Guidelines for Integrated Pome Cultivation 2026

36th edition

Publisher:

AGRIOS

Workgroup for Integrated Fruit Production in South Tyrol
Haus des Apfels, Jakobistraße 1A, I-39018 TERLAN (BZ), Italy

GUIDELINES FOR INTEGRATED POME CULTIVATION

These guidelines consist of technical recommendations on the one hand and on the other, of mandatory obligations which must be fulfilled in order to obtain certification. For clear identification, the latter are printed in **red type** and are additionally emphasized by a **red exclamation point**.

AGRIOS suggests various ecological care measures for the producers in the individual chapters. These are printed in **blue type** and are marked by a **blue exclamation point**.

What is Integrated Production and what is its goal?

By “integrated production”, we mean an agricultural production system for foodstuffs by which natural resources are conserved and aids such as fertilizer and plant protection substances are used prudently. It is a sustainable way of cultivation in harmony with nature that puts protection of human health and the environment at the forefront. The use of synthetic chemical measures is reduced to a minimum and fertilization is rationalized. Natural methods of maintenance are preferred, because of their positive effects on the orchard and the environment. It is the utmost concern of every producer who chooses integrated fruit production to implement as many of these ecological measures as possible.

At least two of the items chosen from this list must be realized in each year of cultivation. The points effected must be recorded in the orchards register.

INTEGRATED PRODUCTION IN CULTIVATION

Technically schooled, environmentally conscious producers

Good **technical training** and a **positive attitude** towards environmental protection and protection of the consumer are important conditions for integrated cultivation. To achieve this, AGRIOS uses lectures and newsletter to make the program understandable to its participants and to keep them informed about the continuation of developments in integrated fruit production.
Further, for the realization of a serious IP program a practice-oriented **research institute** and an efficient **advisory board** are indispensable. Also, the persons responsible for fruit marketing must show understanding and interest for integrated production and support the program in their area of responsibility. Producers must be professionally competent (agricultural-technical education or at least five years of work experience).

In addition, they must prove that all of the production areas cultivated according to the guidelines for integrated fruit cultivation are registered with an advisory organization. If they are members of a production organization, the organization must, as per EU market regulations, have a convention for professional advice through this advisory organization.
Each orchardist must attend at least two hours per hectare of job-related further education courses concerning the topic of integrated cultivation. Orchardists who cultivate more than ten hectares must attend at least 20 hours of further education. The reference value used for the examination is the larger of either net area or the area on the LAFIS document. The participation in further education courses must be listed and included in the orchard register. Since professional training is a prerequisite for obtaining certification, the above-mentioned minimum of training hours must be completed before the orchard register is checked before harvest. The last twelve months prior to the inspection are used as the reference period.

Ecological compensations areas and care of the orchard environment

The orchardist should also protect and care for the environment surrounding his orchard in accordance with integrated cultivation. Bushes, dry walls, rock piles or embankments serve as shelter for many beneficial animals and must not be sprayed with plant protection products and herbicides or burned.
The ecological compensation areas must be at least 5% of the total fruit production area.

Ecological measures:

- Pond with a minimum area of 50 m²
- Standard-sized tree

Considerations upon the creation of new orchards

When planting new orchards, the orchardist should choose for each location the fruit cultivar which because of its natural qualities offers the best chance for regular crops and good quality.

Ecological measure: Choice of a fungus-resistant cultivar.

It is important to choose planting material that is healthy and virus-free as well as true breeding (selected material). In terms of active fire blight prevention, plant material should be used that carries the phytosanitary certification ERWIAM *(Erwinia amylovora)*. This certification guarantees that the plant material was produced in a fire blight-free area.

New plantings must consist of certified planting material when available. If such material is not available, CAC material must be used. The certificate for the plant material used must be filed in the orchard register and kept for a minimum of three years. According to EU regulation (EU) 2016/2031, the phytosanitary certificate must be attached to the trading unit (individual tree, bundle, palette, etc.). As a rule, nurseries include the information about the phytosanitary certificate in the sales documents (packing slip, invoice). In this case, keeping these documents for three years satisfies the documentation requirements of the phytosanitary regulations.
Regardless of the effective phytosanitary regulations, in-house production of propagation material is only admissible when the producer uses varieties that are registered or filed for registration in the national registry of fruit plant varieties. If self-made planting material is used, the legal minimum standards must be met and the origin of the original material must be documented.
The use of seed stock deriving from genetically modified organisms is not allowed.

In new orchards, planting systems which allow the lowest possible use of herbicides and an efficient distribution of plant protection products are preferred.
The **planting distance** should be measured in a way that the chosen combination of variety and rootstock has enough room to grow without using severe pruning or synthetic plant growth regulators.
Tree height and depth should allow enough light penetration for fruit growing in the center of the tree.

Ecological measure: Planting a new orchard as a single row system.
This system of planting guarantees good light for the fruit during the entire growing season. Single rows require less use of plant protection products (especially reduce herbicides) than multiple row systems and allow alternatives to chemical strip treatments.

Soil preparation before planting must be effected in a way that conserves and, if possible, improves the fertility of the soil and prevents erosion and soil dissipation. Type of soil, location, risk of erosion and climatic conditions must all be taken into consideration. Additionally, soil cultivation shall contribute to preserving and promoting the soil structure and diversity of soil organisms as well as avoiding soil compaction and waterlogging.
Should preliminary or long-term fertilization be necessary, the specifications in the chapter about fertilization must be considered.

Chemical soil decontamination is not allowed in integrated production.

Fertilization

The goal of fertilization in integrated production is to cover the nutrient requirements through natural cycles. Soil analysis is the most important basis for the fertilizer dosage of **phosphate, potassium, magnesium, boron** and other nutrients.

