

| <b>Consultation Results Synopsis</b><br><br><b>Information to Stakeholders on the Outcome of the Hazardous Materials List for Flowers &amp; Plants</b> |                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>To</b>                                                                                                                                              | Stakeholders                                                                                                                    |
| <b>Consultation Period</b>                                                                                                                             | 18.02.2026 – 28.03.2026                                                                                                         |
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## PART 1 Introduction

### 1.1. General Introduction

Fairtrade International's Standards & Pricing (S&P) would like to thank all stakeholders for the time and effort they have contributed to the consultation on Flowers & Plants specific Hazardous Materials List (HML). The consultation concluded on 28 March 2026 with a total of 82 participating stakeholders via the online survey. Thanks to these replies, Standards & Pricing (S&P) has gained a good understanding of critical issues and concerns including potential solutions. Together with the results of the research carried out by S&P, this information provides the basis for the final proposal to be presented to the Standards Committee (SC). The SC's decision on the final Hazardous Materials List for Flowers & Plants will be taken in full knowledge of stakeholders' comments.

This document aims to present the outcome of the consultation as transparently as possible without disclosing confidential stakeholder information.

**Should you have any queries or remarks concerning this report, please contact: [standards-pricing@fairtrade.net](mailto:standards-pricing@fairtrade.net) .**

### 1.2. Executive Summary

This consultation focused on the development of a Flowers & Plants-specific Hazardous Materials List (HML) and minor changes to the Fairtrade Flowers & Plants Standard. The review responds to increasing environmental, regulatory and market expectations, while recognising the practical challenges faced by flower producers in reducing the use of highly hazardous pesticides.

As part of the review, Fairtrade assessed the generic HML against pesticide use in floriculture, considering active ingredients authorised in major producer countries, EU regulatory developments and other flower certification schemes. The assessment found that only around 20% of flower-relevant active ingredients are currently covered by the generic HML, confirming the need for a sector-specific approach.

Overall, stakeholders expressed broad support for the proposed direction and recognised the need for a Flowers & Plants-specific HML. Feedback consistently highlighted the importance of practical implementation, realistic transition periods, availability of effective alternatives, and continued support for integrated pest management (IPM) and resistance management.

The consultation also highlighted the importance of balancing stronger environmental and worker protection with maintaining production viability and market access. Stakeholders called for greater technical support, stronger collaboration across the supply chain, and clear guidance to help producers transition towards safer crop protection practices.

The feedback received through this consultation on Proposals 2.2 and 2.3, together with the outcome of the temporary exceptions review conducted over the 2022–2026 period, informed the final proposals related to three active ingredients (abamectin, lambda-cyhalothrin and glyphosate), which were approved by the Standards Committee in May 2026. A detailed summary of the stakeholder feedback and assessment supporting these decisions is provided in the Annex 1.

The evaluation of all inputs, including the analysis of technical input, concludes that the Flowers & Plants HML approach should allow some hazardous materials to be phased out while taking into account the feasibility of transition and the need to maintain sufficient crop protection options. In this context, the Orange List remains a feasible mechanism that could support phased withdrawal where immediate prohibition may create significant challenges, while allowing time for alternative chemical, biological and IPM options to be strengthened.

The remaining proposals, including the overall Flowers & Plants Hazardous Materials List approach will be presented for approval to the Standard Committee in September 2026 (subject to confirmation).

### 1.3. Way Forward

Based on the results of this consultation, S&P will develop proposals to be presented to the SC in September 2026 for decision making.

The table below describes the progress to date and next steps:

| Activity                                                           | Timeline              |
|--------------------------------------------------------------------|-----------------------|
| Scoping                                                            | May 2024              |
| Research                                                           | June 2024 – Q4 2025   |
| Consultation                                                       | February – March 2026 |
| Analysis of consultation responses and drafting proposal to the SC | April-May 2026        |
| SC decision – 1 <sup>st</sup> part                                 | May 2026              |
| SC decision – 2 <sup>nd</sup> part                                 | September 2026        |
| Publication                                                        | Q4 2026               |

### 1.4. Abbreviations

|      |                                                                                |
|------|--------------------------------------------------------------------------------|
| CLAC | Latin American and Caribbean Network of Fair Trade Small Producers and Workers |
| FCM  | False Codling Moth                                                             |
| FTA  | Fairtrade Africa                                                               |
| GHS  | Globally Harmonized System                                                     |
| HHP  | Highly Hazardous Pesticides                                                    |
| HLO  | Hired Labour Organization                                                      |
| HLS  | Hired Labour Standard                                                          |
| HML  | Hazardous Materials List                                                       |
| IPM  | Integrated Pest Management                                                     |
| MPS  | Milieu Programma Sierteelt                                                     |
| NAPP | Fairtrade Network of Asia and Pacific Producers                                |
| NFO  | National Fairtrade Organization                                                |
| NGO  | Non-Governmental Organization                                                  |
| PAN  | Pesticide Action Network                                                       |
| PN   | Producer Network                                                               |
| S&P  | Standards and Pricing                                                          |
| SC   | Standards Committee                                                            |
| SPO  | Small Producer Organization                                                    |
| WHO  | World Health Organization                                                      |

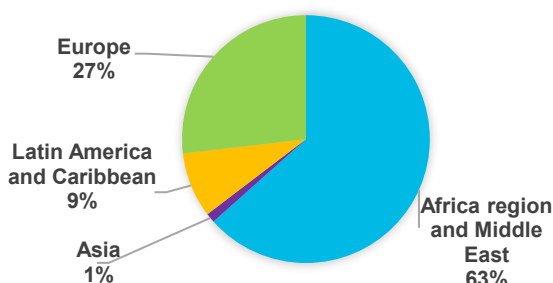
## PART 2 . Draft Standards Consultation - Outcome

### 2.1. Consultation process

The consultation in survey format was published online in Survey Hero and was also available in word format on the Standards section of the Fairtrade website. Both links were sent to all Hired Labour Organisations (HLO) and traders certified for Flowers & Plants and other relevant stakeholders. In addition to the possibility to give written feedback, S&P conducted online sessions to enable verbal feedback and group discussions of topics.

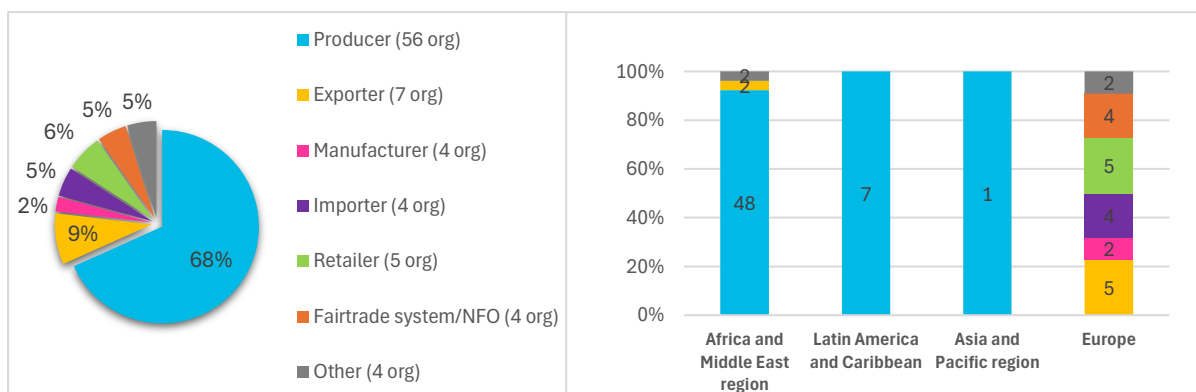
### 2.2. Participants

**RESPONSES PER REGION**



A total of 82 stakeholders participated in the consultation and provided written responses to the questionnaires. Looking at the regional distribution, the highest participation came from Africa and the Middle East (63%), followed by Europe (27%), Latin America (9%) and Asia (1%).

Looking at the distribution across the supply chain, producers represented the largest stakeholder group (68%) (see chart below). Among trader categories, the highest participation came from exporters (9%). In addition to Fairtrade-certified stakeholders, the consultation also received input from one NGO, one voluntary certification scheme and two representatives of the crop protection industry, which are presented under the category "Other".



## 2.3. Consultation Outcome

### Section 1. Fairtrade approach for materials specific to Flowers & Plants production (Proposals 1-1, 1-2)

#### Introduction of topic and overall aim of the proposal

The use of chemicals in flower cultivation poses risks to the environment, worker health, and surrounding communities, for example with runoff potentially contaminating water sources (source: see here). Addressing these impacts is essential for a sustainable flower industry. Growers also face increasing regulatory and market demands, particularly in the EU, which add pressure while they manage local production challenges.

For example, the EU is considering further restrictions on the re-import of agricultural products containing residues of hazardous pesticides no longer approved for use within the EU - a trend already visible with Thiacloprid. If such measures are extended, producers and traders outside the EU may lose access to some commonly used plant protection products. This also makes it essential for producers and traders to plan ahead, seek safer alternatives, and strengthen integrated pest management (IPM) practices.

The European Commission has announced that it will apply the same safety rules to imported goods. Specifically, it has stated:

[“The Commission will establish a principle that the most hazardous pesticides banned in the EU for health and environmental reasons are not allowed back to the EU through imported products.”](#)

This means that, in the future, flower shipments treated with certain banned pesticides may no longer be accepted in the EU market. It is important for producers to be aware of this direction and consider how to gradually reduce the use of highly hazardous pesticides.

Following the objectives of this review, Fairtrade mapped the currently listed materials in the Fairtrade HML against the materials relevant to flowers production cross-checking with the data on authorised materials in some of the producer countries (Ethiopia, Kenya, Tanzania, Colombia & Ecuador), the approval status of materials in the EU and other standards that regulate use of agrochemicals in flower farms.

The result of the evaluation is presented in the Annex 1 (i.e. annex used in consultation), with approx. 20% overlap of flower relevant agrochemicals with those currently included in the Fairtrade Hazardous Materials List.

#### Proposal 1-1. Proposal for the Hazardous Materials List approach specific to Flowers & Plants

The proposal is to keep the Fairtrade HML as the main standard document applicable to Flowers & Plants producers and traders and introduce Flower & Plants product specific list for hazardous materials that meet at least one of the following conditions:

- a) a material is in current HML document but due to its hazard type, when used in flowers production it can be used only under specific restricted conditions, including a compulsory condition to monitor the risks of chemicals exposure to people and environment
- b) material is in current Orange/Yellow HML and should be prohibited / phased out from use on Flowers & Plants due to its hazard category or that were identified as materials of high concern to civil society;
- c) material is not included in the HML document but it is relevant for flowers production and /or is listed in PAN HHP list.

The approach on listing the material as prohibited, restricted or flagged for Flowers & Plants is the same as for Fairtrade HML, i.e. materials are weighted based on their hazard category when meeting the following criteria: i) listed in international conventions, ii) categorized 'high toxicity' (*WHO Class 1a and 1b; Very toxic by inhalation (GHS classification)*), iii) *hazardous for human health and / or environment. (for more details see Fairtrade HML document)*

**Implication:** All producers and traders certified for Fairtrade Flowers & Plants must continue to follow the Fairtrade Hazardous Materials List (HML). This includes complying with all materials that are marked as **prohibited**, **restricted**, or **flagged**.

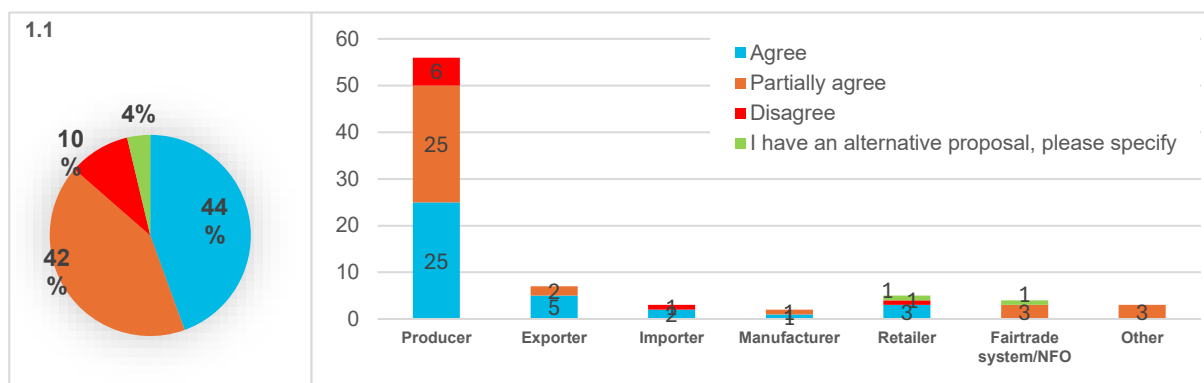
**Unless their classification is different in Flower & Plants HML from the one in the generic HML.**

- All flower specific materials will be marked in the generic HML (see example of Red list below).
- The structure of Fairtrade Flowers & Plants specific HML will follow the generic structure and include classification of Red (Prohibited), Orange (Restricted) and Yellow (Flagged) list of materials

- Where materials have a different classification for the Flowers & Plants category, they will be listed in a separate table and as an Annex to the Flowers & Plants standard.
- the status of materials classification in the Flowers & Plants standard will override the generic HML. Flower & Plants specific materials list will also include extra conditions for compliance for example: compulsory monitoring risks or phase out of the material by a certain deadline.

| Red List (Prohibited List) |                                                  |            |             |                     |                                            |                       |                                           |          | Specific Conditions / Product |
|----------------------------|--------------------------------------------------|------------|-------------|---------------------|--------------------------------------------|-----------------------|-------------------------------------------|----------|-------------------------------|
| No.                        | Name of active ingredient (a.i.) of the material | CAS number | Conventions | High acute toxicity | Long term toxic effect or chronic exposure | Environmental concern | Hazard to ecosystem services <sup>2</sup> | Obsolete |                               |
| 1                          | 2,3,4,5-Bistetrahydro-2-furaldehyde              | 126-15-8   |             |                     |                                            |                       |                                           | x        |                               |
| 2                          | 2,4,5-T                                          | 93-76-5    | x           |                     |                                            |                       |                                           | x        |                               |
| 3                          | 2,4,5-TCP                                        | 35471-43-3 |             |                     |                                            |                       |                                           | x        |                               |
| 4                          | Abamectin                                        | 71751-41-2 |             | x (h330)            |                                            |                       |                                           |          | Flowers & Plants relevant     |
| 5                          | Acetochlor                                       | 34256-82-1 |             |                     | x                                          |                       |                                           |          | Flowers & Plants relevant     |
| 6                          | Acrolein                                         | 107-02-8   |             | x                   |                                            |                       |                                           |          |                               |
| 7                          | Alachlor                                         | 15972-60-8 | x           |                     | x                                          |                       |                                           |          |                               |

### Question 1.1 Do you agree with this proposal for overall approach to Flowers & Plants HML?



82 stakeholders responded to this question where overall either agreed (44%) or partially agreed (42%) with the proposed approach. While respondents generally welcomed the introduction of a Flowers & Plants-specific Hazardous Materials List (HML), the discussion focused more on how the list should be designed and implemented but less on whether such approach should be used. The most frequently raised considerations related to the availability of effective alternatives, realistic transition periods, the clarity and usability of the proposed classification system, and the practical implications of maintaining both a generic and a Flowers & Plants-specific HML. A further 10% of respondents disagreed with the proposal, while 4% suggested alternative approaches.

**36 (44%) respondents agreed** where producers from Kenya mentioned Fairtrade HML provides a practical and established framework, the Red, Orange and Yellow classification supports protection of human health and the environment, and a Flowers & Plants-specific list could provide flexibility while reflecting the operational realities of flower production. Some respondents also noted the importance of retaining effective options for controlling quarantine pests. A manufacturer supported the proposal and recommended developing a complementary list of safer alternatives, including biological controls, to help growers replace phased-out active ingredients. The respondent also asked whether Fairtrade would align the HML with future EU non-renewal decisions.

**34 (42%) respondents partially agreed.** Producers from Ecuador, Ethiopia, Kenya and Uganda raise concerns regarding the limited availability of effective alternatives, flagged the need for realistic and potentially region-specific transition periods, resistance management, pest pressure, phytosanitary requirements and impacts on market access. Some respondents cautioned that restricting effective active ingredients without suitable substitutes could increase pest and disease pressure. They recommended verifying the availability and efficacy of alternatives before introducing restrictions and providing growers with technical support for IPM. Some also called for greater consideration of growers' experience, greenhouse production conditions and the economic viability of flower production. One producer referred specifically to mancozeb for controlling downy mildew and stated that no equally effective alternative was available. Another questioned the scientific basis for some classifications.

