PLANT PROTECTION IN FLORICULTURE

AMBITION DOCUMENT 4.0 FOR THE DUTCH GARDEN RETAIL SECTOR

2021-2023

TUINBRANCHE NEDERLAND

PLANT PROTECTION IN FLORICULTURE AMBITION DOCUMENT 4.0 FOR THE DUTCH GARDEN RETAIL SECTOR | 2021 – 2023

Towards a joint future in floriculture

CONTENTS

VISION FOR THE FUTURE 3

ACTIONS, MILESTONES AND PLANNING 3

BACKGROUND 5

AMBITION 4.0 6

KEY OBJECTIVE 1: STIMULATING THE RESILIENCE OF CULTIVATION SYSTEMS 6

- IPM and Innovation 6
- Definition of Harmful Substances 6
- Residue Measurement 8

KEY OBJECTIVE 2: CHAIN TRANSPARENCY FOR CONTINUOUS IMPROVEMENT 9

- Certification and Traceability 9
- Crop Protection Environmental Indicator 9
- Point of Need Testing for Transparent and Sustainable Production Chains 9

KEY OBJECTIVE 3: KNOWLEDGE SHARING AND COLLABORATION TO ACCELERATE OUR AMBITION 10

- Knowledge Sharing and Collaboration 10

TRADING PARTNERS SUPPORTING THE AMBITION DOCUMENT 10

SIGNATURES 11

Text Tuinbranche Nederland, Natuur & Milieu and CLM Research & Advice | **Editor** Karen Rolsma

VISION FOR THE FUTURE

We hereby present to you Ambition Document 4.0 on plant protection in floriculture for the Dutch Garden Retail Sector. It builds on previous versions of the Ambition for floriculture of Tuinbranche Nederland.

Tuinbranche Nederland (TBNL, the Dutch Garden Retail Sector) sees a green future ahead, in which the plants that we sell are resilient. In which plants find ecosystems in Dutch gardens that help them to grow and flourish. In which all parties within the chain work together to achieve our goals, both technically and economically. Biodiversity in and above the ground will thrive and chemical pesticides will only be used as a last resort. This vision is in line with the vision document of the Dutch Ministry of Agriculture, Nature and Food Quality, entitled 'Working towards a resilient and circular food system'.

By 2025, there will be full transparency on how to ensure plant health and on the use of pesticides. Retailers, together with growers, are actively looking for resilient varieties and use appropriate (green) pest control where necessary. Retailers sell plants to consumers and inform them about the value of plants with beneficial insects. This vision for the future is a continuation of the ambitions that were first defined in 2016.

Ever since that start in 2016, a lot has been achieved. We are therefore optimistic about the opportunities to contribute in a positive way to a strong ecosystem and to the preservation of biodiversity. The garden sector actively contributes to a healthy living environment. Our products and initiatives help and inspire consumers to take a closer look at their own gardens. In the project entitled 'The Living Garden', the garden sector explains how gardeners can help preserve biodiversity by taking simple measures. Retailers and growers work together ever more closely. Together, they succeed in offering high-quality products.

TBNL at all times anticipates developments in legislation and can thus prepare its members and their suppliers for a sustainable future. Between 2018 and 2020, we have seen that ever less pesticide residues are found on plants. Retailers wish to continue this trend by working more intensively together with growers. Transparency is improving, but still requires ample attention. The introduction of a plant passport has proven to be a step in the right direction.

Increased transparency offers the opportunity to learn and to implement improvements where they are most needed. The crop protection environmental indicator will play an important role in steering towards the right package of means and measures available to growers. This requires the digital environmental registration of the grower. In time, certification will become a requirement for supply. All this aims to achieve full transparency and maximum environmental benefits.

Ambition 4.0 focuses not only on increasing the sustainability of substance use, but also on aspects that were previously underexposed. Improved communication within the chain is essential for a continued dialogue and to be able to learn from each other. Through clear communication, the garden sector ensures a greater visibility and transparency of its activities. Sharing experiences from working with these and previous ambitions is important in this respect, so that the garden sector can further develop and respond to learning points. Products are cultivated more and more sustainably, and transparency about the way in which products are produced is important. Product certification will become the norm. We have our eyes on the future. As a sector, we must be prepared for new developments.