Sampling: intervals and times
For every registered orchard (excerpt from the land register) is required a soil analysis. It must contain at least the following parameters: Soil type, humus content, pH, lime, phosphorus, potassium. A soil analysis certificate is valid for **exactly 5 years from the date of issue**.
Exceptions: Orchards made up of various parcels which demonstrate provable similar soil composition and supply rates and are cultivated similarly need only supply a soil sample from a representative area. This is only true if these areas belong to the same producer. If the parcels are different in soil composition (structure) and in nutritional content, a correspondingly greater number of soil analyses per orchard is necessary. Mixing of soil samples from various parcels is not agronomically wise. This makes a proposition for targeted fertilization impossible.
Following fertilization or soil working, an adequate period of time must elapse before soil samples are taken.

Leaf and fruit analyses are necessary to determine deficiencies or excesses of nutrients in the plant or to clarify problems with internal fruit quality.

Ecological measure: Execution of early leaf analyses.
Early leaf analysis made at the time the main growth period is ending gives a good picture of the nutritional condition of the tree. Imbalances in the tree's nutrition can be temporarily stabilized using leaf fertilization. Long-term fertilization must be made through the soil.

The **dosage of fertilizer** is determined by the nutrient levels in the soil and the needs of the plants. Soil and leaf analyses show especially well which type of fertilizer is needed for the specific site.
Overfertilization is to be avoided in the interest of maintaining the resistance of the fruit trees, the quality of the fruit, and the environment (ground water). The N_{min} test delivers clear indications of the amount of plant-usable nitrogen in the soil. The shoot length as well as the color and size of fruit and leaves can also be used in determining the nitrogen needs of the plant. Too much nitrogen makes the background color dark and foreground color is lacking, too much potassium increases the danger of bitter pit.

Ecological measure: Execution of nitrogen fertilization after N-min tests.
The N-min test determines the existing share of mineral nitrogen (nitrate and ammonium) in the soil. On the basis of content and soil type, the nitrogen replacement value of the tree row is estimated and finally, using these two values, the nitrogen fertilization is calculated.

The application of fertilizer (except calcium and magnesium containing lime fertilizers and products containing copper chelate to promote leaf fall) is forbidden from 1 December to the end of February, also the application on frozen, snow-covered, waterlogged or flooded soil. A minimum distance of 5m is necessary near natural watercourses and artificial drainage ditches; a distance of 10m is necessary from natural lakes.
Farm manure (stable manure or slurry) must not come into direct contact with products destined for human consumption, therefore its application is allowed only post-harvest until 30 November and from 1 March until the end of blossoming.
Farm manure can be applied up to a yearly average of 127,8 kg of nitrogen per hectare.
Up to 50 cubic meters of manure per hectare may be applied to improve the soil structure when creating new orchards and a further 50 cubic meters per hectare may be applied at intervals of several years in the case of yielding orchards.

Nutrient removal (guideline values)
The following table contains the annual extraction of principal nutrients (kg/ha) in apple production by various yields:

Nutrient	Removal of principal nutrients (kg/ha) with a crop yield of		
	40 t/ha	60 t/ha	80 t/ha
Nitrogen (N)	16	24	32
Phosphorus (P_2O_5)	11	16	21
Potassium (K_2O)	57	85	113
Calcium (CaO)	3,2	4,8	6,5
Magnesium (MgO)	3,4	5,1	6,8
Boron (B)	0,112	0,18	0,24

Source: Laimburg Research Centre

Fertilizer dosage is measured according to the following parameters:

Nitrogen fertilization

Addition of nitrogen	1st year	2nd year	> 2nd year Crop yield (t/ha)		
			< 32	32-48	> 48
Nitrogen kg/ha	40	80	50	80	110
If soil conditioners are used in the current year, nitrogen is calculated at 30%.*					

* For soil improvers (stable manure, compost), it is important to take the mineralization process that the organic mass is subject to into consideration. For example, stable manure applied as a long-term soil improver in a multiyear cycle: at a nutrient level of 127 kg N, 84 kg P_2O_5 and 121 kg K_2O per hectare, about 30% of this amount or 38 kg N, 25 kg P_2O_5 and 36 kg K_2O is available.

Amount of nitrogen which can be added to the standard dose depending on the corresponding conditions:

• By low supply of organic matter	+ 20 kg/ha
• By low growth	+ 20 kg/ha
• By surplus of precipitation	+ 15 kg/ha

Amount of nitrogen which must be subtracted from the standard dose depending on the corresponding conditions:

• By high supply of organic matter	- 20 kg/ha
• By addition of organic fertilizers in the previous year	- 20 kg/ha
• By excessive growth	- 20 kg/ha

In any case, the maximum addition of nitrogen allowed lies at 140 kg/ha/year.

To keep losses due to washout to a minimum and to attain the largest possible effectiveness of fertilization, it is necessary to apply the nitrogen during the phase of greatest demand, and, in the case of larger amounts, to distribute the amount over several applications. **Apportionment of nitrogen supply is mandatory if the required amount exceeds 60 kg/ha.** A minimum of three weeks between nitrogen applications is required.

Phosphorus fertilization

Supply of phosphorus	1st year	2nd year	> 2nd year Crop yield (t/ha)		
			<32 t/ha	32-48 t/ha	>48 t/ha
A+B (low supply)	15	40	45	55	65
C (normal supply)			30	40	50
D+E (high supply)			25	35	45

Amount of P_2O_5 which can be added to the standard dose:

• By low supply of organic matter	+ 10 kg/ha
• By soil with high lime content	+ 20 kg/ha

Before planting and during the vegetative period:

- For classes A+B without preliminary fertilization before planting max. 65 kg/ha/year for 5 successive years.
- In any case, even when supplementary or preliminary fertilization is implemented, is it not allowed to exceed 250 kg/ha of P_2O_5 in the planting year.