An exporter supported the prohibited list and the possibility for the Flowers & Plants-specific HML to override the generic HML. However, the respondent requested clearer explanations of the purpose and practical implications of the Orange and Yellow Lists, particularly regarding monitoring, restrictions and phase-out.

One manufacturer supported the objective of protecting workers, communities and the environment but considered that some proposed classifications appeared more restrictive than retailer requirements and internationally recognised hazard systems, and mentioned this approach risks removing critical crop protection tools that are currently used responsibly and legally, and which play an important role in integrated pest management

National Fairtrade Organisations generally supported the approach but recommended providing one consolidated list for Flowers & Plants rather than requiring stakeholders to consult both the generic HML and a separate product-specific list.

A respondent from the crop protection industry, generally supported the proposal but recommended complementing the hazard-based approach with consideration of viable alternatives, resistance management, phytosanitary needs, regulatory alignment and possible trade impacts.

A respondent from another Flowers certifying organization considered the product-specific approach appropriate in principle but raised concern that growers could find it difficult to understand which of the two lists applies.

**8 (10%) respondents disagreed.** Producers from Ethiopia and Kenya found the proposal too restrictive and insufficiently aligned with EU regulations and international conventions. Two others argued that use of plant protection products should primarily follow registration in the producing country and requirements of the destination market, with additional conditions rather than further prohibitions. One importer opposed introducing different lists and suggested that Fairtrade Red List should be applied consistently across all product categories.

**3 (4 %) respondents provided alternative proposals.** A respondent from National Fairtrade Organisation proposed a single consolidated Flowers & Plants HML containing all generic and product-specific active ingredients, with flower-relevant materials clearly highlighted. An NGO supported retaining the prohibited list but proposed also assessing cumulative toxicity, cumulative exposure and combined effects from multiple pesticides.

The approach is to move beyond single active ingredient analysis to account for overall exposure and effects similar to Ecotox-Index used by the NFOs, and apply it for ornamental plants — an index that provides a comprehensive picture of a substance's environmental toxicity across multiple parameters, adapted to Fairtrade's needs.

A retailer proposed updating the generic Fairtrade HML instead of creating a separate Flowers & Plants-specific list, as the rationale linked to EU restrictions was considered relevant to other Fairtrade product categories as well.

## **Proposal 1-2. Proposal for the Orange List of restricted materials for the Flowers & Plants Hazardous Materials List, and additional use conditions**

**Please note most of these conditions are already applicable and are outlined in the section for Orange list for restricted materials of Fairtrade HML. The additional conditions for Orange list in Flowers & Plants HML are displayed in 'red' below.**

Orange list materials are allowed for use on Flowers & Plants under specific restricted conditions:

- **An overall restricted condition for Orange list materials, that can be used only:**
  - i) as part of avoiding pesticide resistance build up in pests,
  - ii) in rotation with less harmful pesticides,
  - iii) as part of Integrated Pest Management (IPM) and
  - iv) including non-chemical control measures; AND
- Developing a plan for reducing/phasing out the use of the materials including information on the type of material (technical name/active ingredient (a.i.), formulation (% of a.i.), commercial name), the quantity used (spray concentration (a.i. /ha or in % or ppm etc.) and total consumed a.i./ha/year), actions taken for reducing/phasing out the material including details of other non-chemical controls which are part of the IPM strategy.

- **Conditions specific to some of the materials:**

a. ~~to be used only for Apiculture~~

b. Not to be used on young plant materials;

To be used only in greenhouse production; OR

if open field conditions, it is not used on gregariously flowering melliferous crops, starting one month prior to peak flowering and during flowering period. (e.g. coffee, fruit trees, cashew, almond etc.).

The certification body will determine the crops which fall under this type.

c. to be used only by professionally trained warehouse staff using proper personal protective equipment and specially designed equipment to ensure hermetic sealing and minimize gas leakages

d. to be phased out (for exact date please see column Specific Conditions / Phase out date)

e. **allowed to be used only on young plant materials**

f. **may only be used if the risks to people and the environment have been identified in the risks monitoring assessment template and effectively prevented**

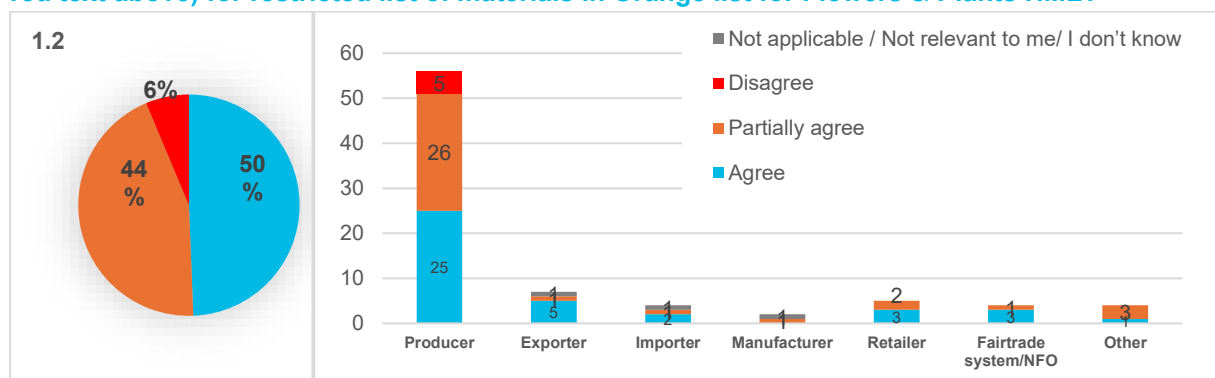
g. **may only be used following the defined scope and frequency of application/use**

The **phase out plan and risks assessment monitoring** is implemented and made available to the Certification Body

**Implications:** the applicability of specific conditions for some of the materials will be indicated in the Orange list next to material. This means that not all of the specific conditions will be applicable to each of the materials.

Following the proposed change above, some of the materials in Orange list will be allowed for use only on young plants materials or only when the use of material was assessed in the risk monitoring template. Certification Body will need to check the phase out plan and the records on risks assessment.

**Question 1-2. Do you agree with the proposal to introduce additional specific conditions (indicated in red text above) for restricted list of materials in Orange list for Flowers & Plants HML?**



82 stakeholders responded to this question. Overall, most respondents supported the proposal, with 50% agreeing and a further 44% partially agreeing. The most frequently raised considerations were related to the practicality and proportionality of the proposed conditions, the need to reflect floriculture-specific production realities, the availability of effective alternatives for resistance management, and the clarity and verifiability of the proposed requirements.

**50% (39) of respondents agreed with the proposal.** Producers from Ethiopia, Kenya and Uganda considered that introducing additional conditions would strengthen the safe and responsible use of Orange List materials, improve traceability and support the gradual phase-out of hazardous materials. Several respondents regarded the proposal as logical and considered that it would provide clearer guidance for the use of Orange List materials. Some producers also noted that certain Orange List materials have already been phased out or that the risks associated with their use are lower under protected greenhouse production than in open-field cultivation. While supporting the proposal, some respondents emphasised the importance of practical implementation, implementation support and training, and recognising existing farm management systems and records that achieve the same objective to avoid unnecessary administrative burden.

**44% (35) of respondents partially agreed with the proposal.** Producers from Ecuador, Ethiopia and Kenya considered that several of the proposed conditions were too broad, insufficiently specific or difficult to apply in practice. They highlighted inconsistencies between some of the proposed conditions, questioned the practicality of distinguishing between young and mature plants within the same production area, and



suggested that some **restrictions should instead be linked to seasonal pest pressure or other production circumstances**. Producers also emphasised the need to reflect floriculture-specific production realities, including greenhouse production systems, perennial crops, regional climatic conditions, high pest pressure and phytosanitary requirements. Several respondents cautioned that restricting key active ingredients without suitable alternatives could negatively affect resistance management, crop quality and yield, and recommended tailoring conditions to support the safe and effective use of materials rather than unnecessarily limiting their use.

An exporter from the Netherlands supported introducing additional restrictions but considered the proposed conditions insufficiently stringent, recommending that the use of Orange List materials should be further limited to situations where no effective alternatives are available and integrated pest management (IPM) measures have been exhausted. An importer from the United Kingdom agreed with strengthening controls but recommended maintaining a stronger link between Orange List use, IPM, resistance management, gradual phase-out planning and risk monitoring. A manufacturer from the United Kingdom cautioned that additional restrictions could increase compliance pressure on growers who are already struggling to comply with the current HML, potentially discouraging continued participation in Fairtrade certification.

National Fairtrade Organisations requested clarification on the proposed monitoring requirements, particularly regarding the scope and frequency of monitoring activities.

Other respondents raised implementation and assurance considerations. For example how compliance with the additional conditions would be verified in practice. A retailer from Germany suggested refining several individual conditions, particularly regarding pesticide persistence and residues in young plant production.

A respondent from Crop Protection Industry generally supported introducing more targeted, risk-based conditions but recommended that these remain science-based, proportionate, practical to implement and reflective of real production conditions, including greenhouse systems, resistance management and phytosanitary requirements.

**6% (5) of respondents disagreed with the proposal.** Producers from Ethiopia, Kenya and Uganda considered that the proposed conditions would excessively restrict the use of Orange List materials, particularly for perennial flower crops, reduce the availability of effective pest and disease control options, and increase the risk of resistance development and crop losses. Eventually this would limit growers' ability to respond to quarantine pests. One respondent considered that Orange List materials should remain available for use whenever necessary rather than only under the proposed conditions.

## Section 2. Feedback on materials proposed to be included as product specific HML applicable to producers and traders of Flowers & Plants. (Proposals 2-1 to 2-11)

This section explains which active ingredients are proposed for inclusion in the Flowers & Plants-specific Hazardous Materials List (HML) under the Red, Orange, and Yellow lists categories.

The existing Fairtrade Hazardous Materials List was used as the basis for this work, with materials assessed for their relevance to Flowers & Plants production. This assessment is based on an analysis of available datasets and sector-specific information. The proposed change below includes those materials that were identified as Flowers & Plants relevant in Table 1 & Table 2 (please see [Annex 1](#)):

- [Table 1](#) presents the materials from the existing Fairtrade Hazardous Materials List, with an indication of their relevance for Flowers & Plants.
- [Table 2](#) lists additional materials that are not currently included in the generic Hazardous Materials List but that, based on pre-consultation research and evaluation, are commonly used in Flowers & Plants production or trade.

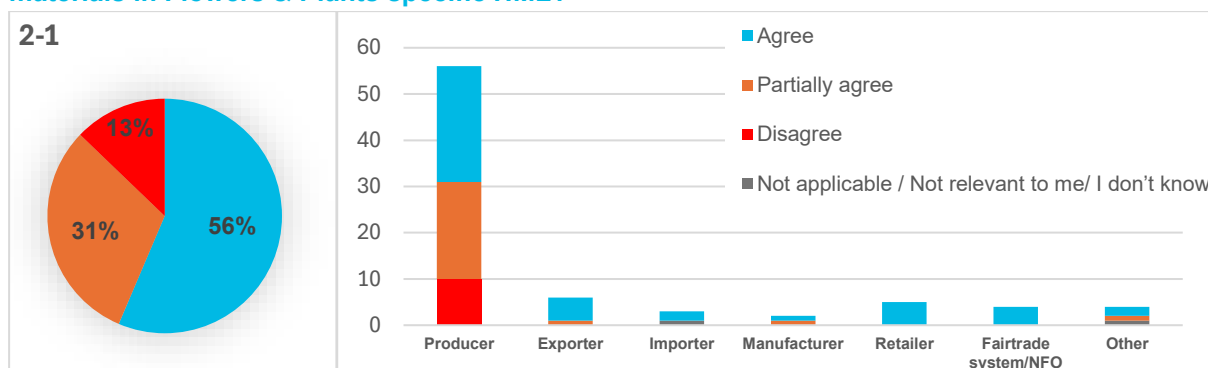
Proposals 2-1, 2-2, 2-3 and 2-4 in this section explore options for the prohibited (red) list of hazardous materials applicable to producers and traders of Flowers and Plants.

## Proposal 2-1. Proposal for retaining eight active ingredients on the Prohibited List of the Flowers & Plants Hazardous Materials List

| # | Name of active ingredient (a.i.) of the material | CAS number           | Current Fairtrade HML category | Flowers & Plants HML list category | Specific condition |
|---|--------------------------------------------------|----------------------|--------------------------------|------------------------------------|--------------------|
| 1 | Chlorothalonil                                   | 1897-45-6            | Prohibited (Red) list          | Prohibited (Red) list              | NA                 |
| 2 | Chlorpyrifos, Chlorpyrifos-methyl                | 2921-88-2, 5598-13-0 |                                |                                    |                    |
| 3 | Formetanate                                      | 22259-30-9           |                                |                                    |                    |
| 4 | Imidacloprid                                     | 138261-41-3          |                                |                                    |                    |
| 5 | Magnesium phosphide                              | 12057-74-8           |                                |                                    |                    |
| 6 | Metam-sodium                                     | 137-42-8             |                                |                                    |                    |
| 7 | Methomyl                                         | 16752-77-5           |                                |                                    |                    |
| 8 | Thiamethoxam                                     | 153719-23-4          |                                |                                    |                    |

**Implication:** no implications. The listed materials will remain prohibited for use by Flowers & Plants producers and traders, in line with the existing Fairtrade Hazardous Materials List.

## Question 2-1 Do you agree to keep the 8 prohibited materials from the generic HML as prohibited materials in Flowers & Plants specific HML?



A total of 82 stakeholders responded to this question. Overall, most respondents supported retaining the proposed eight active ingredients on the Prohibited (Red) List, with 56% agreeing and 31% partially agreeing. While respondents generally supported maintaining the prohibition of highly hazardous materials, the discussion focused on whether specific active ingredients should remain prohibited in view of their importance for floriculture production. The most frequently raised considerations related to the availability of effective alternatives, resistance management, pest and disease control, and the continued need for certain active ingredients to meet phytosanitary and export market requirements.

**56% (44) of respondents agreed with the proposal.** Producers from Ethiopia, Kenya and Uganda considered that the listed active ingredients are already recognised as highly hazardous and that maintaining their prohibition supports consistency within the Fairtrade Hazardous Materials List and contributes to the protection of human health and the environment. Several producers indicated that these active ingredients are no longer used on their farms. An exporter from Uganda supported maintaining the prohibition to protect pollinators and food security. A retailer from Germany also supported retaining the materials on the Prohibited List, noting that although some remain authorised in the EU, they are not considered necessary for floriculture production. One producer requested that the scientific evidence supporting the prohibition of the listed active ingredients be made available.

**31% (24) of respondents partially agreed with the proposal.** Producers from Ecuador and Kenya raised concerns regarding the continued reduction in available active ingredients, highlighting its implications for resistance management, pest control and crop protection where effective alternatives are limited. The majority of material-specific **comments related to imidacloprid, thiamethoxam and magnesium phosphide.** Several producers proposed moving imidacloprid and thiamethoxam from the Prohibited (Red) List to the Orange List for restricted use, particularly under greenhouse conditions or for managing quarantine pests, thrips, aphids and resistance management. Magnesium phosphide was repeatedly identified as an important replacement for methyl bromide and as a critical fumigation tool for meeting mandatory export phytosanitary



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requirements. Additional comments referred to **chlorothalonil, which some respondents described as an important multisite fungicide with limited alternatives.**

A manufacturer from the United Kingdom also supported retaining access to magnesium phosphide for mandatory export fumigation, while an exporter from the Netherlands considered that the proposed Prohibited List should be expanded rather than limited to eight active ingredients.

**13%(10) of respondents disagreed with the proposal.** Producers from Kenya and Uganda considered that several active ingredients should not remain on the Prohibited List because they continue to play an important role in integrated pest management, resistance management and the control of quarantine pests. Most comments specifically referred to imidacloprid, thiamethoxam, chlorothalonil and magnesium phosphide, with respondents proposing that these materials be either exempted from the prohibition or moved to the Orange List under specific conditions, particularly for greenhouse production or where required to meet export market requirements.