Actions, Milestones and Planning

A lot of actions are taken in the context of the ambitions in floriculture. There are several recurring actions which are taken every year. They are presented in the diagram on the next page:

Figure 1 | Annually recurring actions by the retail sector in the context of this ambition

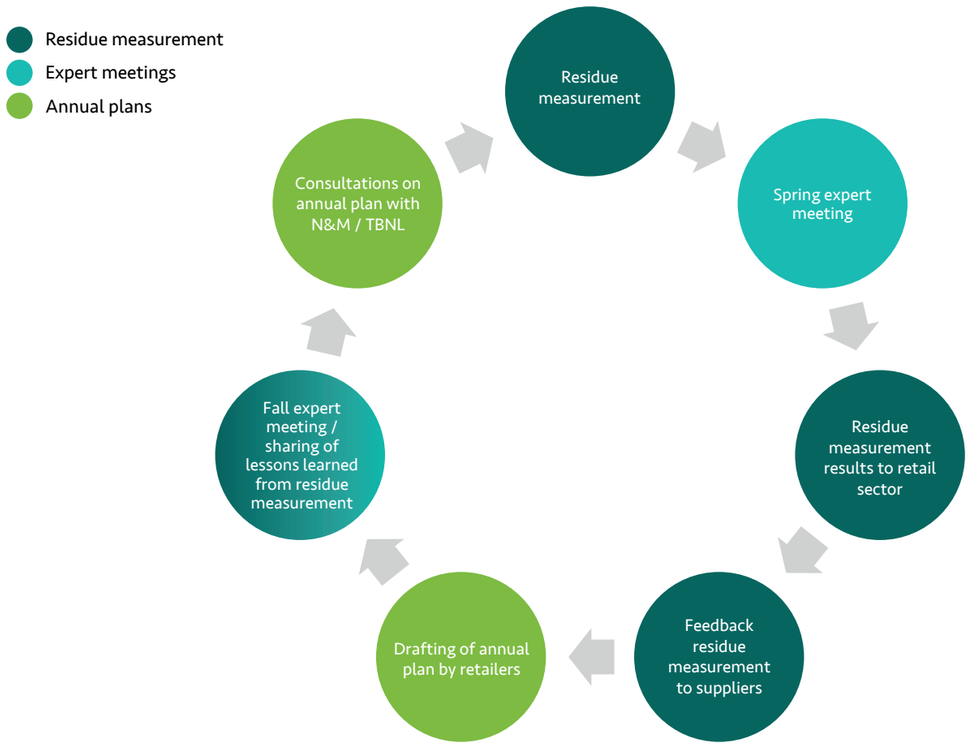

Figure 2 | Annually recurring actions by the retail sector in the context of this ambition

Sharing of goals and ambitions

- Retailers share goals with their suppliers
- N&M and TBNL share goals with growers, cultivation advisors and sector partners

Research and knowledge sharing

- Retailers actively share their learning needs and questions
- N&M and TBNL are involved in the development of the crop protection environment indicator
- TBNL is involved in the development of strip tests for rapid analysis

BACKGROUND

Early 2016, the collective garden retailers, several trading parties and chain partners, as well as Centre for Agriculture and Environment (CLM), Stichting Natuur & Milieu (N&M, Nature & Environment Foundation) and TBNL signed the first ambition document on crop protection in floriculture. With this ambition document, the garden sector takes up a responsible role and shows its ambitions, also in the field of crop protection and improved sustainability in the context of its Green Sector Plan.

The retail sector has a joint vision on corporate social responsibility in the plants sector in general, and on sustainable crop protection in floriculture in particular. The retail sector is unable to realise its ambitions alone. It is vital that chain partners translate these ambitions into working methods, quality systems and quality marks. Efforts in this respect were already made during the past few years, further to the ambitions that were laid down in the first ambition document.

Chain partners (i.e. retailers, growers and their representatives) have again collectively taken up the gauntlet and accepted the challenge to realise the objectives contained in this Ambition document 4.0. It is very positive to see that the ambition is shared, that it leads to in-depth discussions and that parties consult each other in order to learn from each other and share their knowledge.

CLM, N&M, Land- en Tuinbouworganisatie Nederland (LTO, The Netherlands Agricultural and Horticultural Association), Floriculture Sustainability Initiative (FSI), Royal Flora Holland (RFH), certification organisations and other experts involved provide knowledge and information and bring parties together on the basis of practice. In order to do this, we are constantly speaking to a broad range of representatives in the chain, inviting them to share their thoughts with us on our future ambitions.