Potassium fertilization

Supply of potassium	1st year	2nd year	> 2nd year Crop yield (t/ha)		
			< 32 t/ha	32-48 t/ha	>48 t/ha
A+B (low supply)	20	90	115	150	185
C (normal supply)			55	90	125
D+E (high supply)			15	50	85

Amount of K_2O which must be subtracted from the standard dose:

• By addition of organic fertilizer	- 30 kg/ha

Before planting and during the training phase:

- For classes A+B without preliminary fertilization before planting max. 185 kg/ha/year for 5 successive years.
- In any case, even when supplementary or preliminary fertilization is implemented, is it not allowed to exceed 300 kg/ha of K_2O in the planting year.

Magnesium and boron

Nutrient requirements in kg/ha by a crop yield of 60 t/ha, determined on the basis of soil analysis.

Supply class	MgO	Boron
A+B (low supply)	30-50	0,7-1,4
C (normal supply)	20-30	0,5-0,7
D+E (high supply)	0-20	0-0,5

Lime fertilization
A soil analysis forms the basis for deciding whether lime fertilization is necessary. If there are questions or ambiguities in the interpretation of the analysis results, the producer should consult an adviser. The lime fertilizers listed in the appendix can be used for fertilization.

The actual amount of fertilizer applied is to be recorded in the orchard register.

Routine spraying with leaf fertilizer do not bring economic advantages in well-supplied orchards and are as such to be avoided. An oversupply through the leaves can cause problems in fruit quality.

The following fertilizers may not be used in integrated production:

- Fertilizers not corresponding to Regulation (EU) No 2019/1009 or national fertilizer regulation (Decreto legislativo del 29 aprile 2010, n. 75).
- Fertilizers containing raw material from certain animal by-products: meat meal, meat residues, fishmeal, bone meal, blood meal, blood, gelatine, animal dander, skins or leather.
- Fertilizers containing more than 0.001 g/kg of perchlorate.
- Leaf and fertigation fertilizers which exceed the following legal limits for aminoalcohols:
    - Morpholine 0.01 g/kg
    - Diethanolamine 0.01 g/kg
    - Triethanolamine 0.01 g/kg
    - Monoethanolamine 0.1 g/kg.

Sludge and compost as well as fertilisers which contain toxic or soil-contaminating components or which bring up hygienic reservations are not allowed in integrated cultivation.

All equipment used to apply fertilizer must be appropriate for the respective purpose and be kept in good condition. This includes regular maintenance as well as annual inspection and calibration to insure that the desired quantities of fertilizer are in fact applied. This maintenance must be recorded in the maintenance plan added to the orchard register.

Plant fortifiers

The plant fortifiers listed in Appendix 2 of the Ministerial Decree No. 229771 of 22.05.2022 can be used.

Care of the lanes and rows

In orchards with vigorous growth, the rows should be left **green throughout the year** and mulched along with the lanes or the area around the trees should be mowed.
A mulch cover before harvest reduces the nitrogen supply and promotes fruit quality as well as reducing the nitrate reserves at the end of the vegetation period.
A mulch cover of low and flat-rooted plants in the rows (that is, competing with the trees neither over nor under the ground) is to be considered ideal.

Covering the area under the trees with tree bark keeps the ground damp, suppresses grass growth and reduces erosion, and is thus to be considered favorable. This measure can however favor the settlement and reproduction of field mice.
Mechanical treatment of the rows is also an environmentally-friendly solution.
In **areas of vigorous growth**, no herbicides should be used.

Ecological measure: Keeping green the tree strip the whole season or keeping the tree strip free of grass using alternative methods without herbicides.
As far as the tree growth and the natural nitrogen delivery allow, the lanes and tree strips should be kept green all year. This leads to bonding of nitrogen, which is useful especially in orchards with vigorous growth.

In **single row orchards**, the **area treated with herbicides** must not be more than 70 cm wide, may however be up to a maximum of 30% of the planting distance between rows.
In **multiple row orchards**, treatment is only allowed on the area covered by trees. The maximum width of the herbicide treatment strip in multiple rows is the area between the rows plus 35 cm to each side of the outside rows, measured from the tree trunk.

Since 26.11.2018, all herbicide devices are subject by law to a functional test. In order to reduce drift to unintended areas, AGRIOS recommends the sole use of herbicide devices with covers and retrofitting of lacking coverings.

Where orchards in the zone infested by May bugs are covered by ground nets, a universal spraying of herbicides is allowed.

The frequency of mulching for **care of the lanes** should depend on the characteristics of the orchard (tree growth, soil type, water balance). By vigorous tree growth and wet weather, 3-4 rounds a year should suffice. Less frequent mulching allows for more variety of ground cover plants.

Ecological measure: Alternately mulching of the lanes.
If every other lane is mulched and at the same time the nitrogen dosage is reduced, the ground cover develops a larger variety of foliage and grasses. Blooming ground cover is an important source of nutrition for many beneficial insects (chalcid wasps, hoverflies, etc.)

When products dangerous to bees are used, blooming ground cover must be mowed first.