4 respondents replied NA, and indicated that they did not have sufficient information to provide a view

## **Proposal 2-2 Proposal to introduce specific restricted conditions for red list materials use in Flowers & Plants**

**The proposal aims to explore Flowers & Plants specific challenges related to use of generic HML, one of the outcomes were to consider allowing some of the prohibited materials only for flowers production and only when restricted use is ensured – e.g. on frequency, on timeline. The materials are currently categorized into Red HML due to their Hazard criteria (High acute toxicity, and/or Long term toxic effect or chronic exposure, and/or Environmental concern).**

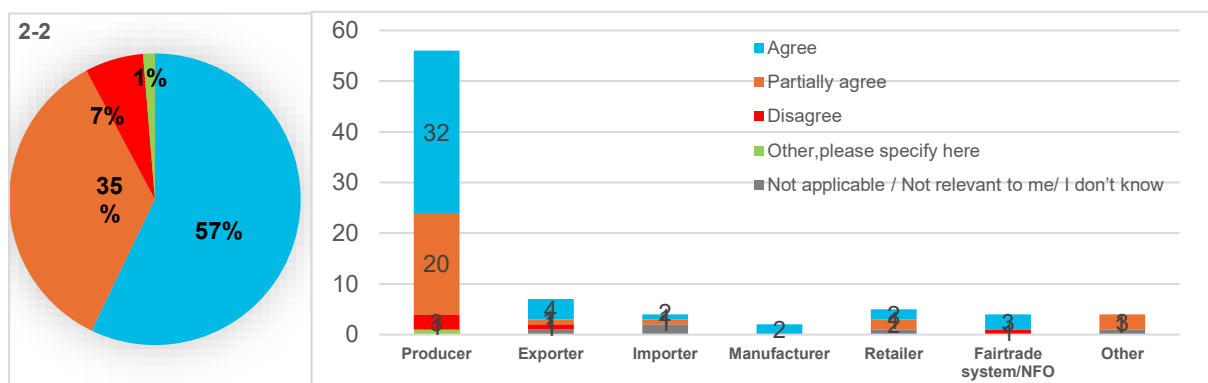
Based on the outcome of pre-consultation, the proposal is to explore feasibility of proposed options for these 5 materials to be used under restricted specific conditions including monitoring of risks. The proposed change also introduces a time-bound measure permitting their use under such restricted conditions until 1 January 2029 or 1 January 2031.

| # | Name of active ingredient (a.i.) of the material | CAS number                                                                         | Current Fairtrade HML category | Flowers & Plants HML list category | Specific condition for application/use and rationale for proposed change                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---|--------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Lambda-cyhalothrin                               | 91465-08-6                                                                         | Prohibited (Red) list          | Restricted (Orange) list           | <ul style="list-style-type: none"> <li>- spraying limited to 3 times per year, until 1 January 2029;</li> <li>- only in houses where FCM or thrips where other control methods have not been successful;</li> <li>- only in enclosed systems (e.g. plastic house use with UV films), not allowed during pollination.</li> </ul> <p><i>Rationale: required by growers for managing False Codling Moth (notifiable pest) and thrips for resistance management, high toxicity to bees could be reduced by restricting to plastic house use with UV films (11) and on flowers which are not grown in open space</i></p> |
| 2 | Pyridalyl                                        | 179101-81-6                                                                        | Prohibited (Red) list          | Restricted (Orange) list           | <p>allowed to be used for production away from sources of open water, fixed number of applications a year, until 1 January 2029</p> <p>(at least 10 metres away from surface water, unless national law requires a difference buffer)</p> <p><i>Rationale: compatible with IPM, risk based application</i></p>                                                                                                                                                                                                                                                                                                      |
| 3 | Abamectin                                        | 71751-41-2                                                                         | Prohibited (Red) list          | Restricted (Orange) list           | <p>allowed to be used maximum 3 times per year, until 1 January 2031</p> <p><i>Rationale: compatible with IPM, one of the few effective tools against quarantine leaf miner and important for resistance management</i></p>                                                                                                                                                                                                                                                                                                                                                                                         |
| 4 | Captan                                           | 133-06-2                                                                           | Prohibited (Red) list          | Restricted (Orange) list           | <p>for production away from sources of open water, until 1 January 2031</p> <p><i>Rationale: compatible with IPM, EU restrictions for renewal of approval to glasshouse/ protected cropping due to: · Risk to wild non-target terrestrial vertebrates, · Risk to wild non-target terrestrial organisms other than vertebrates, · Risk to aquatic organisms. Not on banned lists for European supermarkets, restricted by some</i></p>                                                                                                                                                                               |
| 5 | Glyphosate and its salts                         | 1071-83-6, 69254-40-6, 38641-94-0, 40465-66-5, 34494-03-6, 81591-81-3, 111872-58-3 | Prohibited (Red) list          | -                                  | <p>use of this material is allowed only for devitalization. See next proposal</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

*Rationale: required by growers for market opportunities in Australia; use of material allowed only when compliance with measures outlined in the requirement are met.*

**Implication:** Prior to the use of the materials listed above, producers and traders must carry out a risk assessment to regularly monitor risks to human health, the environment, and potential residue or market-related impacts. The proposed restricted use is time-bound and subject to the specific conditions outlined above.

## Question 2-2 Do you agree with the proposed approach above?



A total of 82 stakeholders responded to this question. Overall, most respondents supported the proposed approach, with 57% agreeing and 35% partially agreeing. Respondents generally welcomed the proposal to allow the temporary and restricted use of selected active ingredients under specific conditions, recognising it as a pragmatic approach to balancing hazard reduction with the operational needs of floriculture production. The discussion focused on whether the proposed restrictions, timelines and conditions were practical and proportionate, and on whether the proposed list appropriately reflected the importance of individual active ingredients for resistance management, quarantine pest control and export market requirements.

**57% (44) of respondents agreed** with the proposal. Producers from Ecuador, Kenya and Uganda generally supported allowing the temporary restricted use of the proposed active ingredients, provided that the specified conditions are met. Respondents considered the proposal a practical compromise that would maintain access to important crop protection tools while strengthening risk management. Several producers highlighted the importance of the proposed materials for resistance management, while others supported the introduction of risk assessments and acknowledged the rationale provided for each active ingredient. One manufacturer supported aligning the proposed approach with developments in other certification schemes where appropriate.

**35% (27) of respondents partially agreed** with the proposal. Producers from Ethiopia, Kenya and Uganda generally supported the proposed direction but questioned the practicality of several of the proposed conditions. The most common comments related to the proposed limits on the number of annual applications, particularly for **abamectin**, with several respondents suggesting that application limits should instead reflect crop cycles, seasonal pest pressure or resistance management programmes. Some respondents also requested clarification of the proposed application limits and monitoring requirements.

On use of **Abamectin** and **lambda-cyhalothrin** producers emphasised these are important for resistance management, thrips control and crop protection. Some respondents proposed allowing broader or unrestricted use of these materials, while others considered the proposed restrictions acceptable provided they remain temporary. **Captan** received limited comments, with one producer recommending that it should not be permitted because suitable alternatives are available. **Glyphosate** was generally supported for devitalisation, although respondents recommended clarifying the wording and recognised its importance for specific export markets such as Australia. Other respondents raised implementation considerations.

Respondent from another certification scheme questioned whether maintaining the same active ingredient on different HML lists under different conditions could create confusion. A retailer from Germany requested additional safeguards for lambda-cyhalothrin and questioned whether similar pollinator protection measures

should also apply to abamectin. An importer from the United Kingdom highlighted the importance of considering False Codling Moth management when reviewing lambda-cyhalothrin.

**7% (5) respondents disagreed** with the proposal. A producer from Ethiopia argued that **pyridalyl** should not be moved to the Orange List but get even less restricted, because it has comparatively low acute toxicity and is an important component of integrated pest management programmes. An exporter from the Netherlands and the French National Fairtrade Organisation considered that **abamectin** and **pyridalyl** should remain on the Prohibited (Red) List because of their hazard profile or existing regulatory restrictions. They also questioned the proposed allocation of responsibility for risk assessments to traders, arguing that this responsibility should remain with producers. An NGO similarly supported maintaining **abamectin** and **lambda-cyhalothrin** on the Prohibited List or introducing substantially shorter phase-out periods due to their high toxicity and environmental risks

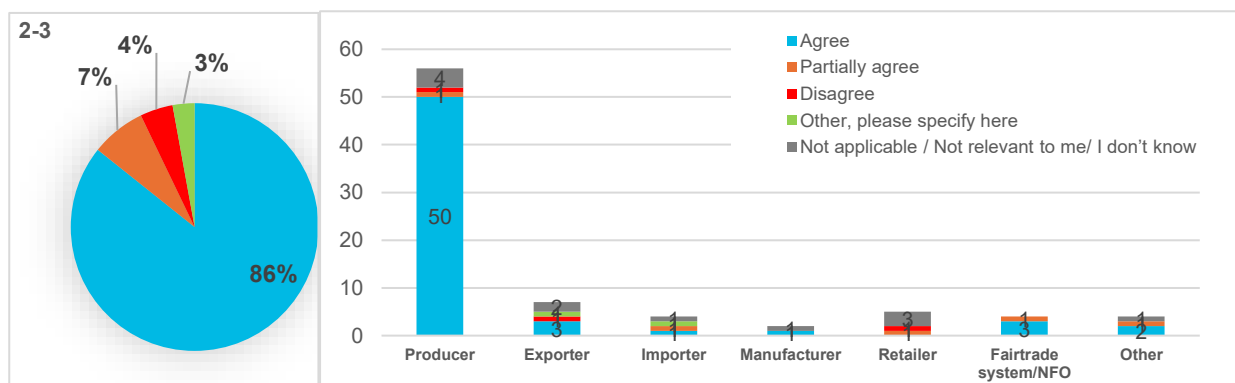
### Proposal 2-3: Proposal on use of Glyphosate

**Due to a number of submitted applications for exceptional use of Glyphosate on Fairtrade Flowers to ensure there is potential market opportunity for Fairtrade producers to sell flowers to Australia market. Following the proposed change above, this proposal explores inclusion of requirement on Glyphosate use in flowers production.**

#### NEW Glyphosate use for devitalization

| Applicable to: Flower farms                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Core</b>                                                                                                                                                                                        | You ensure the following conditions are fulfilled when Glyphosate is necessary to be used for devitalization                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Year 0</b>                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                                                                                                                                                    | <ol style="list-style-type: none"> <li>1. All flowers must be treated in an enclosed area (never in the open)</li> <li>2. There is physical segregation and labelling of treated flowers</li> <li>3. Any remaining liquid from the treatment is disposed of appropriately eg in specific soak-away pits used for washings of pesticide equipment</li> <li>4. These flowers can only be exported to Australia</li> <li>5. to be used only by professionally trained warehouse staff using proper personal protective equipment</li> </ol> |
| <b>Guidance:</b> Glyphosate and salts materials listed in the Fairtrade Red HML is not applicable to Flower farms only in case when all five conditions outlined in this requirement are fulfilled |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### Question 2-3 Do you agree to introduce the proposed requirement above in the Flower standard that would allow use of Glyphosate on Flowers under specific conditions?



82 stakeholders responded to this question. Overall, they expressed strong support for introducing a specific requirement allowing the restricted use of glyphosate for flower devitalization, with 86% agreeing and 7% partially agreeing. Respondents generally considered the proposed requirement a pragmatic solution to enable continued access to the Australian market while maintaining strict safeguards for worker safety, segregation and environmental protection. The limited comments received focused primarily on clarifying the



proposed conditions, the future relevance of the exemption if Australian import requirements change, and the potential implications for Fairtrade's credibility.

**60 (86%) of respondents agreed with the proposal.** Producers from Ecuador, Ethiopia, Kenya and Sri Lanka, together with an exporter from Uganda, generally supported introducing the requirement as a narrowly defined exception for flower devitalization destined for the Australian market. Respondents emphasised that glyphosate remains the only practical option currently available for this purpose and considered that the proposed conditions appropriately balance market access with worker safety and environmental protection. Several producers highlighted that the proposal would enable continued Fairtrade sales and Fairtrade Premium generation for flowers exported to Australia. Some respondents also suggested clarifying the wording on waste management and staff training to facilitate consistent implementation and auditing.

**5 (7%) of respondents partially agreed with the proposal.** They questioned whether the exemption would remain necessary if Australian import requirements change. Several respondents recommended verifying ongoing regulatory developments in Australia before introducing the requirement. Additional suggestions included clarifying whether glyphosate formulations containing POEA should be excluded and considering a defined phase-out period for the exemption.

**5 (7%) respondents disagreed with the proposal or suggested alternative approaches.** An importer from Germany questioned whether creating a country-specific exemption could undermine the credibility of Fairtrade certification, arguing that products requiring such exemptions should instead not be marketed as Fairtrade. A retailer from Switzerland expressed concerns about the environmental implications of glyphosate and indicated that the proposal could require changes to existing quality assurance procedures if such flowers were imported into Switzerland.

Other respondents indicated that they were not sufficiently familiar with the issue to express a view.

**Please note:** The stakeholder feedback received on Proposals 2.2 and 2.3 was assessed together with the outcome of the temporary exceptions review. The resulting changes to the Flowers & Plants Standard and the generic Hazardous Materials List were approved by the [Standards Committee in May 2026](#). A complete overview of the assessment, including the stakeholder input presented above, is available in the [Annex 1 & 2](#).



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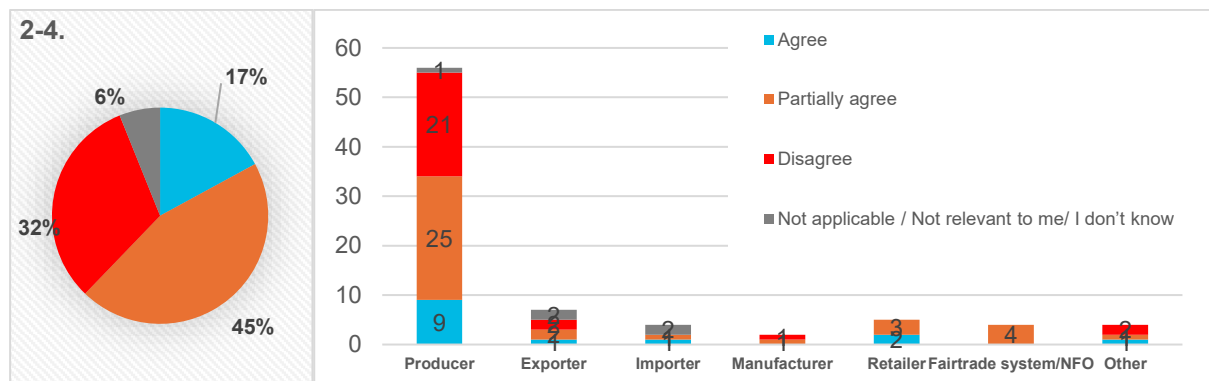
## Proposals 2-4 & 2-5: Proposal for Prohibited (Red) list of HML for Flowers & Plants

28 active ingredients of materials were found relevant for flowers production and either currently included on the Fairtrade HML under the Restricted (Orange) or Flagged (Yellow) categories, or currently are not included in the HML. These materials are proposed to be prohibited for use by Fairtrade Flowers & Plants producers and traders following three transition period defined by the phase-out date. These materials pose significant risks to human health and environment, where some of them are already banned in the EU or other regulatory regimes due to their hazard profiles, and meet Red List hazard criteria due to high acute toxicity (WHO 1a/1b or H330), chronic health hazards (carcinogenicity, reproductive toxicity, endocrine disruption), severe environmental persistence and aquatic toxicity, and/or high toxicity to pollinators and ecosystem services.