This ambition paper must be seen as a dynamic document. It presents the ambitions of the following garden branch retailers: BijSTOX, Groenrijk, GRS retail, Hornbach, Intratuin, Praxis Tuincentrum, Ranzijn tuin en dier and Welkoop. Trading parties supporting the ambitions are: Arie Bouman tuinplanten, FM Group, Greenbaze, Royal Lemkes and Waterdrinker. This document was drawn up at the initiative of TBNL, N&M and CLM.

Additionally, a number of other chain partners were closely involved in the creation of this memorandum and wish to express their support for the sustainability ambition contained in it. The key objectives of this joint Ambition document 4.0 for the years 2021-2023 are:

Key objective 1

Stimulating the resilience of cultivation systems

Key objective 2

Chain transparency for continuous improvement

Key objective 3

Knowledge sharing and collaboration to accelerate our ambition

KEY OBJECTIVE 1

Stimulating the resilience of cultivation systems

Integrated Pest Management (IPM) is at the heart of resilient cultivation systems. It involves the integrated control of diseases and pests, innovation, the promotion of strong plants and a phased ban on harmful substances. These pillars ensure that the use of these substances is kept to a minimum. In addition, increasing attention is being paid to certification and traceability, as well as measurement and registration.

IPM and Innovation

Growers who supply to the Dutch garden retail sector follow the principles of IPM. In this way, they help to limit the use of plant protection agents. Organic production, which is largely based on the principles of IPM, is encouraged. IPM is widely applied and integrated into most of the business processes of suppliers to the garden retail sector. Furthermore, IPM is constantly evolving. Growers are expected to keep up with and implement new developments. Glastuinbouw Nederland (the Dutch greenhouse horticulture industry) and LTO Bomen, Vaste Planten en Zomerbloemen (the Dutch trees, perennials and Summer flowers industry) provide their members with tools to include and implement new steps in IPM. These new steps will also help us to jointly achieve a reduction in the use of plant protection agents.

Based on the ambitions, we promote the continuous sharing of information and knowledge on IPM together with partners in the chain. This involves themes such as diagnosis and scouting of diseases or pests, the introduction of damage thresholds to prevent unnecessary chemical intervention, the use of natural enemies, green agents or agents with a low environmental impact, local pest control and emission prevention. Additionally, innovation is crucial. Along the lines of the vision for the future of crop protection 2030 of the Dutch Ministry of Agriculture, Nature and Food Quality, more attention must be given to resilient plants and cultivation systems. This is a challenge for the entire sector. Both growers and retailers must increasingly take into consideration how this impacts their own business operations. This ambition calls for knowledge session is which the matter can be discussed further.

IPM, alternative (organic) pesticides, and a reduced use of harmful agents will result in a change in the product range. Plants will not always be flawless and may carry insects, whether intentionally or not. It is up to the garden sector to make consumers aware of the presence of these insects and their positive contribution to plants and gardens. Culture change and consumer awareness take time, but are vital here.

Definition of harmful agents

In the context of these ambitions, harmful agents are those whose active ingredients which are either prohibited by law or, if they are permitted, contain undesirable active substances. A detailed description is given below.

Active substances prohibited by law:

No illegal active substances may be found in ornamental plants. This requirement can be met in the sector through certification. In case of violation, products may not be traded and measures will be taken. Participating retailers will not buy the product concerned and therefore will not market it.

Legally permitted but undesirable substances:

Plant protection products with active substances that are permitted but that have a high environmental impact (in particular on bees and other beneficial insects), will be banned as soon as possible, or at least phased out. The garden sector is aware that it is in some case and for certain product groups difficult to find alternatives for these active substances. However, it cannot be that the least resilient plant determines at which pace an active substance is phased out or banned. That is why a phasing out strategy has been introduced under the authority of TBNL. Agents will be phased out on a per product group basis if a complete ban is not possible immediately. This approach prevents that the ban for the product range as a whole is determined by the most difficult plants. In this way, the retail sector has chosen a strategy through which non essential agents and/or agents that are highly burdensome for horticulture are quickly phased out.