Irrigation

Irrigation is meant to cover the water requirements of the crop. It ensures sufficient growth of the plant and fruit and their quality development. Avoid both over and under watering.
Excessive watering causes water and nutrient loss and can promote the development of harmful organisms. In late summer, it can lead to inadequate lignification, increasing the danger of frost damage in sensitive varieties.
Through excessive sprinkler use in summer, scab and Alternaria infection can be promoted because of perseverant leaf wetness and rinsing off plant protection substances.
The application of irrigation should correspond to the actual requirements

Ecological measure: testing of soil moisture using a tensiometer or other device for measuring soil moisture.

The amount of water should depend upon the deficiency of precipitation as well as on the acqueousity (field capacity) and the profundity of the ground.
If technically possible, the use of fertigation is recommended in order to increase the effectiveness of the fertilizer and to reduce washout.

For every orchard in production, the following data must be recorded in the orchard register:

1) Irrigation date and amount:

- Overhead sprinklers - date and amount of each individual irrigation; the amount of water is determined as follows:
  - by reading the rain gauge,
  - by reading the gauge on the water supply lines of the individual properties,
  - by calculation of the amount of water applied per hour
- Drip irrigation and Microjet: irrigation amount for the total culture cycle (or shorter period), citing beginning and end of irrigation.

If irrigation is realized collectively or through consortiums, the above mentioned data can be supplied through those organizations.

2) Precipitation data: readable through rain gauges or weather stations or through data supplied by weather services. (Production operations with a cultivation area of less than a hectare and areas with drip irrigation and Microjet are exempt from the recording of these data.)

3) Irrigation amounts:
By each implementation, the producer must not exceed the following maximum amounts, depending on the soil type specified in the soil analysis:

Soil type	Classification	Drip irrigation and Microjet		Overhead irrigation	
		mm	m³/ha	mm	m³/ha
Sand	Light soil	15	150	35	350
Slightly loamy sand					
Silty sand					
Medium loamy sand					
Strongly loamy sand					
Sandy silt					
Sandy loam	Medium soil	20	200	45	450
Clayey silt					
Silty loam	Heavy soil	25	250	55	550
Silty clay					
Clay					

The soil type specified in the soil analysis may be entered into the orchard register. If no soil type is listed, the maximum amount for light soils may not be exceeded.

Frost irrigation does not count as irrigation and is exempt from the above mentioned restrictions.

All possibilities for efficient use of water resources should be exhausted; for example: night irrigation, repair of leaks, reduction of the water amount per irrigation period, etc.
Where possible, drip irrigation should be preferred.

Ecological measure: Use of drip irrigation

The use of flood irrigation should be avoided if possible. New plantings must be switched to another type of irrigation. The use of flood irrigation will no longer be allowed for all orchards planted from 2021 on.

Water quality:
The resources available for the irrigation of fruit cultivation have been regularly controlled since 1997 through a monitoring program of the department of sustainable water use of the Autonomous Province of Bozen-Südtirol. These examinations provide information about the quality of the water. Upon request, the corresponding documents can be made available by the department.

Sewage water must never be used for irrigation.

Tree training and fruit quality

Yearly growth of 20-40 cm is desirable. In the case of more vigorous growth, appropriate measures (adjustment of winter pruning, reduction of nitrogen fertilization, reduction of irrigation, root pruning and ground cover propagation under the trees) can inhibit growth.

Regular, good-quality crops are indispensable for economic success in commercial orchardry. That is why the orchardist should always try to better fruit quality (fruit size, color, taste, internal quality, shelf life and hygiene) by the use of environmentally friendly measures. Many varieties require chemical fruit thinning

(allowed products - see appendix). Thinning surplus, small, deformed or otherwise damaged fruit by hand is an especially good method of improving fruit quality.

For reduction of russet, only kaolin as well as gibberellins and Benziladenin are allowed. Synthetic products which speed up or slow down ripening or improve the color are not allowed for this purpose.

Ecological measure: thinning using a mechanical blossom thinner.

Integrated crop protection

a) Prevention

The entire cultivation program should be aimed at maintaining the trees' natural **resistance** against diseases and pests so that no additional spraying is necessary. Trees with too vigorous growth, for example, are especially susceptible to scab, mildew, aphids, mites and tortrix moths.

Integrated crop protection means further protecting and promoting **natural enemies** of pests. In the interest of **natural protection of species** and to promote the settlement and reproduction of beneficial animals in the orchards, we recommend the following measures:

- At the edges of the orchards, **hedges and bushes** should be left as shelter and breeding places for many species.
- Dry walls are welcome **shelter** for weasels, hedgehogs, shrews, various snakes and other beneficial animals. The same is true for rock piles, wood piles, and similar hiding places.
- To attract **birds of prey** (buzzards, falcons, owls, etc.), perches should be installed in the orchards above the trees. Birds of prey keep the orchard clean of mice.
- **Insectivorous birds** (titmice, wrynecks, tree sparrows, redstarts, hoopoes, etc.) collect many larvae (winter moths, clouded drab moths, clear wing borers, and tortrix moths), especially during nesting. We recommend hanging nesting boxes (entry hole 32, 45 or 55 mm) in the orchard.
- **Predatory mites**, if properly protected, keep spider mites under control in the orchard with the help of spider beetles and minute pirate bugs. If there are not enough predatory mites in the orchard, these should be carried in on bundles of branches from other orchards.
- Pots or boxes filled with straw or wood-wool can be hung up in the orchard as winter quarters for **lacewings** (Chrysoperla).

Ecological measures:
- Setting up of nesting boxes in the orchard to attract titmice.
- Construction of perches for raptors
- Creation of hiding places for weasels, hedgehogs, shrews or grass snakes.
- Introduction of predatory mites into the orchard.

b) Alternative plant protection measures

In integrated production, **alternative** (non-chemical) **products and measures** are to be given preference.