| #  | Name of active ingredient (a.i.) of the material | CAS number  | Current Fairtrade HML category | Flowers & Plants HML list category | Specific condition                                                                                                                        |
|----|--------------------------------------------------|-------------|--------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Aluminum phosphide                               | 20859-73-8  | Restricted (Orange) list       | Prohibited (Red)                   | <b>Phase out date:</b><br><br>One year after publication of Flowers & Plants HML                                                          |
| 2  | Carbendazim                                      | 10605-21-7  | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 3  | Deltamethrin                                     | 52918-63-5  | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 4  | Dimethoate                                       | 60-51-5     | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 5  | Epoxiconazole                                    | 133855-98-8 | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 6  | Fipronil                                         | 120068-37-3 | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 7  | Flusilazole                                      | 85509-19-9  | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 8  | Glufosinate-ammonium                             | 77182-82-2  | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 9  | Thiacloprid                                      | 111988-49-9 | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 10 | Boric acid                                       | 10043-35-3  | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 11 | Diuron                                           | 330-54-1    | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 12 | Iprodione                                        | 36734-19-7  | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 13 | Spirodiclofen                                    | 148477-71-8 | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 14 | Triadimenol                                      | 55219-65-3  | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 15 | Cyfluthrin                                       | 68359-37-5  | Not yet included               |                                    |                                                                                                                                           |
| 16 | Cyproconazole                                    | 94361-06-5  | Not yet included               |                                    |                                                                                                                                           |
| 17 | Propiconazole                                    | 60207-90-1  | Not yet included               |                                    |                                                                                                                                           |
| 18 | Triflumizole                                     | 68694-11-1  | Not yet included               |                                    |                                                                                                                                           |
| 19 | Mancozeb                                         | 8018 01 7   | Restricted (Orange) list       | Prohibited (Red)                   | <b>Phase out date:</b><br><b>By 1 January 2029</b><br><br>Prior to phase-out date, all materials are included in Restricted (Orange) list |
| 20 | Pirimicarb                                       | 23103-98-2  | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 21 | Sulfoxaflor                                      | 946578-00-3 | Restricted (Orange) list       |                                    |                                                                                                                                           |
| 22 | Acephate                                         | 30560-19-1  | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 23 | Thiophanate-methyl                               | 23564-05-8  | Flagged (Yellow) list          |                                    |                                                                                                                                           |
| 24 | Buprofezin                                       | 69327-76-0  | Not yet included               |                                    |                                                                                                                                           |
| 25 | Dimethomorph                                     | 110488-70-5 | Not yet included               |                                    |                                                                                                                                           |
| 26 | Flubendiamide                                    | 272451-65-7 | Not yet included               |                                    |                                                                                                                                           |
| 27 | Flupyradifurone                                  | 951659-40-8 | Not yet included               |                                    |                                                                                                                                           |
| 28 | Acetamiprid                                      | 135410-20-7 | Restricted (Orange) list       | Prohibited (Red)                   | <b>Phase out date:</b><br>By 1 January 2031                                                                                               |

**Implication:** Producers and traders would be expected to phase out the listed materials by the proposed phase-out dates. Until the applicable phase-out date, these materials will be included in, or moved to, the Restricted (Orange) list for Flowers & Plants. The feasibility of these timelines will be also assessed based on the detailed, material-specific input provided through this consultation.

**Question 2-4 Do you agree to include the proposed materials above to the Prohibited (Red) list of Flowers & Plants HML following the transition period and by the proposed phase-out date?**



82 stakeholders responded to this question. 17% agreed with the proposal, while 45% partially agreed and 32% disagreed. The consultation demonstrated broad support for the objective of progressively phasing out highly hazardous active ingredients. However, respondents raised substantial concerns regarding the feasibility of the proposed phase-out timelines and the inclusion of specific active ingredients, particularly where effective alternatives are not yet available. Most comments were material-specific and focused on resistance management, integrated pest management (IPM), availability of alternatives and the practical implications for flower production

**14 (17%) of respondents agreed with the proposal.** Producers from Ethiopia generally supported the proposed phase-out while emphasising the need for flexibility until effective alternatives become available. A producer from Kenya requested further explanation of the proposed phase-out rationale, while another noted that several of the active ingredients remain important for IPM and resistance management in greenhouse production. An exporter from the Netherlands agreed with the proposal but requested clarification that phase-out responsibilities should apply to producers rather than traders.

**37 (45%) of respondents partially agreed with the proposal.** Producers from Ecuador, Ethiopia, Kenya and Uganda generally supported the direction of the proposal but requested that specific active ingredients—including **mancozeb, acetamiprid, dimethomorph, flubendiamide, sulfoxaflor, aluminium phosphide and iprodione—remain available for longer** due to their importance for disease and pest control, resistance management or the lack of effective alternatives.

Several producers from Ethiopia and Kenya also suggested introducing greater flexibility before materials are moved to the Prohibited (Red) List, including the possibility of justified exceptions where alternatives are unavailable.

The UK importer supported the overall direction but questioned the feasibility of the proposed timelines and suggested a single Red List across all Fairtrade product categories. A Dutch manufacturer recommended **moving acephate immediately to the Restricted (Orange) List due to the risk of residues of its metabolite, methamidophos**. A German retailer questioned the rationale for the different phase-out periods and suggested **earlier phase-out for sulfoxaflor** while noting that some production needs may vary between growing regions.

National Fairtrade Organisations in Austria, Germany, France and Switzerland generally supported the proposal but recommended considering additional active ingredients for future inclusion on the Prohibited List to strengthen alignment with the PAN Highly Hazardous Pesticides list and EU regulatory developments.

**26 (32%) of respondents disagreed with the proposal.** Most producers from Kenya, together with a producer from Uganda, considered that phasing out a number of the proposed active ingredients would not be feasible because they remain important for resistance management, IPM and the control of key pests and diseases, while effective alternatives are limited or unavailable.

**Frequently mentioned materials included mancozeb, flubendiamide, flupyradifurone, sulfoxaflor, acetamiprid, dimethomorph, deltamethrin, fipronil and iprodione.** Several respondents also considered the proposed **transition periods too short**.



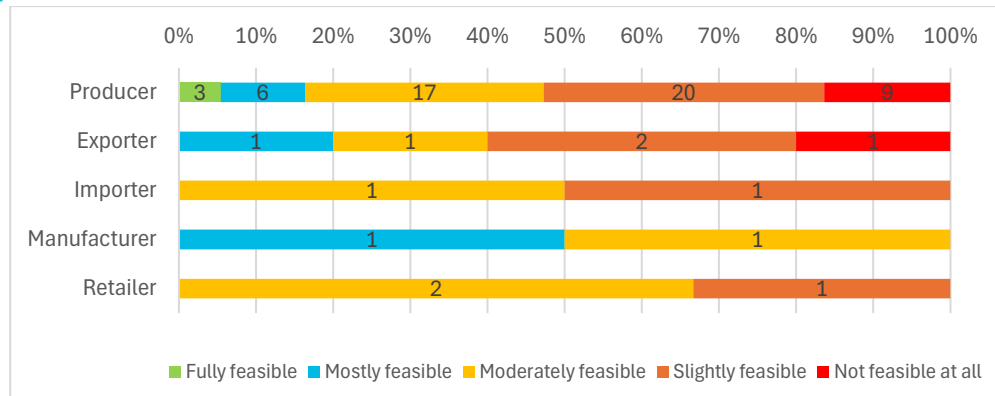
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A UK manufacturer similarly questioned the feasibility of the second and third phase-out groups, arguing that the cumulative effect of expanding the Prohibited List would leave insufficient effective crop protection options.

A respondent from the crop protection industry specifically opposed the proposed classification of sulfoxaflor, arguing that it did not sufficiently reflect scientific evidence, greenhouse production conditions or its role in resistance management and IPM programmes

## Feasibility of proposed materials to be included in Red List for Flowers & Plants

### Question 2-5. How feasible is it for you to implement the proposed changes to Red List of prohibited materials specific to Flowers & Plants?



## Proposals 2-6 & 2-7: Proposals for Restricted (Orange) list for Flowers & Plants

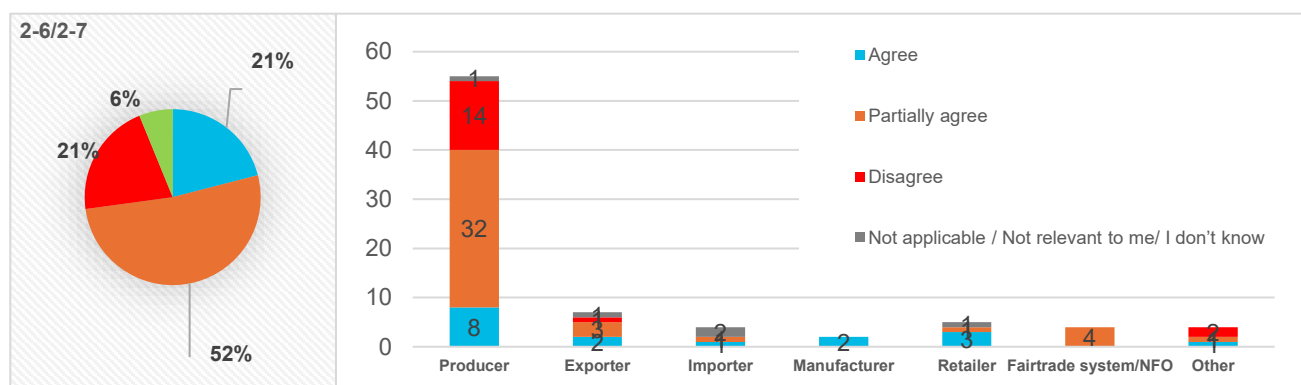
The proposed list of 21 materials below is to be included in the Orange List of restricted materials applicable to Flowers and Plants producers and traders, where 6 materials are already in the current orange list of HML, 14 materials are currently in the Yellow list of HML and 1 is not included in the list. The proposed substances present significant environmental and ecosystem risks, particularly to aquatic organisms and pollinators, and in some cases suspected chronic health concerns and do now meet absolute Red List criteria. Their risks can be mitigated through strict IPM-based practices, resistance management, and application controls. The specified condition does not set a fixed phase-out date. However, in line with the current approach to HML implementation, producers and traders are [required to complete the reporting template](#), including the section on restricted materials used by the organization where they have to provide details on a gradual and feasible phase-out of these materials over time.

| #  | Name of active ingredient (a.i.) of the material | CAS number  | Current Fairtrade HML category | Flowers & Plants HML list category | Specific condition                    |
|----|--------------------------------------------------|-------------|--------------------------------|------------------------------------|---------------------------------------|
| 1  | Cypermethrin, beta                               | 52315-07-8b | Restricted (Orange) list       | Restricted (Orange) list           | to gradually phase out, no fixed date |
| 2  | Chlorantraniliprole                              | 500008-45-7 | Restricted (Orange) list       |                                    |                                       |
| 3  | Cypermethrin, alpha                              | 67375-30-8  | Restricted (Orange) list       |                                    |                                       |
| 4  | Lufenuron                                        | 103055-07-8 | Restricted (Orange) list       |                                    |                                       |
| 5  | Bifenthrin                                       | 82657-04-3  | Restricted (Orange) list       |                                    |                                       |
| 6  | Cypermethrin                                     | 52315-07-8  | Restricted (Orange) list       |                                    |                                       |
| 7  | Bendiocarb                                       | 22781-23-3  | Flagged (Yellow) list          |                                    |                                       |
| 8  | Tebuconazole                                     | 107534-96-3 | Flagged (Yellow) list          |                                    |                                       |
| 9  | Milbemectin                                      | 51596-10-2s | Flagged (Yellow) list          |                                    |                                       |
| 10 | Indoxacarb                                       | 173584-44-6 | Flagged (Yellow) list          |                                    |                                       |
| 11 | Pymetrozine                                      | 123312-89-0 | Flagged (Yellow) list          |                                    |                                       |
| 12 | Oxadiazon                                        | 19666-30-9  | Flagged (Yellow) list          |                                    |                                       |

|    |                    |             |                       |
|----|--------------------|-------------|-----------------------|
| 13 | Permethrin         | 52645-53-1  | Flagged (Yellow) list |
| 14 | Esfenvalerate      | 66230-04-4  | Flagged (Yellow) list |
| 15 | Fenvalerate        | 51630-58-1  | Flagged (Yellow) list |
| 16 | Hexythiazox        | 78587-05-0  | Flagged (Yellow) list |
| 17 | Cyhalothrin, gamma | 76703-62-3  | Flagged (Yellow) list |
| 18 | Chlorfenapyr       | 122453-73-0 | Flagged (Yellow) list |
| 19 | Spinetoram         | 187166-15-0 | Flagged (Yellow) list |
| 20 | Spinosad           | 168316-95-8 | Flagged (Yellow) list |
| 21 | Emamectin benzoate | 155569-91-8 | not in the list       |

**Implication:** The listed materials will be classified as Restricted (Orange) for Flowers & Plants producers and traders. While no fixed phase-out date is set, producers and traders are expected to plan for a gradual and feasible reduction in use over time, supported by risk assessment and monitoring.

**Question 2-6 / 2-7. Do you agree to introduce the proposed materials as Restricted materials for Flowers & Plants HML without the fixed phase out dates as specific condition? Please provide material-specific input using the Excel template.**



A total of 81 stakeholders responded to this question. 21% agreed with the proposal, while 52% partially agreed and 21% disagreed. Respondents generally supported the approach of classifying additional active ingredients as Restricted (Orange) materials rather than immediately prohibiting them. However, many respondents questioned the inclusion of specific active ingredients, the absence of fixed phase-out dates and the practical implications for resistance management and integrated pest management (IPM). Most comments were material-specific and highlighted the need to balance hazard reduction with the availability of effective alternative

**17 (21%) respondents agreed with the proposal.** Producers from Kenya generally supported the proposed approach, while noting that several of the listed active ingredients remain important for pest control, IPM and resistance management. They nevertheless considered the proposed classification to be acceptable.

**42 (52%) respondents partially agreed** with the proposal. Producers from Ecuador, Ethiopia, Kenya and Uganda generally supported introducing additional Restricted (Orange) materials but considered that several active ingredients should remain outside the Orange List or be retained under their current classification until effective alternatives become available. Materials that should not be included in the Orange list are: **Tebuconazole, Milbemectin, Oxadiazon, Hexythiazox, Gamma-cyhalothrin, Chlorfenapyr, Espinetoram, Spinosad and Emamectin benzoate, spinetoram, spinosad, chlorantraniliprole, lufenuron and indoxacarb** primarily due to their importance for resistance management, IPM and the control of thrips, caterpillars and other key pests. Several respondents also requested additional time before introducing restrictions.

Exporters from the Netherlands and the United Kingdom importer supported the overall approach but requested clearer phase-out expectations, with one Dutch exporter specifically recommending introducing fixed phase-out dates to facilitate communication and monitoring throughout the supply chain. A German retailer similarly questioned the rationale for not introducing fixed phase-out dates and proposed additional use conditions for some materials to reduce pollinator risks.

National Fairtrade Organisations in Austria, France, Germany and Switzerland, generally supported strengthening the Orange List but questioned the absence of fixed phase-out dates and suggested that some active ingredients should instead be moved to the Prohibited (Red) List to strengthen alignment with the PAN Highly Hazardous Pesticides list and evolving EU regulatory developments..

Respondent from an NGO considered that several active ingredients proposed for the Orange List should instead **be included in the Prohibited (Red) List: Alpha-Cypermethrin and Cypermethrin, Bifenthrin, Esfenvalerate, Chlorfenapyr**

**17 (21%) respondents disagreed with the proposal.** Most producers from Kenya, together with a producer from Ethiopia, considered that restricting a number of the proposed active ingredients would leave insufficient effective options for pest and disease management, particularly for thrips, caterpillars, spider mites and false codling moth. Respondents specifically referred to **spinetoram, spinosad, emamectin benzoate, cypermethrin, lufenuron, chlorantraniliprole, tebuconazole and hexythiazox** as important tools for resistance management and IPM where suitable alternatives are limited.