In 2020, CLM has made new analyses of nine undesirable active substances including six neonicotinoids (table 1). These were used to determine whether agents can be phased out for certain product groups or banned altogether, based on the assessment framework that was set up:

- The latest scientific insights on harmfulness (the extent to which the agent is detrimental to bees or other beneficial insects, or any other new findings on harmfulness);
- The horticultural necessity of the agents and the availability of alternatives for specific product groups (i.e. innovation in the product range). This is determined by analysing whether growers use the agent and if so, which percentage of them, and whether any problems may arise once they are banned;
- The economic relevance of a product or product group that prevents the early phasing out of a harmful agents (e.g. in case of a turnover share of less than 0.5%, it may be advised to withdraw a product from the product range if that product prevents the complete phasing out of a specific agent);
- The initiators encourage innovation in general, and more in particular with respect to cultivated plants, Integrated Pest Management (IPM) as well as more sustainable methods in plant protection.

The results of the assessment are as follows:

- Substances already banned for all product groups were chlorpyrifos, clothianidin, cypermethrin, fipronil and imidacloprid (table 1);
- As of 2020, the use of thiacloprid and thiamethoxam is no longer permitted (table 1 - revised);
- The prohibition to use acetamiprid and deltamethrin only applies to product groups where less than 10% of the growers use these agents (table 2).

If it turns out that there is a horticultural necessity to use one of these agents for a specific plant, growers can notify Glastuinbouw Nederland or LTO Bomen, Vaste Planten en Zomerbloemen. Horticultural necessity in integrated plant protection is particularly relevant where an agents has to be used as a corrective measure if organic control appears to be insufficiently effective and (local) chemical intervention is necessary. In order to bring the ambition of the sector and retail to a higher level, it is important that the total environmental burden resulting from the use of pesticides is reduced, so that biodiversity can benefit as much as possible from this approach. This includes bees, natural enemies, water organisms, birds, etc.

The phasing out the most harmful agents, which is part of this approach, will contribute to this. In exceptional circumstances, the use of one of the banned agents may be necessary from a horticultural point of view. In such cases, a grower may be granted dispensation for the use of that agent. He will have to notify all buying retail organisations (and the signatories of this ambition document) in advance on this use of a banned agent. In addition, he will have to make out a convincing case that the total environmental burden will not increase as a result of his use of the agent.

The number of substances found and their content must be as low as possible. Their maximum was 15 in 2017 and 12 in 2019. In 2023, the maximum number of substances will be 10 (assuming a content of 0.05 mg/kg). In this context, it must taken into account that alternation of substances is important for effective plant protection (IPM).

Agents that may no longer be used as of a certain year, either because of a legal ban or because they are phased out, may during checks still be found in perennial plants. The reason for this is that they were used in an earlier period, when that use was still permitted. Substances can be found in the plant, but also in a recycling system that is used for a combination of indoor and outdoor cultivation. When this occurs, it will be assessed whether or not there is question of a violation. Certifiers have experience with such matters and are able to make a proper assessment of this together with the grower.

[1] An overview made by CLM at the request of N&M shows that some of the agents currently permitted in the Netherlands can be harmful to the environmental or to people, including the agents that are subject to discussion because of their harmful effect on bees (report of January 2019).

[2] The detection limit applied to most protection agents is 0.01 mg/kg. For the number of agents to be detected, 0.05 mg/kg will apply as a benchmark. This places the focus on agents used in cultivation. Contents between 0.01 and 0.05 mg/kg can also derive from other sources, such as use in a previous year or drift (wind) from other plots.

Table 1: Ambition for phasing out and reduction in use of harmful substances in the garden sector, 2021 – 2023

Harmful Substance	2021-2023
Chlorpyrifos	banned
Clothianidin	banned
Cypermethrin	banned
Fipronil	banned
Imidacloprid	banned
Thiacloprid	banned
Thiamethoxam	banned
Acetamiprid	permitted if no limitation applies under table 2
Deltamethrin	permitted if no limitation applies under table 2
Other substances	permitted if IPM roadmap is followed