- **Shoots infested with mildew or aphids should be cut off.** Thus the intensity of infestation can be reduced and the success of abatement can be improved.

- **Mating disruption** should be used where codling moths, oriental fruit moths, tortrix moth and leopard moth are present. At low infestation rates, reduction of the population is achieved, and prevents the problems that an increase in the population involves. This biotechnical method makes it possible to avoid or reduce spray applications thus avoiding or at least delaying resistance. The dispensers used should be, if possible, biodegradable.

- **Alcohol traps** (8 per ha) are the most effective methods of fighting the European shot-hole borer (Anisandrus).

- **Juice traps** are suitable to fight clear wing borers. Only young clear wing moth larvae can be satisfactorily controlled using insecticides. Besides that, this method of control is technically hardly feasible for older trees. A large part of the moths can be caught using juice traps

- **Mass reproduction and release of beneficial insects** (San José parasitic wasps, woolly apple aphids Trichogramma, parasitic mites, etc.), is more effective over a long period of time than chemical controls.

- Trees with clear symptoms of apple proliferation must be stubbed without delay.

Ecological measures:
- Use of mating disruption against codling moth, oriental fruit moth, tortrix moth and leopard moth.
- Use of juice traps to fight clear wing borers
- Use of traps for mass trapping of garden chafers
- Use of traps for mass trapping of mediterranean fruit fly
- Removal of shoots infected with mildew or aphids.
- Use of ground nets in orchards subject to May bug infestation.

c) Resistance management

Resistance of harmful organisms can make plant protection very difficult and lead to serious problems in regulating harmful populations. All possible precautions should be taken to prevent eventual building up of resistance. The goal of integrated production is to use all non-chemical possibilities and to include or integrate them. IP is through consequential adhesion to its principles suited from the very start to prevent and/or delay resistance of harmful organisms.
The most important principles of a program aimed at resistance management are briefly described below:

- **Reduction of crop protection products use:** Each action that can be avoided delays resistance. If a treatment becomes necessary, the active ingredients should be chosen and used with care. This requires a good knowledge of biology and of the occurrence of the harmful organism. The choice of the correct product and time of use, the right dosage and well-aimed application lead to optimal results and usually avoid the necessity of follow-up treatments. Insecticide application should be limited to the area of infestation.

- **Avoidance of a permanent spray layer:** Effective layers of spray should remain on the tree and in the environment only as long as absolutely necessary. Even short-lived active ingredients which are used repeatedly within short intervals result in a permanent spray coating. Long-lived, persistent active ingredients should be used sparingly and suited to the period of damage. For this reason, the use of several substances is limited.

- **Use of alternatives:** This is a basic requirement of integrated plant protection. Included in these methods are for example pheromone traps, Bacillus thuringiensis, May bug nets, natural enemies (predatory mites) etc.

- **Protection and promotion of beneficial organisms:** Beneficial organisms occupy an important place in resistance management. Their regulatory effect on harmful organisms helps to avoid treatment.

Independent from degree and mechanism of resistance of the pests, beneficial organisms destroy them and counteract the selection of a resistant population.

- **Substitution of active ingredients:** A well-considered change of active ingredients used can delay development of resistance over a long-term period. Decisive is, however, that the actual method of effect, that is, the killing mechanism, is changed. The active ingredients used should therefore belong to different groups. As far as possible, the program offers choices.

Resistance management must begin as long as the products are still working. According to present knowledge, some active ingredients are because of their characteristics especially prone to building up resistance. The use of these is therefore to be limited (see the active ingredient list in the appendix).

Acaricides should not be necessary in an integrated program because of consequential protection of predatory mites. Limited use of these products can preserve the full effect of them for those cases where, because of several reasons, acaricide treatment is required.
Well-considered and consequential resistance management is in accordance with integrated production and is the prerequisite for its long-term success.

d) Choice of products

The **goal of integrated plant protection** is to guarantee the economical success of the orchard using as little and as environmentally-friendly plant protection products as possible.
Chemical measures should only be implemented in integrated plant protection when necessary.

The orchards must thus be checked for disease, pests and beneficial organisms at the most important observation dates Per year, at least two analyses of at least four hours per hectare for beneficial organisms must be performed. At the end of May or beginning of June, the level of primary scab infection must be determined in the orchard (100 shoots per orchard). Per hectare of registered area, annual field checks of at least 8 hours must be made. The reference value used for the examination is the larger of either net area or the area on the LAFIS document. The checks and the results of the counts must be recorded in the orchard register. The reference value used for the examination is the larger of either net area or the area on the LAFIS document.

Out of the list of legally allowed plant protection products, those which:
- do not endanger the **user** or the **personnel working in the orchard**,
- reduce the pest population under the **threshold of tolerance**, yet protect beneficial organisms and other animals,
- do not unnecessarily pollute the **environment** (soil, water, air), and
- leave few **residues** on fruit and in the environment should be preferred.

Plant protection measures with a low level of health risk for the user are preferable if there are formulas with the same active ingredient that carry especially critical hazard codes.

Where spraying against spider mites is necessary, the biological balance between this pest and its natural enemies is disturbed. In this case, the use of products harmful to beneficial insects must be limited, above all in order to guarantee the protection and promotion of predatory mites and other enemies of spider mites (spider beetles, minute pirate bugs, etc.).
In orchards where selected plant protection products are used, beneficial insects can live and thrive.

In the AGRIOS program 2026, only those substances are allowed (with corresponding limitations) which are listed in the national guidelines 2026 and in the active ingredient list for integrated pome fruit cultivation 2026. All **active ingredients not listed there are not allowed in the AGRIOS program 2026** unless authorized during the year. Use of an active ingredient not allowed in the program or the proof of its use through residue analysis leads to non-issuance or the withdrawal of certification for the respective orchard sector or the entire orchard. The non-issuance or the withdrawal of certification for the orchard sector in

question is also effected when plant protection products are used which are not allowed in Italy for the individual plant culture.