A respondent from the crop protection industry opposed the proposed restriction of specifically **spinetoram and spinosad**, arguing that the proposal did not sufficiently reflect greenhouse production conditions, resistance management needs or current regulatory assessments

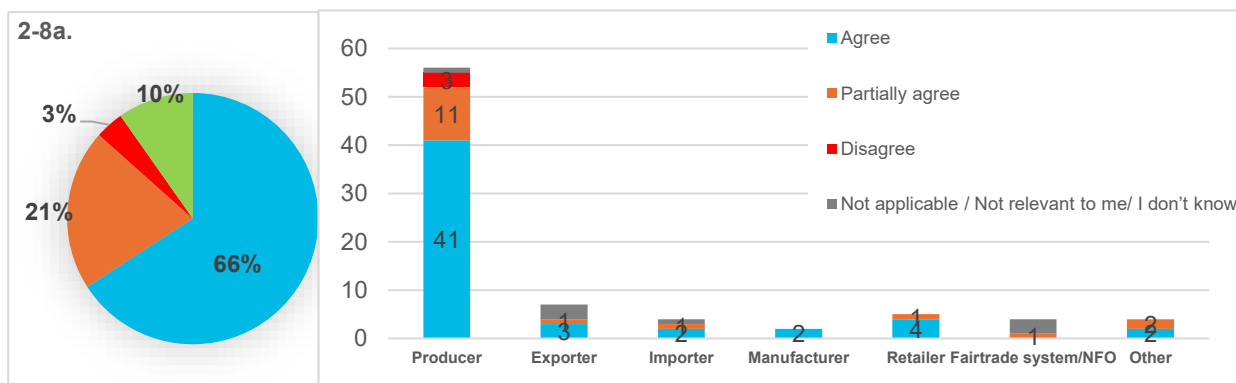
## Proposal 2-8 Proposal on introducing risk assessment template, to monitor risks related to pest management

To support the responsible use of materials included in the *Orange List* of the Flowers & Plants HML, we propose that organizations are using a risk assessment template. This template outlines the key risk areas organizations must evaluate prior to use and encourages continuous improvement in risk mitigation practices.

**Implication:** Organizations that already use an internal risk assessment tool covering similar aspects will not be required to adopt the proposed template, as their existing tool will be considered equivalent.

Please leave your feedback on the elements and sections that are proposed to be included in the '*risks monitoring*' template (see the survey in Excel format).

### Question 2-8 a. Do you agree with the proposed approach above ?



82 stakeholders responded to this question. 66% agreed with the proposal and 21% partially agreed and overall, they expressed broad support for introducing a harmonised risk assessment template to support the responsible use of Orange List materials. Stakeholders generally recognised that a structured risk assessment could strengthen the identification and mitigation of risks to human health and the environment. Comments mainly focused on ensuring that the template remains practical to implement, avoids unnecessary administrative burden and provides sufficient flexibility to accommodate existing internal risk assessment systems.

**54 (66%) of respondents agreed with the proposal.** Producers from Kenya generally welcomed the introduction of a harmonised risk assessment template, considering that it would improve the identification and mitigation of risks associated with the use of Orange List materials. Respondents highlighted that the template

could strengthen proactive management of risks to human health and the environment, improve risk profiling of active ingredients, support more responsible pesticide use and encourage preventive measures. Several producers also considered the proposal logical and confirmed their willingness to implement the proposed monitoring template.

**17 (21%) of respondents partially agreed with the proposal.** Producers from Kenya generally supported the introduction of a risk assessment template but requested additional implementation support, particularly through capacity building on conducting risk assessments. Some respondents also suggested revising specific elements of the template, including **removing product residue testing requirements** and referred to additional comments submitted separately and **questioned how the proposed approach could be effectively verified in practice.**

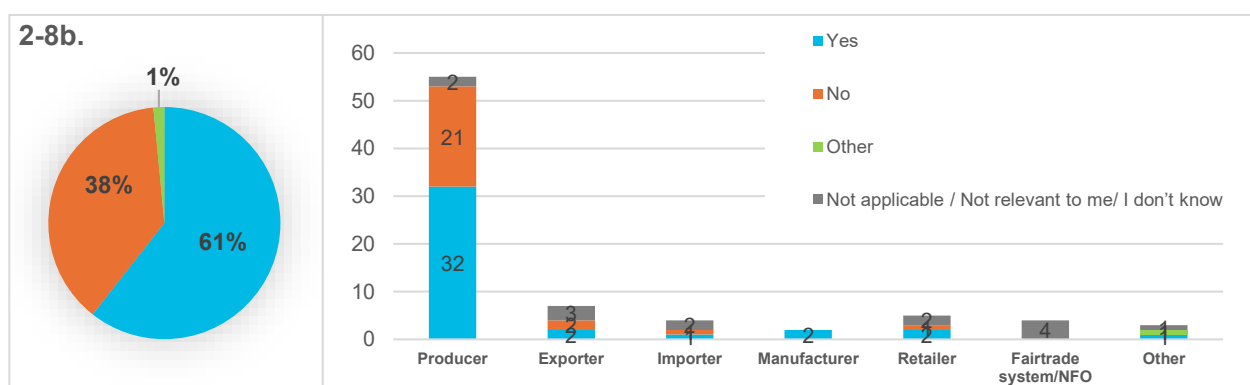
An importer from the United Kingdom supported the proposal in principle but considered that its suitability would depend on the final design of the risk assessment tool.

A respondent from National Fairtrade Organization supported the development of a harmonised risk assessment tool but requested clarification on how FLOCERT would assess the robustness of completed risk assessments and whether Fairtrade would have access to the information collected for monitoring purposes.

**Among inputs from other organizations, a respondent from a Crop Protection industry showed support on the proposal but recommended that the template remain flexible, recognise equivalent existing internal risk assessment tools and better reflect greenhouse production systems, resistance management and phytosanitary requirements.** An Austrian NGO supported the proposal **but suggested incorporating an additional environmental risk assessment approach, such as the Ecotox Index, to better assess cumulative pesticide impacts and environmental toxicity.**

**3 (3%) of respondents disagreed with the proposal.** Producers from Ethiopia and Kenya expressed concern that introducing an additional mandatory risk assessment template would create unnecessary administrative burden. Respondents argued that crop protection planning already incorporates risk assessment and questioned the value of introducing an additional documentation requirement that could result in multiple overlapping assessments.

#### Question 2-8b Do you use any similar risk assessment tool?



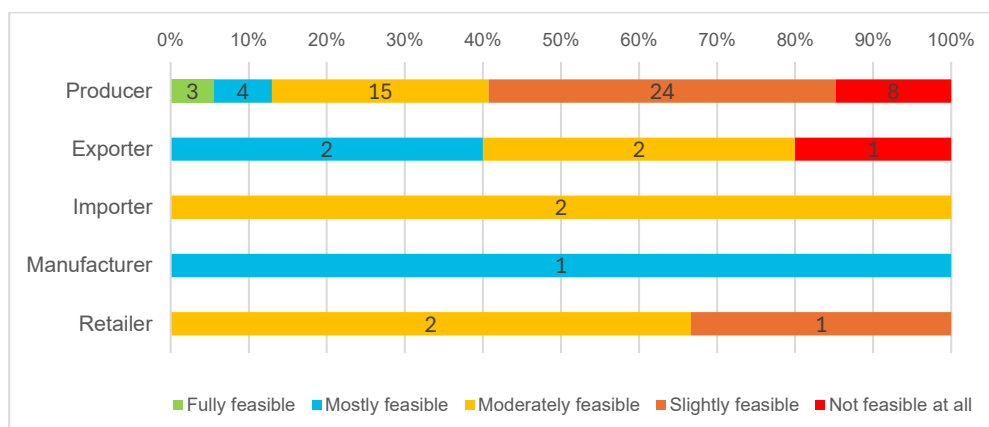
82 stakeholders responded to this question. 61% responded that they use similar risk assessment tool and 38% responded they are not. This is in general in line with feedback to question 2-8a, where a broad support for introducing a harmonised risk assessment template was captured through written feedback. An NGO referred to the tool they are using to assess potential environmental impact of pesticides. The tool combines multiple ecotoxicological and environmental fate parameters into a single score. There were no additional comments from stakeholders.



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## Feasibility of proposed materials to be included in Orange List for Flowers & Plants

**Question 2-9 How feasible is it for you to implement the proposed changes to Orange List of Restricted materials specific to Flowers & Plants?**



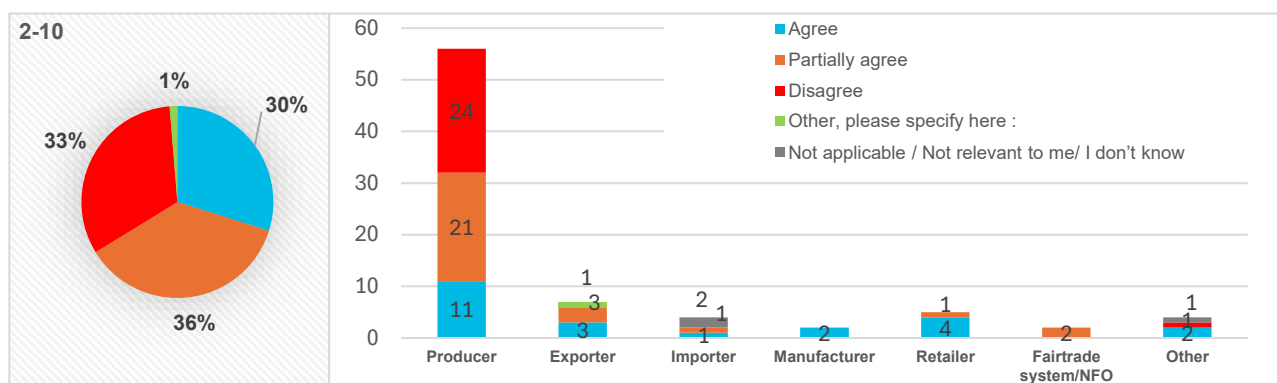
## Proposal 2-10: Proposed materials to be included in the Flagged (Yellow) list of hazardous materials applicable to producers and traders of Flowers and Plants.

The proposed list of 24 materials below is to be included in the Yellow List of flagged materials applicable to Flowers and Plants producers and traders, where 7 materials are already included in the Yellow list of HML and 17 materials are currently not included in any HML list. The proposed substances show identified environmental and/or suspected long-term health concerns but do not meet the thresholds for Red or Orange lists. Several of them are used as alternatives to materials already prohibited or proposed for prohibition. Their inclusion in the Yellow list ensures closer monitoring while maintaining availability of alternative pest management options. The materials in this list are hazardous and should be used with caution and these can potentially be moved to the Red List (prohibited) or Orange List (restricted) as new information is generated on their hazards. Therefore it is recommended to limit the use of these materials and phase- them out. Please note there is no change for 7 materials that are already included in Yellow Fairtrade HML.

| #  | Name of active ingredient (a.i.) of the material | CAS number  | Current Fairtrade HML category | Flowers & Plants HML list category | Specific condition                                                |
|----|--------------------------------------------------|-------------|--------------------------------|------------------------------------|-------------------------------------------------------------------|
| 1  | Diafenthiuron                                    | 80060-09-9  | Flagged (Yellow) list          | Flagged (Yellow) list              | HML yellow list conditions apply:<br><br>To be used with caution. |
| 2  | Folpet                                           | 133-07-3    | Flagged (Yellow) list          |                                    |                                                                   |
| 3  | Iprovalicarb                                     | 140923-17-7 | Flagged (Yellow) list          |                                    |                                                                   |
| 4  | Kresoxim-methyl                                  | 143390-89-0 | Flagged (Yellow) list          |                                    |                                                                   |
| 5  | Malathion                                        | 121-75-5    | Flagged (Yellow) list          |                                    |                                                                   |
| 6  | Mepanipyrim                                      | 110235-47-7 | Flagged (Yellow) list          |                                    |                                                                   |
| 7  | Pirimiphos-methyl                                | 29232-93-7  | Flagged (Yellow) list          |                                    |                                                                   |
| 8  | Azoxystrobin                                     | 131860-33-8 | not in the list                |                                    |                                                                   |
| 9  | Bifenazate                                       | 149877-41-8 | not in the list                |                                    |                                                                   |
| 10 | Clofentezine                                     | 74115-24-5  | not in the list                |                                    |                                                                   |
| 11 | Cyrantraniliprole                                | 736994-63-1 | not in the list                |                                    |                                                                   |
| 12 | Cyprodinil                                       | 121552-61-2 | not in the list                |                                    |                                                                   |
| 13 | Fenpropimorph                                    | 67564-91-4  | not in the list                |                                    |                                                                   |
| 14 | Flometoquin                                      | 875775-74-9 | not in the list                |                                    |                                                                   |
| 15 | Flonicamid                                       | 158062-67-0 | not in the list                |                                    |                                                                   |
| 16 | Fluazinam                                        | 79622-59-6  | not in the list                |                                    |                                                                   |
| 17 | Fludioxonil                                      | 131341-86-1 | not in the list                |                                    |                                                                   |
| 18 | Fluopicolide                                     | 239110-15-7 | not in the list                |                                    |                                                                   |
| 19 | Mandipropamid                                    | 374726-62-2 | not in the list                |                                    |                                                                   |
| 20 | Metalaxyl-M                                      | 70630-17-0  | not in the list                |                                    |                                                                   |
| 21 | Myclobutanil                                     | 88671-89-0  | not in the list                |                                    |                                                                   |
| 22 | Propamocarb                                      | 24579-73-5  | not in the list                |                                    |                                                                   |
| 23 | Spiromesifen                                     | 283594-90-1 | not in the list                |                                    |                                                                   |
| 24 | Tetradifon                                       | 116-29-0    | not in the list                |                                    |                                                                   |

**Implication:** 17 new materials will be applicable as flagged materials applicable to Flowers&Plants producers and traders. It is also recommended that these are gradually phased out

**Question 2-10: Do you agree to introduce the proposed materials as Flagged materials for Flowers & Plants HML? Please provide material-specific input using the Excel template.**



82 stakeholders responded to this question. 30% agreed with the proposal, 36% partially agreed and overall stakeholders expressed mixed views on the proposal to introduce 17 additional active ingredients to the Yellow List for Flowers & Plants. While many agreed that hazardous materials should be monitored, concerns focused on the rationale for including specific substances, the recommendation to gradually phase them out, the availability of alternatives, and whether some substances should instead be classified as Orange or Red List materials.

**23 (30%) of respondents agreed with the proposal.** Producers, exporters, importers, manufacturers, retailers and other organisations generally supported introducing the proposed materials to the Yellow List. Respondents who agreed did not provide additional comments or request modifications to the proposal.

**28 (36%) of respondents partially agreed with the proposal.** Producers from Ethiopia generally supported introducing the proposed materials to the Yellow List but requested additional time before any phase-out, highlighting the importance of several active ingredients, including **Mandipropamid, Metalaxyl-M, Fludioxonil and Cyprodinil**, for the management of downy mildew and botrytis. Respondents emphasised the need to consider pest pressure, resistance management and the availability of suitable alternatives before recommending phase-out. Other producers agreed with classifying the materials as Flagged but **did not support the recommendation to gradually phase them out**. Producers from Kenya questioned the rationale used to determine which materials should be flagged and suggested that **Malathion, Pirimiphos-methyl and Tetradifon should instead be moved directly to the prohibited list**.

Exporters generally supported the proposal but noted that many of the proposed active ingredients remain authorised for use in the European Union. Respondents recommended assessing the practical feasibility for growers before introducing the proposed changes.

Respondent from an NFO considered that substances currently prohibited in the European Union or associated with long-term health concerns should instead be included on the Orange List with an appropriate phase-out period or, where justified, on the Red List. Another respondent from an NFO also suggested reviewing several substances, including **Cyprodinil, Fludioxonil, Kresoxim-methyl, Fluazinam, Malathion and Diafenthiuron**, for possible inclusion on the Red List where they meet relevant criteria.

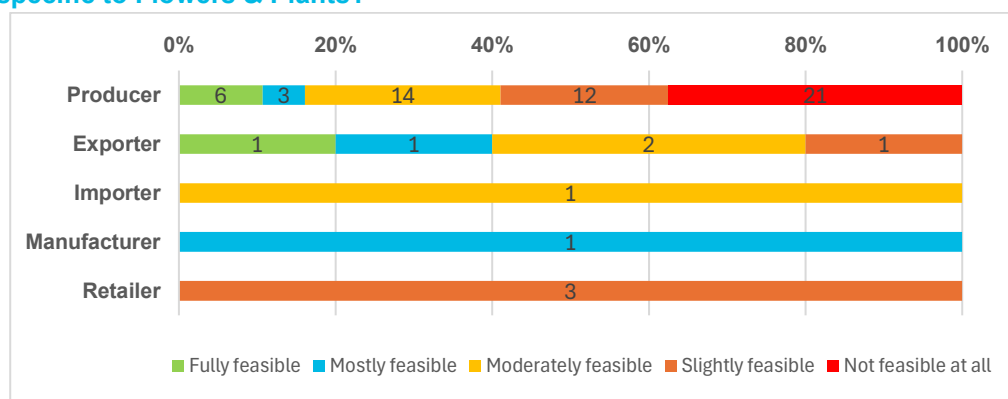
**25 (33%) of respondents disagreed with the proposal.** Producers from Kenya expressed concern that introducing additional Flagged materials would significantly reduce the already limited number of effective crop protection options available for flower production. Respondents highlighted the increased risk of pest and disease damage, challenges related to resistance management and considered that some of the proposed

active ingredients remain essential for flower production and therefore should not be included on the Yellow List.