Table 2. Ambition to ban two harmful substances, 2021-2023

If less than 10% of the growers uses an agent, a ban applies to that agent

Plants	Acetamiprid	Deltamethrin
Bedding plants	banned	
House plants (green)	banned	
Forest and hedge shrubs	banned	
Avenue and park trees	banned	
Tree cultivation (container)	banned	
Fruit trees (rootstock)	banned	
Chrysanthemum	banned	
Freesia	banned	
Rose		banned
Summer flowers	banned	
Orchid		
Bulbous and tuberous flowers (in pots)	banned	banned
Tulip (bulb cultivation)		banned
Lilly (bulb cultivation)		banned
Hyacinth (bulb cultivation)		banned
Narcissus (bulb cultivation)		banned
Perennial plants (in pot)	banned	
Vaste planten (in pot)	verbod	

Residue Measurement

Pursuant to the ambition it contains, the signatories of this document annually initiate a study into the residues of plant protection agents in their product range. N&M conducts the study as an independent party and CLM analyses the results. In this manner, the use of pesticides is monitored in line with Ambition 4.0.

The results are fed back to each of the retail organisations, giving them input for discussion with the suppliers of the plants. These discussions provide insight into positive developments and learning points that can be taken from the results of residue measurements. Residues that do not meet Ambition 4.0 will be discussed by the retailers with the suppliers. Sanctions can be applied where necessary. TBNL and N&M also provide general feedback each year on how lessons can be learned from the findings that emerged from the residue measurement.

Examples of lessons learned from previous resdue measurements are:

- higher traceability in retail;
- more structured action plans;
- better evaluation of the position of retail organisations;
- more involvement of growers;
- closer involvement of independent retailers.

KEY OBJECTIVE 2

Chain transparency for continuous improvement

Digital registration, traceability and environmental certification

Customers increasingly demand transparency on floriculture products. Transparency by means of digital registration, traceability and environmental certification also provides insight into use of agents and allows for continuous improvement. Digital registration, traceability and environmental certification are therefore important steps that will prepare the sector for the future. For example, steering on environmental burden, for which the crop protection environmental indicator is being developed, is becoming increasingly important.

The initiators are committed to working with growers towards fully digital registration of agent use by 2023. In addition, the initiators aim to improve the traceability of products. In order to be able to consult the producer or supplier, it is important to know where a product comes from. Phytosanitary rules require good traceability of products. The plant passport is to improve this traceability

The role of environmental certification will become increasingly important in achieving transparency in the market. The ambition of the initiators is to make certified procurement the standard. Retailers set themselves targets for this and aim to increase the share of certified procurement every year. As in previous years, the signatories inform their suppliers in writing of the targets they have set. The general goal of TBNL, in line with the Floriculture Sustainability Initiative goals, is to work with the entire sector towards 90% certification by 2025. At the moment or in the very near future, four certificates are available for that purpose: MPS ABC, MPS A+, MPS GAP and GLOBAL G.A.P. All suppliers will be asked to work towards obtaining one of these certificates. In addition, we encourage Planetproof, Productproof and Groenkeur to promote IPM and improvement processes at the grower. Retail organisations join forces to offer transparency to customers and communication about environmental certification.

Crop Protection Environmental Indicator

In 2019, a public-private partnership was launched under the title Crop Protection Environmental Indicator, which was led by Wageningen University & Research, CLM and N&M. The initiators are working together with leading parties to develop a methodology that will enable growers and market players to assess the environmental burden of pesticide use in a validated manner. Their objective is to have an internationally applicable method available by mid-2022. In brief, in this method the registration of pesticides in a certain growing season is converted into the environmental impact associated with the total use of pesticides during that season. As a result, crops no longer need to be assessed to establish the presence of a particular substance, and growers and their advisors are more flexible in the use of agents. Together they can steer towards a spraying plan with a lower environmental impact. This indicator provides insight into the environmental impact per crop, per grower and per product. It thus provides management information to many different target groups, including, in time, the retail sector. The indicator therefore offers opportunities for the sector to manage and report in a different way on the more sustainable use of pesticides. The signatories see digital registration of agent use as a pillar for the future and are actively working on its introduction. This fits in with the development and implementation of the Crop Protection Environmental Indicator. TBNL contributes to the development of the indicator, which can provide a basis for defining joint ambitions for the future.