Basic substances, low-risk active substances, microorganisms and pheromones
All basic substances authorized in accordance with Article 23 of Regulation (EC) No 1107/2009 of 21 October 2009 may be used.
In addition, all low-risk active substances, all microorganisms and all pheromones may be used if they are contained in products that are legally authorized in Italy and provided that the pests to be controlled are listed in the crop data sheets. These substances may also be used if they are not expressly listed in the crop data sheets.
The above-mentioned active substances are excluded from the maximum number of treatments provided for each pest in the individual crop data sheets.

Wetting agents
The use of wetting agents is allowed in integrated pome fruit production, in compliance with the label requirements.

Using up leftover plant protection substances
Leftovers of plant protection substances which were still allowed in the previous year's IP program may be used up. This exception to the rule is only valid for the amounts of plant protection substances which were already present in storage and registered in the inventory lists. The regulation is not valid for those plant protection substances which are no longer allowed or for which no use-up period has been provided.

Limitations on label
The instructions for use on the labels of plant protection substances must always be followed.

Pollinator varieties
If an orchard contains single trees as pollinators which are treated during plant protection measures together with the main variety, the same restrictions for the main variety are also valid for these.

Ecological measures: Placement of pheromone traps and regularly control of the moth catches.
Pheromone traps offer the possibility of observing the flight course of important pests (i.e. apple codling moth, oriental fruit moth, tortrix moth). Correct interpretation of all data (peak and length of flight, weather, laying of eggs) can help in making a decision. As different traps have varying ability to catch insects, the orchardist should turn to an expert in case of difficulty in interpretation.

e) Plant protection product use per ha and year

The amount of plant protection products used in an orchard per ha and year is determined by 3 factors:

- **Dosage:** In principle, the lowest possible dosage needed to push the pest population under the threshold for tolerance should be used when applying products.
  100-percent extermination of a pest is not in accordance with integrated plant protection. It is relatively expensive, promotes the development of resistant species and damages the environment more than is necessary.

- The **amount of spray** per ha depends on planting system, tree height and spray concentration. Using normal concentrations, it should not exceed 500 liters/ha/meter of tree height in a single row system.
  When using a fine spray system with high concentration, the spray amount should be reduced accordingly.

- The number of applications per year must be justified by the pest population (threshold of tolerance), the weather conditions (for example with scab) as well as by the estimated crop loss (economical threshold of damage). Tips as to thresholds for intervention concerning various pests are given in the guideline brochure „Leitfaden zum integrierten Pflanzenschutz" of the South Tyrolean Advisory Service for fruit and wine growing.

Chemical control of where codling moths, oriental fruit moths and tortrix moths may only be implemented upon reaching the infestation threshold in the appendix. The exceedance of the damage threshold must be documented by corresponding counts registered in the orchard register.

Storage and application of plant protection products

Proper storage, application and elimination of plant protection products

Plant protection storage may consist of a separate room, a separate area divided by a metal grate or fence or a plant protection cabinet. Entrance or access to the storage area is restricted to trained users of plant protection substances. Appropriate danger signs with emergency numbers must be exhibited on the outside of the space or cabinet. The door to the storage area must have a safety latch, and access must not be possible through other openings (e.g. windows). The storage area must be under constant supervision when open. The storage area must be made in a way that allows any spilled or leaking plant protection substances to be collected without any danger of environmental contamination. This collection system must ensure that no plant protection substances, cleaning water or waste from plant protection substance are released into the environment, water, or sewer system. In the storage area, sufficient air exchange must be guaranteed. To prevent entry by animals, the air vents must be equipped with grates. The storage area must be kept dry and protected from precipitation and sunlight. The plant protection substances must not be subjected to extreme temperature influence. The shelves must be made of nonabsorbent material and may not have any sharp edges. Wooden shelves can be sealed with water-repellent protective paint.
All plant protection substances (including herbicides) must be stored in their original packaging with intact and legible labels. Solid formulas must always be stored above liquid plant protection substances. Fertilizers, such as foliar fertilizers which are applied in conjunction with plant protection substances, can be stored in the plant protection storage area. Soil fertilizers, however, must be stored separately from plant protection substances.
Plant protection substance waste such as empty packaging, expired or no longer usable products may also be stored there temporarily. They must be kept separate from the plant protection products in a correspondingly labeled area. Scales and measuring cylinders must be kept in stock. After use, they must be washed and stored in the storage area.
No food or feed may be kept in the plant protection storage area.
Before the plant protection season starts, a list must be made of the plant protection substances on hand and added to the orchard register.
During the preparation of the spray, appropriate protective clothing must be worn.
If the spray solution has been correctly calculated and the sprayer correctly calibrated, there should be no solution left over. In the case that some solution remains, it must be thinned with the rinse water and sprayed in the previously sprayed orchard.
The orchardist is required to dispose of empty spray packaging and obsolete crop protection products according to the existing provincial measures.

Cleaning of sprayers

Sprayers should be cleaned either at a certified washing facility with professional collection and disposal of the washing water or directly in a treated orchard. If cleaning is carried out in the field, it must not be repeated in the same place or in drinking water protection areas. For further information, please refer to the South Tyrolean Farmers' Association's guide ‘Sprayer cleaning in agriculture’.