An exporter from the Netherlands replied as 'other' and questioned the purpose and added value of the Yellow List, arguing that if materials are considered hazardous they should either be included on the Orange or Red Lists or not listed at all. The respondent also requested clarification on the purpose of monitoring and considered that the Yellow List may create unnecessary confusion.

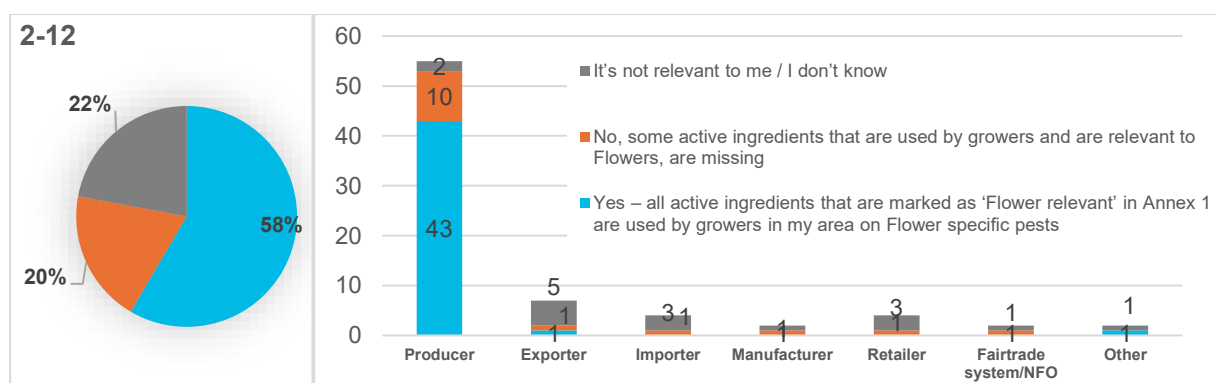
## Feasibility of proposed materials to be included in Yellow List for Flowers & Plants

**Question 2-11 How feasible is it for you to implement the proposed changes to Yellow list of Flagged materials specific to Flowers & Plants?**



## Additional general questions on Flowers & Plants proposed hazardous materials list.

**Question 2-12 The proposals above included materials that were found relevant for Flowers & Plants production. Please respond if materials that are listed in sections above (or in the Annex 1) include all the materials that are used by you/ growers in your area?**



20% of respondents replied that some materials are not included in the proposed consulted list of materials relevant for Flowers & Plants. List of suggested materials is covered in the table below.

**Question 2-13 If your answer above was 'No', which active ingredients are used in your area that were not yet listed as flowers & plants relevant.**

**24 materials** were suggested as flower-relevant, as a response to this question.

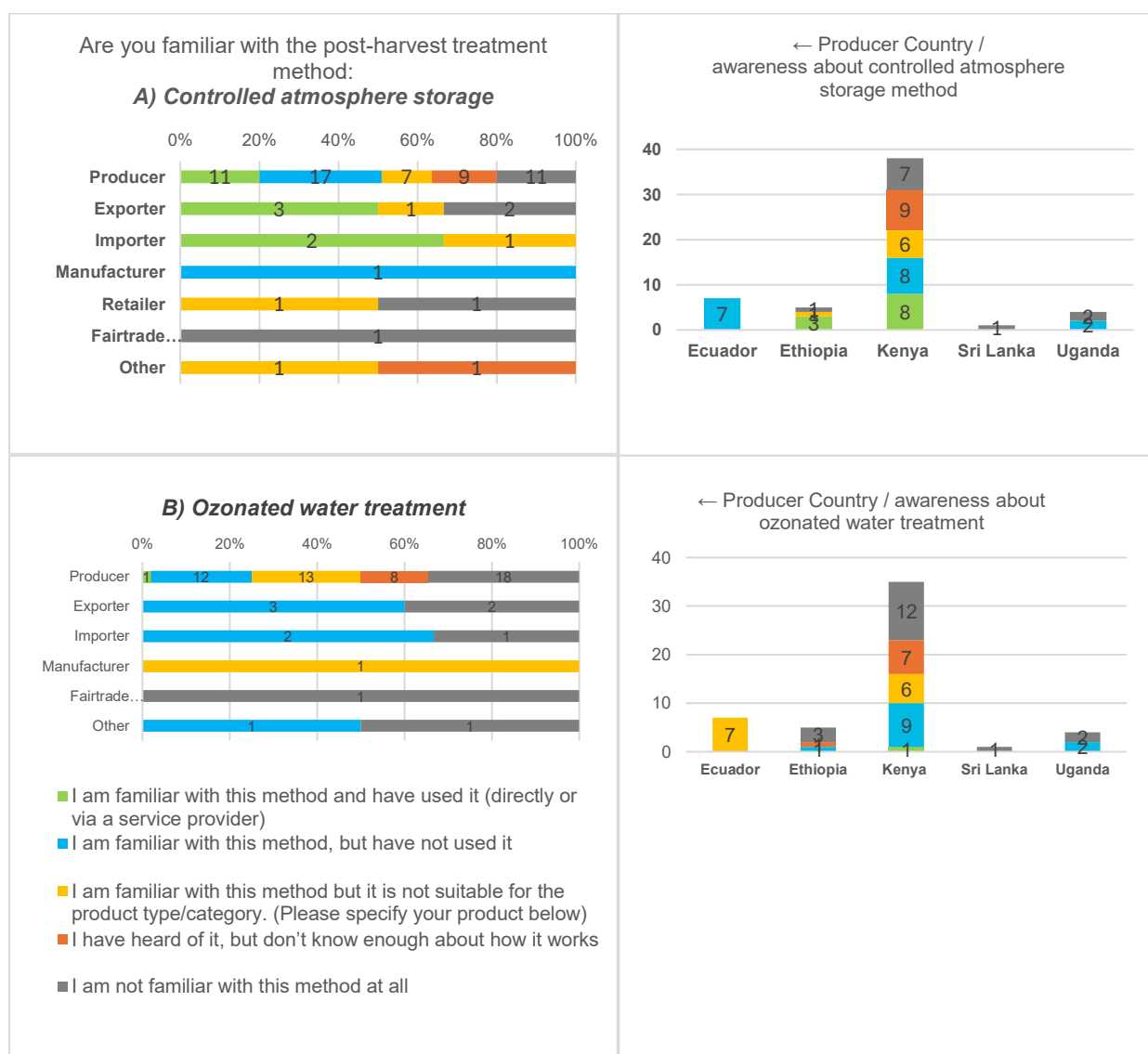
Among all suggested materials, there are three that currently listed in the generic HML: Pyrimethanil & Mineral oils / Paraffin oils (Yellow list) and Methamidophos (Red list)

| #  | Proposed material                     | Country                                | Stakeholder group                          |
|----|---------------------------------------|----------------------------------------|--------------------------------------------|
| 1  | Boscalid                              | Kenya                                  | Producers                                  |
| 2  | Bupirimate                            |                                        |                                            |
| 3  | Chromafenozide                        |                                        |                                            |
| 4  | Dodemorph acetate                     |                                        |                                            |
| 5  | Fluoxastrobin                         |                                        |                                            |
| 6  | Fluxametamine - <b>Fluxametamide</b>  |                                        |                                            |
| 7  | Fluxapyroxad                          |                                        |                                            |
| 8  | Methoxyfenozide                       |                                        |                                            |
| 9  | Novaluron                             |                                        |                                            |
| 10 | Oxymatrine (Prosuler Oxymatrine)      |                                        |                                            |
| 11 | Pyrimethanil                          |                                        |                                            |
| 12 | Pyrethrin (pyrethrum flowers extract) |                                        |                                            |
| 13 | Spirotetramat                         | Kenya;<br>France;<br>Switzerland       | Producers and / or<br>Fairtrade system/NFO |
| 14 | Spiroxamine                           |                                        |                                            |
| 15 | Thiocyclam                            |                                        |                                            |
| 16 | Methamidophos                         | United Kingdom,<br>France; Switzerland | Importer and / or<br>Fairtrade system/NFO; |
| 17 | Propineb                              |                                        |                                            |
| 18 | Cymoxanil                             |                                        |                                            |
| 19 | Fenhexamid                            | The Netherlands;<br>United Kingdom     | Importer                                   |
| 20 | Mineral oils / Paraffin oils          |                                        |                                            |
| 21 | Thiabendazole                         |                                        |                                            |

### Section 3. Post harvest options for quarantine pest control

This section explores how familiar are producers and traders (e.g. exporters) with post-harvest treatments that could help to reduce use of agrochemicals. For example, thrips and False Coddling Moth are pests of particular concern for EU market as these are EU quarantine pests. This means that any individuals (pest) detected in flower shipments by customs officers could cause the shipment to be rejected and an increase in frequency of full monitoring checks for all flower exports from the relevant country.

**Question 3-1 Are you familiar with the following post-harvest treatment methods that may be used to help control pests and reduce reliance on chemical pesticides in flowers before or after shipment :** a) *Controlled atmosphere storage (modifying oxygen and CO<sub>2</sub> levels during storage/shipping)* and b) *Ozonated water treatment (disinfection of harvested flowers using ozone-infused water)*



Stakeholders who replied that this is not suitable for their product, mentioned the following product (s):

- *Fresh flowers / Cut flowers (6 respondents)*
- *Roses (8 respondents)*
- *Summer flowers (7 respondents)*

**Question 3-2 What do you see as the main reasons for not using such methods? (select all that apply or add your own)**

- Equipment or services not available in my country/region
- Costs are too high
- Lack of technical knowledge/training
- Not required by my current buyers or markets
- Unsure of effectiveness in pest control
- Not applicable / Not relevant to me/ I don't know
- Other:

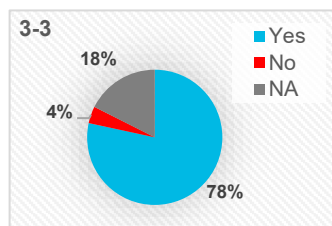
A total of **73 respondents** answered this question. As respondents could select more than one option, the totals exceed the number of respondents.

- Lack of technical knowledge/training (43 respondents) and High costs (38 respondents) – were the most frequently identified barriers
- 27 respondents also cited that it's not required by their buyer or markets
- 26 respondents mentioned these methods being not applicable or not relevant
- 24 expressed their uncertainty regarding effectiveness in pest control
- 20 mentioned there is limited availability of equipment or services
- 7 respondents indicated that all listed barriers apply.

Respondents who chose "**Other**", further mentioned:

- their current post-harvest system relies on alternative methods - **cold chain management, physical inspections, sorting and quality control**. They emphasised that pest management should primarily focus on field monitoring, crop protection strategies and pre-harvest inspections, as pest damage occurs mainly before harvest.
- One respondent also noted that controlled atmosphere is only used during sea shipments.
- Another commented that the best stage to eradicate pests is in the field rather than at intake, aiming for zero tolerance.
- On other respondent referred to the use of a *polymated fungicide*.
- 

**Question 3-3 Would you be interested in learning more about these methods as part of a guidance on reducing pesticide use and meeting market access requirements?**

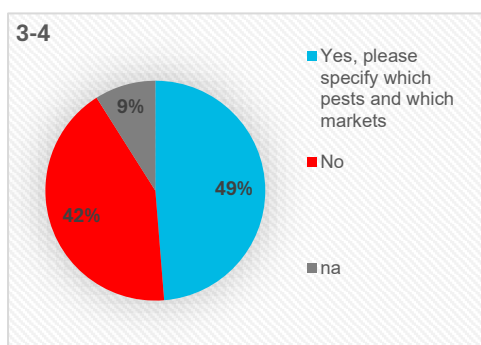


Most of stakeholders would be interested in learning more about the controlled atmosphere storage and the ozonated water treatment

**Question 3-4 Beyond False Codling Moth and thrips, are you aware of other quarantine pests relevant to your markets ?**

34 respondents identified other quarantine concerns relevant to their markets (see table below). As respondents could list several organisms, the number of mentions exceeds the number of respondents.

The most frequently identified pests were whiteflies, including *Bemisia tabaci* (20 respondents), and leaf miners, including *Liriomyza* spp.



| Pest or quarantine concern            | Nr. of respondents mentioning it |
|---------------------------------------|----------------------------------|
| Whiteflies, including Bemisia tabaci  | 20                               |
| Leaf miners, including Liriomyza spp. | 18                               |
| Spodoptera spp. / Fall Army Worm      | 11                               |
| Aphids                                | 8                                |
| Mites                                 | 7                                |
| White rust                            | 7                                |
| Thrips                                | 5                                |
| Mealybugs                             | 3                                |
| Helicoverpa spp.                      | 3                                |
| Oxalis seeds/weeds                    | 3                                |
| Caterpillars                          | 2                                |
| Scale insects / Diaspididae family    | 2                                |
| Duponchelia / pepper moth             | 2                                |
| Chrysanthemum rust                    | 1                                |

### Non-pest quarantine concerns

Three respondents referred to Oxalis, i.e. including "Oxalis seeds" and "Oxalis weeds."

One respondent stated that, for the Australian market, "all living things, dead or alive" are treated as quarantine concerns.

**Markets specific**, i.e. respondents associated some quarantine concerns with particular markets:

- **EU/Europe:** whiteflies, Bemisia tabaci, leaf miners, Spodoptera, Fall Army Worm, Helicoverpa, caterpillars, mealybugs and thrips
- **United Kingdom:** caterpillars, whiteflies and mealybugs
- **France/Russia:** thrips and Spodoptera frugiperda
- **Australia and Japan:** respondents described very broad quarantine controls, particularly for insects;

**What specific methods or practices have you implemented to comply with phytosanitary or quarantine requirements for these pests? Please also complement this information elaborating on frequency of such cases, if it was feasible in terms of the costs and any other further information.**

### Responses from producers:

- **Integrated Pest Management (IPM):** The majority of producers referred (IPM) as the main approach to meeting phytosanitary requirements, i.e. implementation of IPM strategies, constant IPM practices, robust IPM programmes, full IPM protocols and integrated crop management; combining biological, chemical, physical and cultural control measures
- **Defoliation and leaf removal:** Several producers highlighted leaf removal or complete defoliation of Gypsophila before packing as an important measure, particularly to prevent leaf miner. Respondents noted that this practice is effective but labour-intensive, time-consuming and costly.
- **Monitoring, scouting and inspections:**
  - monitoring tools and early warning systems;
  - pre-harvest scouting;
  - visual inspection before packing;
  - screening and quality checks at different stages until export;
  - 100% field, intake and packhouse inspections using trained personnel.
- **Biological, chemical and physical control**  
Respondents described using a combination of:
  - **biological control**, including biological products and parasitoids;
  - **chemical control**, including pesticide applications and chemical sprays;
  - **physical control**, including insect nets.

Several respondents emphasised that combining approaches is necessary to meet quarantine requirements:

- **Trapping methods**, i.e. use of pheromone traps and sticky traps for monitoring and mass trapping of pests.

- **Crop hygiene and cultural practices**, i.e. *crop hygiene, cultural practices and good agricultural practices as components of their phytosanitary management.*
- **Market-specific measures**, i.e. to meet the requirements of specific export markets. These included combining multiple pest and disease management measures for the Australian market, and applying full IPM protocols together with complete defoliation to meet quarantine requirement

#### Responses from traders:

- Finnish market has zero tolerance for any type of live insect.
- Removing all leaves from *Gypsophila*

#### Responses from the crop protection industry

- No on-farm phytosanitary measures but support compliance through crop protection solutions, IPM and resistance management guidance and technical stewardship for export requirements.