Strip tests for rapid analyses

Rapid and accurate testing for residues is of great importance. Lab tests are currently cost intensive and time-consuming. TBNL is therefore involved in the public-private partnership Point of need testing for transparent and sustainable production chains. In this project, Wageningen University & Research (WUR) is developing a strip test that can detect all active substances considered to be harmful under this ambition document in ten minutes only. This allows residues to be determined in an easy, quick and cost effective way. In that way, more residue tests can be performed in due course, and they will be easily accessible.

The tests are already available for six out of the nine substances mentioned in this ambition document. WUR is now working on expanding the tests to all nine substances. TBNL is sharing the results of residue measurements in the framework of this ambition document to support the research done by WUR. It is expected that the retail sector will be able to easily perform these tests in the future to assess whether plants meet the preferences and requirements as set out in this ambition document. This will offer extra input for talks with growers where necessary.

KEY OBJECTIVE 3

Knowledge sharing and collaboration to accelerate our ambition

Expert meetings

Knowledge sharing will be focused on the needs of the signatories and their partners within the chain to work towards solutions for the main challenges included in Ambition 4.0. To promote knowledge sharing, the signatories will actively contribute to an annual expert meeting by providing both topics to be discussed and expert knowledge. The meetings will be coordinated by TBNL and N&M.

Knowledge sharing and collaboration

The signatories and parties involved in the ambition aim for transparency and openness within the sector. TBNL participates in the Platform for Sustainable Floriculture so as to be able to share knowledge with partners in the chain. The parties are aware that further sustainability in the sector can be accelerated through collaboration, knowledge sharing, transparency and clear targets. To this end, they will seek collaborations with others, such as the Floriculture Sustainability Initiative for their efforts in the field of certification and certification benchmarks, with Royal Flora Holland for targets related to environmental registrations, and with certifying bodies for the interpretation of residue measurements. Other parties in the chain, both nationally and internationally, are encouraged to take note of the ambition and to join in.

Annual plan per retail organisation

Each retail organisation will draw up an annual plan to translate the key objectives of this ambition into concrete activities. They can make use of a general format, which has been developed especially for this purpose (see Appendix 1). In this annual plan, the organisations will describe where they stand and what they intend to focus on. As each organisation has its own identity and profile, this is an individual process. The annual plan will therefore be drawn up per retailer and shared with TBNL and N&M. Learning points are addressed by the retailers and discussed with TBNL and N&M, also to see which knowledge and insights can be shared with the other signatories.

INFORMATION ABOUT THE PARTIES INVOLVED

This document was drawn up at the initiative of TBNL, N&M and CLM.

TBNL

The Dutch Garden Retail Sector TBNL is the trade organisation for the entire garden chain. Its members are manufacturers, importers and wholesalers in garden products (suppliers) as well as plant and garden centres focussing on the sale of garden products (retail). TBNL is the unique representative of the entire business chain. It speaks on behalf of a broad spectrum of parties active in the sector.

Natuur & Milieu

NNatuur & Milieu (N&M, Nature & Environment Foundation) is an independent environmental organisation that believes in a sustainable future for all. It works on sustainable solutions in the areas of energy, food, raw materials and mobility in order to combat climate change and to restore nature.

CLM

CLM (Centre for Agriculture and Environment) is an independent consultancy active in agriculture, food, nature and the environment. CLM is committed to making sustainable agriculture the norm in the Netherlands, for it believes that healthy food, clean water, biodiversity, nature and cultural landscape have great value. CLM works together with other parties to secure these valuable elements for the future.

SIGNATORIES

GroenRijk – Weet wat er leeft
GRS Retail
HORNBACH – Er is altijd iets te doen.
Intratuin
Ranzijn Tuin & Dier
praxis tuincentrum
welkoop

Trading partners supporting the ambition document

ARIE BOUMAN TUINPLANTEN
FM Group
GREEN BAZE BY PEGRO
Royal Lemkes SINCE 1882
WATERDRINKER aalsmeer

INITIATIEFNEMERS

clm
TUINBRANCHE NEDERLAND
NATUUR & MILIEU

The initiators wish for this ambition to be embraced and implemented by as many national and international partners, in or outside the sector. They therefore call on parties and organisations who identify with this ambition document to sign it. Interested parties can notify the initiators of their intention to sign.

Tuinbranche Nederland
Arnhemse Bovenweg 100 | 3708 AG Zeist | the Netherlands
+31 88 9730608 | info@tuinbranche.nl

TUINBRANCHE
NEDERLAND