Spray application methods

Before the first use of a new sprayer, its spray plume should be calibrated to suit the orchard (planting system, tree height). Environmentally safe spraying methods are indispensable for integrated cultivation.
Sprayers with transverse flow sprayers and those with methods of collecting drifting spray and recycling it (tunnel sprayers) cause the least amount of spray drift into the environment.

To prevent unnecessary spray drift onto the ground and into the air, all jets of the sprayer must aim directly at the leaves of the trees. Jets which spray under or above the leaves must in any case be shut down before spraying.

To avoid spray drift over neighboring areas, exact adjustment of the air volume and air speed of the sprayer is necessary to accommodate the characteristics of the orchard. To test this, water-sensitive paper can be used, for example. These adjustments must be made once a year after blossoming of the orchards. The adjustment measures implemented must be recorded and filed along with the orchard register.

The use of injector flat jet nozzles significantly reduces drift.

Sprayers must be kept in good condition and annually serviced and calibrated to insure exact application of the desired quantity of spraying solution. The maintenance work performed on the sprayers (adjustments, repairs, replacement of parts) must be recorded in the appropriate maintenance plan added to the orchard register. All producers are required to submit all sprayers to a periodical checkup of functionality at an authorized testing center. Checkups of functionality are valid for three years. There is an exception to this in the case of new sprayers, where an inspection interval of five years applies.
In order to take part in the AGRIOS program, a sprayer with drift-reducing technology with at least the following equipment must be used:

- Blower attachment;
- Every set of nozzles must be equipped with air suctioning injector flat jet nozzles with a spray angle of 80° - 90° **on all nozzle positions**;
- An automatic or manual back-flushing filter system where one set of filters must have a mesh size of at least 80 mesh.

If a producer cultivates bed or multiple row plantings with a minimum of four rows or trees between driving lanes on a minimum area of no less than 2.000 m², the following exemptions are valid:

- At least the three uppermost jet positions must always be equipped with air injector flat jet nozzles with a spray angle of 80°-90°;
- If this sprayer is used solely with the above-mentioned bed or multiple row plantings, the lower jet positions may be equipped with hollow cone jets with a maximum opening of the ISO color yellow -02;
- If the sprayer is used for the above-mentioned bed or multiple row plantings as well as other orchard forms such as individual rows, the subjacent jet positions may be equipped with hollow cone jets with a maximum opening not exceeding the ISO color yellow -02. The remaining jets are to be equipped completely with air injector flat nozzles with a spray angle of 80°-90°. The hollow cone jets may only be used in bed or multiple row plantings.

If the sprayer is also used to treat cherry orchards, a set of hollow cone jets may be applied from the time the insect net and the rain protection film are closed. The hollow cone jets may only be used in the cherry plants.

The spray device used must belong:

- To the producer himself,
- To the farm manager,
- To another producer whose area is managed by the same farm manager,
- To a close relative or in-law of the farm manager,
- Alternatively, to a third party (documented by invoice or contract and against payment, for example through leasing or a machinery ring).

If the use of a spray device is not possible for a comprehensible reason (for example, type of terrain), a hose line with a spray pistol may be used to apply plant protection substances.

Pre-harvest intervals

The security intervals between the last spray application and harvest required in integrated production are listed in the appendix.

This safety margin ensures that the promised results relating to the maximum level of the legal limit reached can be fulfilled. Usually it deals with the legal waiting periods for the various substances. The first harvestable date must be calculated with the following formula:

Application date + AGRIOS-waiting period (in days) + 1 day = first harvestable date

Residues of plant protection

Eventual residues of plant protection substances approved in the program on fruit produced using integrated production may not exceed 50% of the legal limit. This does not apply to their degradation products, for which the legally permitted maximum residue limit must be observed. If the analytical limit of determination has been determined as the highest allowable residue content, this value is also sufficient for AGRIOS goods.

Water protection

While filling the spray equipment with water and preparing the spray mixture, it must be ensured that no part of the solution finds its way onto the ground or into bodies of water. During application of plant protection measures it is important to be sure that none of the spray solution reaches open water. Therefore, upon planting new orchards, an adequate distance from ditches and streams should be observed. In the use of certain plant protection substances, a minimum distance to watercourses must be kept and the corresponding label recommendations on the packaging must be followed.

Danger of spray drift

Where apple varieties with different harvest dates border one another, attention must be paid to spray drift from the neighboring properties. Spray drift shortly before harvest can raise the amount of residues on the fruit.
To keep spray drift on early ripening varieties to a minimum, the last row should only be sprayed on the outer side towards the inside and the fan should be turned off in the last row from mid-June on.

Spray drift into open waters or neighboring biotopes must absolutely be avoided.

Measures for minimizing spray drift onto neighboring cultures

We refer to the relevant government regulations in this sector.

Ecological measures: Planting of a hedge in order to reduce the drift to neighboring property.

Measures for minimizing spray drift onto organically cultivated fruit production areas

We refer to the framework contract for conflict-free coexistence of organic and integrated fruit production areas.

Rodent control

For rodent control (mice), only the active substance listed in the Annex is currently allowed. To avoid endangering humans, birds, domestic and wild animals, the baits are to be placed directly in the mouse holes. The baited area must be identified with the appropriate danger signs.

Bee conservation

The Western honeybee (Apis mellifera) is one of the most important pollinating insects in fruit cultivation. Pollination of the blossoms takes place when the bee collects pollen and nectar as food from the blossoms. During collection, pollen sticks on the bee's coat and is transferred to the stigma of the next blossom it visits. Bee pollination not only ensures the agricultural crop and raises the level of fruit quality, but also guarantees biodiversity. This is why honeybees must be protected.
Treatment by plant protection measures can also pose a danger to the honeybee. If producers recognize the behavior pattern of the honeybee, there are possibilities of treatment by plant protection measures which significantly improve the protection of bees.