## Section 4. Implications of HML use in Flowers for trade and import market

### 4.1 Support to producers

Producers often face higher costs and increased risk of product loss when switching to alternatives for prohibited or restricted materials. They also face challenges when different standards or regulations set inconsistent rules on the use of the same chemical substances. This consultation aims to better align the Fairtrade Hazardous Materials List (HML) with other flower standards and EU regulations, helping to reduce complexity for supply chain actors. However, immediate changes at the production level are not always feasible. Long-term phase-outs may involve significant cost implications—particularly in countries where effective or accessible alternatives (chemical or non-chemical) are limited.

#### Question 4-1 Do you have any proposals on feasible ways for traders and retailers to support producers on the challenge mentioned above?

#### Producer feedback:

**Commercial support and fair pricing** – this was most common recommendation, to help producers manage the costs of transitioning to alternative pest management approaches, and this could include:

- co-financing of IPM tools, alternative crop protection products, research and transition activities (Ethiopia, Kenya);
- premium prices, fairer purchasing prices and long-term purchasing contracts to reflect production costs and reduce commercial risk (Ethiopia, Kenya, Sri Lanka).

**Technical support and investment in alternatives**- necessary to increase support for the development and adoption of alternative pest management approaches, including:

- technical guidance and training on IPM, biological control and resistance management (Ethiopia, Kenya);
- investment in research, development, validation and registration of effective alternative and non-chemical solutions (Ethiopia, Kenya).

**Realistic transition and implementation**, i.e. gradual and based on practical realities.

- allowing realistic implementation and phase-out timelines;
- validating alternative solutions before restricting existing materials; and
- recognising producers' production challenges during implementation (Ethiopia, Kenya)

**Dialogue and communication across the supply chain**, i.e. stronger communication and engagement between producers, traders, retailers and consumers.

- regular consultation with producers before introducing restrictions (Kenya);
- dialogue between producers and markets to improve understanding of production realities (Ecuador); and
- transparent communication with consumers and other market actors on the transition (Ethiopia, Kenya).

**Review of market and quality requirements**, i.e. to review market expectations that influence pesticide use.

- reviewing quality specifications and tolerance levels to better reflect production realities (Ecuador, Kenya);
- recognising that strict cosmetic quality requirements can drive pesticide use (Ecuador, Kenya); for example when retailers and buyers require flowers with perfect cosmetic appearance, producers respond by increasing pesticide use to meet those expectations and thus, reducing pesticide use becomes much more difficult.

**Other recommendations**

- harmonising standards and regulations across certification schemes and markets (Kenya);
- ensuring restrictions are based on availability of effective alternatives and local production conditions (Kenya, Uganda);
- considering producer-country registrations and MRL compliance when assessing permitted materials (Kenya);
- reducing restrictions on active ingredients or increasing permitted MRLs (Kenya).

**Trader feedback (exporter, importer, manufacturer, retailer) :**

**Collaboration across the supply chain**

- to establish a common approach across the supply chain, including closer cooperation between producers, traders, retailers and certification bodies, and longer-term partnerships (Netherlands, Germany, United Kingdom), for example - *long-term partnerships with growers including a joint force to introduce IPM methods*

**Technical support and knowledge sharing**

- recommendation is to increase support to producers through research, training and sharing of best practices, particularly on IPM, biological alternatives and environmentally friendly production (Germany, Netherlands, United Kingdom, Uganda). For example, retailers could play a more supportive role by allowing more flexibility.

**Commercial support and realistic transition**

- respondents recognised the higher costs and practical challenges for producers and flagged importance of fair pricing, greater flexibility in product specifications, and realistic implementation of restrictions (Netherlands, Uganda, United Kingdom).

**Harmonisation of standards**

- better alignment of certification schemes for prohibited materials lists to reduce complexity and conflicting requirements (Netherlands, United Kingdom).

**Fairtrade system:**

- recommended creating a dedicated fund to support the transition away from hazardous chemicals through technical assistance, while recognising good-performing farms, promoting experimentation, and facilitating knowledge exchange between farms

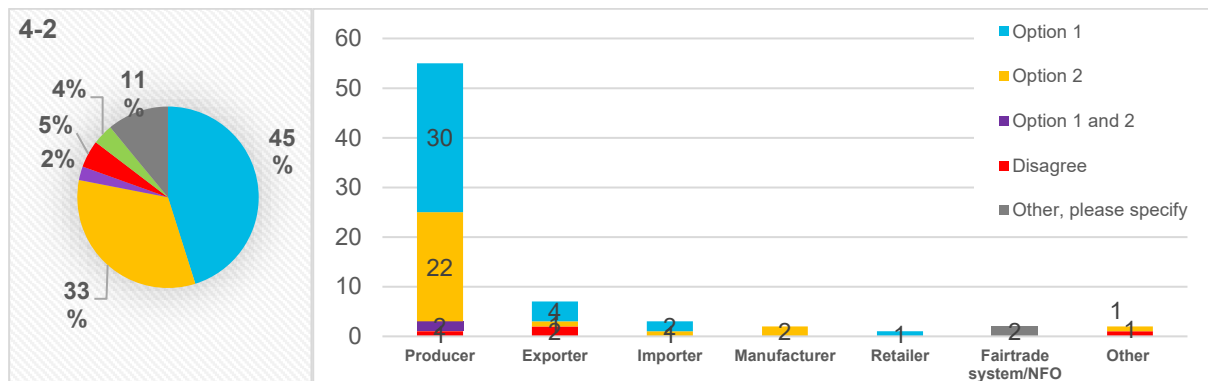
**Crop protection industry representatives:**

- To avoid blanket restrictions, to follow a science-based and risk-driven transition, alignment of standards with regulatory frameworks, and maintaining market access for compliant production systems

**Question 4-2 Do you agree for Fairtrade to introduce more explicit stipulations for traders supporting producer organizations in their efforts to reduce use of highly hazardous pesticides and their risks due to regulations in EU / other market?**

- Agree only with Option 1 - stipulated as a requirement in the standard as a provision of support to producers on their efforts and upon their request
- Agree only with Option 2 - participation in a project or initiative aimed at reducing the use of specific agrochemicals
- Disagree

- Not applicable / Not relevant to me/ I don't know
- Other, please specify here:



Those who replied 'other' further suggested:

- Supporting targeted outcome-based requirements, supported by risk-based and science-driven approaches tailored to local contexts, rather than mandatory participation in predefined initiatives (crop protection industry respondent).
- Option 1 but to clarify the role of traders, including financial support and communication with retailers, or allow larger traders to choose between Option 1 and Option 2 (Fairtrade system respondents)

#### Question 4-3 Would you be interested in supporting producer organizations with costs for services/methods outlined in Question 10 (see above)?

Trader responses indicated limited willingness to commit to supporting producer organisations with these costs. Exporters predominantly responded "No", while one importer suggested that support would depend on the project or other factors.

Retailer and manufacturer responses were split between "No" and "Not applicable".

### General comments/feedback

- **Producers** generally emphasised the need to balance the ambition of strengthening the Hazardous Materials List with practical implementation realities. Respondents requested realistic transition periods, availability of effective alternative products, increased technical support and training, and continued consultation with producers before introducing new restrictions. Several comments highlighted the importance of considering local production conditions, quarantine requirements, resistance management, export market requirements and production under protected cultivation.

Several producers requested that Fairtrade provide or identify alternative products for active ingredients proposed for phase-out or inclusion on the Red or Orange Lists. Respondents also suggested increased training on post-harvest treatment and more country-level consultation meetings involving technical experts from both Fairtrade and non-Fairtrade flower producers.

Some producers highlighted the importance of Magnesium Phosphide for fumigation of flowers destined for the Australian market. They explained that its use is limited to controlled post-harvest fumigation of non-Fairtrade flowers under strict segregation, traceability and health and safety measures, and requested clarification on continued use under Fairtrade requirements. Respondents also proposed the possibility of an off-site fumigation facility and requested written guidance from Fairtrade and FLOCERT regarding acceptable arrangements and certification requirements. Additional comments are:

- consideration of market access and pricing alongside new requirements;
- stronger coordination between producers, traders and markets through technical dialogue and working groups;
- reasonable timelines for exemptions;
- more consultation on materials proposed for the Red List.

#### ▪ **Traders**

- **Importers** supported greater harmonisation of agrochemical requirements across standards and markets to reduce complexity, administrative burden and compliance risks throughout the supply chain. One importer also suggested developing a single Fairtrade Red List applicable across all sectors.
- **Manufacturer / Processor** respondents emphasised that implementation of proposed Red List changes depends on growers having access to effective alternatives, technical training and integrated pest management support. They requested biological alternatives or biocontrol options to facilitate transition.

Overall, this group of stakeholders also provided technical suggestions regarding the Hazardous Materials List, including:

- clarification on Maximum Residue Levels (MRLs) for prohibited substances;
- addressing situations where parent substances remain permitted while their metabolites are prohibited (e.g. Acephate/Methamidophos and Benomyl/Thiophanate-methyl/Carbendazim); suggesting is to add all related materials to Red list.
- synchronising Fairtrade updates with external schemes such as MPS;
- considering occupational exposure limits (OELs) based on dermal transfer factors;
- exploring guidance on limiting the total number of detectable active ingredients ("chemical cocktail effect") in mixed bouquets.

- **NFOs** emphasised alignment with European Union legislation and other recognised standards. Respondents considered that materials prohibited in the EU should generally be included on the Fairtrade Red List or, at minimum, on the Orange List with a phase-out date.

Suggestions included indicating EU prohibition status within the HML and establishing a reference date for EU legislation.

Concerns were raised regarding potential reputational risks for Fairtrade flowers if the HML remains less stringent than market expectations.

Further suggestions included:

- ensuring Fairtrade HML is at least as strict as RA and MPS;
- introducing regular updates of the HML, including consideration of automatic inclusion of new PAN HHP materials;
- assigning phase-out dates to Orange List materials;
- moving materials associated with chronic health concerns from the Yellow List to at least the Orange List, or where appropriate the Red List;
- strengthening worker protection, including consideration of pesticide exposure during handling of flowers and protection of children present on farms;
- conducting random residue analysis by Fairtrade or FLOCERT.

## Conclusion on received inputs to materials use and their alternatives

As a next step in revising the consulted proposed Flowers & Plants specific HML, the objective is to ensure that phasing out hazardous materials does not unintentionally reduce the diversity of control options available to producers to manage key pests and diseases

For this purpose, the information presented in **Annex 3 and Annex 4** gathered through technical input of the survey, was considered when assessing the feasibility of proposed HML changes and appropriate transition periods.

**Annex 3** provides overview of materials identified as relevant or not relevant for Flowers & Plants, together with additional information to inform their possible inclusion in the HML. While many of the additional materials were reported as not used or already phased out, a smaller number were identified as relevant for current use. For some of these materials, producers highlighted their importance for effective pest and disease control, particularly where alternatives and/or resistance management are limited (Cymoxanil, Fenhexamid, Propineb and Thiabendazole).

The assessment presented in **Annex 4** identified Botrytis, aphids and downy mildew as areas requiring particular attention in relation to the availability of reported alternatives. Such findings and similar, could be considered when deciding on HML changes and appropriate transition periods.

For example, in the case of Botrytis, the objective would be to maintain sufficient diversity of control options when hazardous materials are phased out. Where a material has a strong hazard basis for phase-out but the available evidence indicates that immediate prohibition could significantly reduce effective control options, an appropriate transition period or other temporary risk-management measures could be considered.

Within the Fairtrade HML framework, where the reported evidence indicates that immediate prohibition could significantly reduce available control options, the Orange List could serve as a temporary transition mechanism while alternative chemical, biological and IPM options are strengthened.

In general, phased withdrawal can be used as an interim risk-management measure where immediate withdrawal is not feasible.

## Annex 1: Summary of technical feedback on Abamectin use in Flowers & Plants

- 26 organizations have either applied for exception to use Abamectin or in recent consultation indicated they need to use this material.
- 17 organizations participating in the consultation have indicated they have already phased it out.

Abamectin is primarily used in greenhouses for cut flower and young plant production for the management of mites, thrips, leaf miners, nematodes, and related pests.

Reported dependence on the material varies across countries and production contexts, with most respondents from Kenya and Ecuador describing medium to high dependence, while some respondents indicated that use is already limited or rare or did not specify any detail.

Producers in Kenya most frequently reported concerns related to:

- insufficient effectiveness of alternatives,
- limited availability of alternative products,
- resistance management challenges,
- and risks of yield or quality loss if the material is phased out. Several respondents indicated that alternative biological or chemical controls exist but were considered less effective under current pest-pressure conditions.

In Ecuador, producers emphasized the importance of Abamectin mainly as part of pesticide rotation strategies to prevent resistance development, particularly for mite control in greenhouse production. Respondents also highlighted the importance of maintaining multiple chemical groups within integrated pest management programs.

The Sri Lanka respondents indicated that Abamectin is used mainly during acute mite outbreaks, while available alternatives such as neem oil and soap mixtures were considered insufficiently effective or not consistently available.

Across countries, many respondents indicated that they are implementing IPM and mitigation measures, including biological control agents, targeted applications, reduced frequency of use, and use only as a last resort.

However, consultation responses suggest that the feasibility of phase-out differs significantly depending on pest pressure, production systems, availability of alternatives, and local agronomic conditions.

## Annex 2: Summary of technical feedback on Lambda-cyhalothrin use in Flowers & Plants

- 16 organizations have either applied for exception to use Lambda-cyhalothrin or in consultation they indicated they need to use this material.
- 18 organizations participating in the consultation have indicated they have already phased it out.

Lambda-cyhalothrin is mainly used in greenhouse cut flowers production for the management of False Codling Moth (FCM), thrips, caterpillars, leaf miners, aphids, whiteflies, and other quarantine or sucking pests. Most frequent reported use is against the FCM as a quarantine pest management, particularly in relation to export phytosanitary compliance and prevention of export interceptions.

Producers, especially in Kenya and Uganda, highlighted challenges linked to KEPHIS export controls, EU phytosanitary inspections, and risks of rejected shipments or market access restrictions when FCM cannot be effectively controlled.

Responses from Kenya most frequently referred to:

- high pest pressure,
- resistance management concerns,
- lack of sufficiently effective alternatives,
- and risks of yield, quality, and economic losses if Lambda-cyhalothrin is unavailable. Several producers indicated that available alternatives or biological controls were either less effective, not consistently available, or insufficient under current pest-pressure conditions. At the same time, some Kenyan respondents reported lower dependence or indicated that alternatives are available and phase-out may be feasible under certain production conditions.

Responses from Uganda focused primarily re its use on caterpillar and FCM management. Producers reported that climatic conditions favour continuous moth multiplication and indicated that available alternatives are currently insufficient or not easily accessible. Several respondents described Lambda-cyhalothrin as an important tool for reducing phytosanitary risks and supporting export compliance.

Consultation responses from Ethiopia indicated high dependence related to insect control despite the existence of alternatives.

Ecuador respondents indicated that alternatives are available and that Lambda-cyhalothrin is rarely or no longer used.

In general producers frequently stated that its use is intended only as a last resort or during periods of high pest pressure. As an ongoing efforts to reduce reliance on Lambda-cyhalothrin producers mentioned the following measures:

- IPM implementation,
- biological control,
- pheromone and insect traps,
- insect-proof nets,
- reduced spray frequency,
- spot spraying,
- and trials of alternative active ingredients.

### Annex 3: Summary of detailed input submitted via technical survey

Overview of feedback in additional technical survey on materials that have not yet been identified as relevant for flowers included in main consultation proposal is presented below.

Respondents were asked to comment on materials from the existing Fairtrade Red, Orange and Yellow Lists that had not previously been identified as relevant for flowers, but which they considered relevant and potentially requiring assessment for inclusion in a Flowers-specific HML. The table also included materials that are currently not in the HML but considered as potentially relevant for Flowers & Plants.

- The table below is the overview of materials where detailed inputs were provided

| Active Ingredient of material | Current Fairtrade status    | Nr of org. who provided input on use | Total Nr of org. reporting use | Greenhouse use | Open field use | Not used / phased out | Countries of respondents providing input on use | Phased out in % to total nr of org. | comments from producer organizations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------|-----------------------------|--------------------------------------|--------------------------------|----------------|----------------|-----------------------|-------------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cymoxanil                     | not included in current HML | 34                                   | 28                             | 28             | 0              | 6                     | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 18%                                 | <ul style="list-style-type: none"> <li>- No effective alternative: Only active within its Fungicide Resistance Action Committee (FRAC) code.</li> <li>- Resistance management: Important for rotation and resistance control.</li> <li>- Effective control: Good curative treatment for downy mildew.</li> <li>- Frequently used/needed.</li> <li>- Recommendation: Do not include in HML.</li> </ul>                                                                                                                                                                                 |
| Fenhexamid                    |                             | 35                                   | 28                             | 26             | 2              | 7                     | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 20%                                 | <ul style="list-style-type: none"> <li>- Highly effective against Botrytis: Reported as an effective preventive/curative botryticide.</li> <li>- Important for resistance management: Important rotation option; removal would reduce resistance-management options.</li> <li>- Limited alternatives: Producers report no effective/best alternative and consider it difficult to phase out.</li> <li>- Frequently used and affordable: Described as frequently used, needed and moderately priced.</li> <li>- Recommendation: Reconsider listing / do not include in HML.</li> </ul> |
| Propineb                      |                             | 23                                   | 16                             | 15             | 1              | 7                     | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 30%                                 | <ul style="list-style-type: none"> <li>- Effective fungicide: Reported as a very effective multisite/contact fungicide for downy mildew and Botrytis.</li> <li>- Frequently used/needed, mixed use evidence some phased out</li> <li>- Recommendation: not listing/phasing it out.</li> </ul>                                                                                                                                                                                                                                                                                         |
| Thiabendazole                 |                             | 21                                   | 10                             | 9              | 1              | 11                    | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 52%                                 | <ul style="list-style-type: none"> <li>- Very effective curative Botrytis fungicide.</li> <li>- Difficult to replace: Reported as the only active within its FRAC code / no effective alternative.</li> <li>- Needed/required.</li> <li>- Important for resistance management: Respondents state that removing it would reduce options in the rotation programme.</li> <li>- Recommendation: not to include in any HML list.</li> </ul>                                                                                                                                               |

| Active Ingredient of material       | Current Fairtrade status | Nr of org. who provided input on use | Total Nr of org. reporting use | Greenhouse use | Open field use | Not used / phased out | Countries of respondents providing input on use | Phased out in % to total nr of org. | comments from producer organizations                                                                                                                                                                                                                                                                                                            |
|-------------------------------------|--------------------------|--------------------------------------|--------------------------------|----------------|----------------|-----------------------|-------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Phosphane (Phosphine)               | Orange list (Restricted) | 12                                   | 1                              | 0              | 0              | 11                    | Ethiopia, Kenya, SriLanka, Uganda               | 92%                                 | - No alternative works while keeping flowers safe                                                                                                                                                                                                                                                                                               |
| Cyflufenamid                        | Yellow list (Flagged)    | 16                                   | 6                              | 6              | 0              | 10                    | Ethiopia, Kenya, SriLanka, Uganda               | 63%                                 | <ul style="list-style-type: none"> <li>- Effective against powdery mildew.</li> <li>- Important for resistance management: Respondents state that removing it would reduce options in the rotation programme.</li> <li>- Very much needed.</li> <li>- Non-use also reported: One respondent states that they never used the product.</li> </ul> |
| Paraffin oils; mineral oils         |                          | 14                                   | 4                              | 2              | 2              | 10                    | Ethiopia, Kenya, SriLanka, Uganda               | 71%                                 | <ul style="list-style-type: none"> <li>- Important for resistance management.</li> <li>- Very much needed.</li> <li>- Considered comparatively less harmful than pesticides.</li> <li>- At least one producer never used the product.</li> </ul>                                                                                                |
| Antibiotics (including Amoxicillin) |                          | 14                                   | 2                              | 2              | 0              | 12                    | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 86%                                 | - Suggested not to include in any HML list.                                                                                                                                                                                                                                                                                                     |
| Borax; Borate salts                 |                          | 14                                   | 2                              | 2              | 0              | 12                    | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 86%                                 | <ul style="list-style-type: none"> <li>- Permanent use for crop fertilisation: Respondent recommends removal from Yellow because it is permanently used for crop fertilisation.</li> <li>- Non-use also reported:</li> </ul>                                                                                                                    |
| Boric acid                          |                          | 13                                   | 2                              | 2              | 0              | 11                    | Ecuador, Ethiopia, Kenya, SriLanka, Uganda      | 85%                                 | <ul style="list-style-type: none"> <li>- Permanent use for crop fertilisation: Respondent recommends removal from Yellow because it is permanently used for crop fertilisation.</li> <li>- Non-use also reported:</li> </ul>                                                                                                                    |

- The table below is the overview of materials where no detailed inputs were provided, but only indication if the material is already phased out

| Active Ingredient of material               | Current Fairtrade status | Nr. of org who reported<br>Not used / phased out | Countries of respondents providing input<br>on use |
|---------------------------------------------|--------------------------|--------------------------------------------------|----------------------------------------------------|
| Alanycarb                                   | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Anthraquinone                               | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Azamethiphos                                | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Bensulide                                   | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Bioresmethrin                               | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Butachlor                                   | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Butylate                                    | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Chinomethionat; Oxythioquinox               | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Chloroform                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Climbazole                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Diclofop-methyl                             | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Dimethenamid                                | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Fluthiacet-methyl                           | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Furilazole                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Haloxypop-methyl (unstated stereochemistry) | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Imazethapyr                                 | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Imiprothrin                                 | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Isoxaflutole                                | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Metam-potassium                             | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Methabenzthiazuron                          | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| MGK 326                                     | Yellow list (Flagged)    | 11                                               | Ethiopia, Kenya, Uganda                            |
| MON 4660; AD 67                             | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Monuron                                     | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Nitrapyrin                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Oryzalin                                    | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Phosalone                                   | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Prallethrin                                 | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Propachlor                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Propham                                     | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Pyraclofos                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Pyrazachlor                                 | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Quinoclamine                                | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Quintozene; PCNB                            | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Rotenone                                    | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Sedaxane                                    | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Sodium dimethyl dithiocarbamate             | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Technazene                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Temephos                                    | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |

| Active Ingredient of material               | Current Fairtrade status | Nr. of org who reported<br>Not used / phased out | Countries of respondents providing input<br>on use |
|---------------------------------------------|--------------------------|--------------------------------------------------|----------------------------------------------------|
| Terrazole; Etridiazole                      | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tetrachlorvinphos                           | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Thiodicarb                                  | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tralomethrin                                | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Validamycin                                 | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| XMC                                         | Yellow list (Flagged)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| 2,4-DB                                      | Orange list (Restricted) | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Amisulbrom                                  | Orange list (Restricted) | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Amitraz                                     | Orange list (Restricted) | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Quinoxifen                                  | Orange list (Restricted) | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| 2,3,4,5-Bistetrahydro-2-furaldehyde         | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| 2,4,5-T                                     | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| 2,4,5-TCP                                   | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Acrolein                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Allyl alcohol                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Alpha-chlorohydrin                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Amitrole                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| and its compounds)                          | Red list (Prohibited)    | 11                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Anthracene oil                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Arsen and its compounds                     | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Asbestos                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Azafenidin                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Binapacryl                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Brodifacoum                                 | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Bromadiolone                                | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Bromoxynil                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Bromoxynil heptanoate                       | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Bromoxynil octanoate                        | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Cadmium compounds                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Calcium arsenate                            | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Carbon tetrachloride                        | Red list (Prohibited)    | 11                                               | Ethiopia, Kenya, Uganda                            |
| Chloranil                                   | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Chlordecone                                 | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Chlordimeform                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Chlorobenzilate                             | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Chlorotoluron                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Copper Arsenate                             | Red list (Prohibited)    | 11                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Coumatetralyl                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| CPMA (Chloromethoxypropyl-mercuric-acetate) | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Creosote                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |

| Active Ingredient of material                                         | Current Fairtrade status | Nr. of org who reported<br>Not used / phased out | Countries of respondents providing input<br>on use |
|-----------------------------------------------------------------------|--------------------------|--------------------------------------------------|----------------------------------------------------|
| Cyhexatin                                                             | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| DBCP                                                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Difenacoum                                                            | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Difethialone                                                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Dimoxystrobin                                                         | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Dinocap                                                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Dinoseb and its salts and esters                                      | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Diquat dibromide                                                      | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Diquat dichloride                                                     | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| DNOC and its salts                                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Epichlorohydrin                                                       | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Ethylene thiourea                                                     | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Fenchlorazole-ethyl                                                   | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Fentin acetate; Triphenyltin acetate                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Fentin hydroxide                                                      | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Fluazifop-butyl                                                       | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Fluazolate                                                            | Red list (Prohibited)    | 11                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Flumetralin                                                           | Red list (Prohibited)    | 11                                               | Ethiopia, Kenya, Uganda                            |
| Flumioxazin                                                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Halfenprox                                                            | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Heptachlor                                                            | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Hexachlorocyclohexane; BHC mixed isomers                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Ioxynil                                                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Lead arsenate                                                         | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Leptophos                                                             | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Linuron                                                               | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Methoxychlor                                                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Mirex                                                                 | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Molinate                                                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Nitrobenzene                                                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Nitrofen                                                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Octamethylpyrophosphoramidate (OMPA)                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Paris Green (copper acetoarsenite)                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Pentachlorobenzene                                                    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Phenylmercury acetate                                                 | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Picloram                                                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| PMDS Di(phenylmercuric) dodecenyl succinate                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Polybrominated biphenyls mixture PBB                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Polychlorinated biphenyls PCB (except mono and dichlorinated) Aroclor | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |

| Active Ingredient of material        | Current Fairtrade status | Nr. of org who reported<br>Not used / phased out | Countries of respondents providing input<br>on use |
|--------------------------------------|--------------------------|--------------------------------------------------|----------------------------------------------------|
| Polychlorinated Terphenyls (PCTs)    | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Potasan                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Profoxydim                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Propylene oxide, Oxirane             | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Pyrazoxon                            | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Quizalofop-p-tefuryl                 | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Resmethrin                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Safrole                              | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Silafluofen                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Silvex (all forms)                   | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Sodium arsenite (arsenic             | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| TCMTB                                | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| TDE                                  | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tefluthrin                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tepraloxymid                         | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Terbutryn                            | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Terpene polychlorinates (Strobane)   | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tetraethyl lead                      | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tetramethyl lead                     | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Thallium sulfate                     | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Thiourea                             | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tolylfluand                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Toxaphene; Camphchlor                | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tri-allate                           | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tributyltin compounds                | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Trichlorfon                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Trifluralin                          | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Tris (2,3 - dibromopropyl) phosphate | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Vinyl chloride                       | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |
| Zinc phosphide                       | Red list (Prohibited)    | 12                                               | Ethiopia, Kenya, SriLanka, Uganda                  |

## Annex 4. Overview of reported evidence on key pest and disease challenges and availability of alternative products

Overall, based on reported information presented Table 1 and Table 2 below, the consultation shows that producers reported alternatives for most of the pests and diseases that were mentioned most often. This information was used to complement our understanding when assessing the feasibility of the proposed HML changes.

Botrytis and aphids stand out as areas where alternatives appear to be more limited. Although these pests were not among the most frequently reported pest and disease challenges, they may need particular attention when considering changes to the HML.

**Please note, this assessment is based on reported consultation information. Use of this data for feasibility assessment does not confirm the efficacy, registration or availability of individual alternatives in all producing countries.**

The **Table 1** below shows the number of times individual target pests and diseases were mentioned in relation to the use of active ingredients. Multiple mentions may originate from the same respondent where different active ingredients are used against the same target organism. The results therefore indicate the relative prominence of pest and disease challenges in the reported pesticide-use data, rather than the number or percentage of producers affected.

| Rank | Pest / disease             | Number of times material was mentioned in reported data/ responses | Respondents reporting it | Different a.i.s associated |
|------|----------------------------|--------------------------------------------------------------------|--------------------------|----------------------------|
| 1    | Thrips                     | 336                                                                | 42                       | 37                         |
| 2    | Downy mildew               | 226                                                                | 41                       | 15                         |
| 3    | Caterpillars / Lepidoptera | 145                                                                | 32                       | 24                         |
| 4    | Mites / spider mites       | 120                                                                | 33                       | 15                         |
| 5    | Botrytis / grey mould      | 116                                                                | 34                       | 12                         |
| 6    | Powdery mildew             | 95                                                                 | 36                       | 19                         |
| 7    | Aphids                     | 64                                                                 | 26                       | 18                         |
| 8    | Rust                       | 33                                                                 | 18                       | 5                          |
| 9    | False Codling Moth (FCM)   | 31                                                                 | 15                       | 13                         |
| 10   | Whiteflies                 | 30                                                                 | 12                       | 15                         |

Other: - leaf miners (10), Weeds (9) , Nematodes (8) ,Leaf spot (6)

## Potential hotspots in the availability of alternatives

Further to the overview above, the reported data allowed us to identify potential areas of concern regarding alternatives, i.e. pests and diseases for which alternatives may be limited. The complete overview is presented in **Table 2** below.

The reported information highlights **three pests/diseases** that may require particular attention:

- **Botrytis** – reported evidence is mixed, and several responses indicate challenges with the availability of alternatives.
- **Aphids** – limited availability of effective alternatives was reported by some producers and requires further attention.
- **Downy mildew** – several alternatives were reported; however, there is a risk that changes to the Flowers HML could reduce the range of available control options. This should be considered when deciding on changes to individual materials.

Producers reported a wider range of alternative control options for **thrips and powdery mildew**.

The Table 2 below provides a qualitative overview, starting with target organisms for which the consultation indicated greater potential challenges regarding alternatives. The assessment considered the number and type of reported alternatives, including chemical alternatives with different modes of action and biological or IPM options.

| pest / disease                                | feedback / input reported by producers                                                                                                                                                                                  | OUTCOME / next step                                                                                      |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Botrytis</b>                               | - Several responses say none/no alternative or give products that still need identification;<br>- some alternatives do exist (e.g. Fenhexamid/Polyoxin-type options and biological input), but evidence is inconsistent | potentially, challenging feasibility – further review of remaining control options needed                |
| <b>Aphids</b>                                 | Some alternatives are reported, including chemical and biological control, but several respondents explicitly say no alternative / no effective alternative, especially for aphids                                      |                                                                                                          |
| <b>Downy mildew</b>                           | Many alternatives are reported, but there are also numerous “Nil / no effective alternative” responses and several alternatives are in overlapping fungicide MoA groups                                                 | alternatives exist, but the diversity of available modes of action may be reduced by changes to the HML. |
| <b>Spider mites / red spider mites</b>        | Quite a lot of alternatives overall, including predatory mites and different acaricide groups; however, some reported substitutions are same-MoA substitutions (e.g. Clofentezine ↔ Hexythiazox)                        | evidence that in general alternatives are available                                                      |
| <b>Caterpillars / moth caterpillars / FCM</b> | Several chemical and biological options reported, but some substitutions are within IRAC 28 (e.g. chlorantraniliprole/cyantraniliprole/flubendiamide), number of alternatives overstates MoA diversity                  |                                                                                                          |
| <b>Thrips</b>                                 | evidence reported for many alternatives across chemical MoAs plus biological controls such as Amblyseius                                                                                                                | strongest evidence of reported alternatives                                                              |
| <b>Powdery mildew</b>                         | different fungicide/biological options reported                                                                                                                                                                         |                                                                                                          |

## Cross-check of reported alternatives with technical information on impacts and resistance management

During the data evaluation, the above input from producers on alternatives was complemented by the assessment provided by FoodExpert organization.

Their technical input generally supports the finding that alternatives are available for a number of the materials considered.

However, it also shows that the existence of an alternative active ingredient does not necessarily mean that it provides an additional option for resistance management. In several cases, the material and its proposed alternative belong to the same mode-of-action group.

Examples include:

- Clofentezine and Hexythiazox (IRAC 10A)
- Dimethomorph and Mandipropamid (FRAC 40)
- Azoxystrobin and Kresoxim-methyl (FRAC 11)
- Flubendiamide and Cyantraniliprole (IRAC 28)

According to the FoodExpert assessment, some of these alternatives may offer other benefits, including potentially lower impacts on human health or the environment, but they do not necessarily increase the diversity of modes of action available to producers.

This is particularly relevant for downy mildew, where producers reported several alternatives, but some available options belong to the same or overlapping mode-of-action groups.

This supports the conclusion from the producer consultation that changes to the Flowers HML should consider the overall range and diversity of control options remaining available, rather than only whether an alternative product exists.