Safety precautions

- The department of horticulture and viticulture annually defines a period of time (transhumance) during which treatment using plant protection substances that are dangerous to bees is banned. This ban must be adhered to unconditionally.
- Outside of the transhumance period, the spray of substances harmful to bees must not reached blooming plants. Special heed must be taken to protect early bloomers (for example, hazelnut or alder) which bees need in early spring for their offspring.
- Through proper use of the technology of low-loss spraying, drift onto blooming plants can be avoided.
- Outside of the transhumance period, substances harmful to bees should be applied if possible in the evening hours, at night or in the early morning, when bees are no longer active. Once the spray has dried, the danger of harming bees is greatly reduced. If the spray solution has already dried, the danger of bee poisoning is significantly lessened. This must be kept in mind, especially in the period after apple blossoming. Foraging bees continue to fly through the orchards in this period, looking for food on the plants blooming in the undergrowth. This is especially important when they are unable to find attractive flowering plants outside the apple orchard. In most years, we have recorded a longer period between the end of apple blossoming and the beginning of blossoming in the woods. It is precisely during this time that the bees return to the orchards looking for pollen.
- Before using substances harmful to bees, the blooming undergrowth must be mulched. This process should also be performed when bees are not active, since many bees also visit the blooming undergrowth.
- During blossoming, substances harmful to bees should only be applied in times of bee inactivity. Furthermore, we recommend not mixing these substances during blossoming or if not otherwise possible, applying them only with a mixing partner.

Before plant protection substances are applied, it is important the producer and nearby beekeepers consult and determine certain rules of conduct. This can help avoid many problems before they occur.

Substances harmful to bees must not be used from the time from the opening of the first blossom until the last blossoms have faded. The dates for the beginning and end of blossoming recorded in the orchard register are binding. The use of plant protection substances harmful to bees after the beginning of blossoming or before the recorded end of blossoming will be penalized in the same way as their use during the period determined by the administration.

Plant protection substances harmful to bees:
Substances classified as harmful to bees are all those annually published by the department of horticulture and viticulture prior to blossoming. This decree must be respected. Below is a provisional list of those substances classified as harmful to bees that are allowed in the AGRIOS program:

Chlorantraniliprol	Etofenprox	Milbemectin
Deltamethrin	Flonicamid	Pyridaben
Emamectin benzoat	Flupyradifurone	Spinosad

FRUIT FROM IP IN THE PROCESSING AND/OR MARKETING ORGANIZATIONS

Delivery to the processing and/or marketing organizations

The parameters for harvest and delivery of the fruit are determined by the respective marketing organizations and are directed at picking the fruit at the optimal point of ripeness so that they can be suitably stored. Lots of fruit from integrated cultivation must be clearly labeled as such (on the delivery order and on every bin) upon arrival in the storage facility.
In the storage facility, all lots from one producers are precisely recorded (Date of delivery, number of delivery order, variety, number of bins or boxes, net weight, orchard parcel and so on) through the storage records and by a particular variety code. In this way, a clear overview of all AGRIOS and non-AGRIOS lots in storage.

Upon delivery, a list of all registered producers, orchard parcels and varieties must be available from which the non-issuance or the withdrawal of certifications and the voluntary cancellations are discernable. In this way, unintentional storage of fruit whose cultivation does not conform to the guidelines as AGRIOS products can be avoided.

The controllers can at any moment take samples to have the fruit examined for eventual residues of chemicals or other foreign substances.

Treatment and storage of the fruit in the storage facility

In the storage facility, various diseases can occur. The causes are partly of a physiological nature (scald, internal breakdown, bitter pit, lenticel spots and so on) and partly various fungi can infect the fruit and cause great losses.

a) Fungus diseases
Fungus diseases (storage scald, gloeosporium, monilia, penizillium, phytophtora and others) can usually be effectively fought in the orchard. Spring treatments are to be effected exactly and on time in order to prevent primary infestation (scab). The final treatment in the orchard is very important and should coordinate the proper substance with the weather, location and variety. Late infections are in this way largely avoidable.

Tips for hygiene in storage:
- Use clean bins for harvest
- Avoid contamination of the bins by soil, as these represent sources of infection
- Cleaning of storage cells, grading lines and packaging lines

Post-harvest treatment with fungicides is not allowed.

b) Scald
In the susceptible varieties this physiological dysfunction can appear even after relatively short periods of storage. As a method of preventing scald in many apple varieties, the AGRIOS program allows treatments with 1-MCP (Methylcyclopropene).

Grading and packaging

The handling of fruit from integrated cultivation in the storage facility must be executed in a way which excludes the possibility cultivation of mixing or confusing them with non-AGRIOS lots.
Fruit from integrated cultivation must not be contaminated by foreign substances during emptying (water bath), calibration, grading or packaging.

During grading it must be clearly visible if IP products are being processed or not. This must also be controllable for longer periods of time; **in no case may AGRIOS lots be mixed with non AGRIOS lots**. Especially during grading and temporary storage **labeling of pregraded lots must be made in a way which cannot be changed afterwards.** Also packaging must be clearly recognizable and traceable as to whether the lot comes from AGRIOS producers or not.

Fruit from integrated cultivation must be packaged and supplied in hygienically harmless, foodstuff approved, **environmentally friendly packaging**.

Labeling and presentation of the fruit from integrated production

South Tyrolean fruit which is proven to have been cultivated and stored according to the guidelines and has passed all test has the right to use the term **"from integrated production".**
The orchardist, the persons responsible in his marketing organization and the certification body guarantee with this as far as possible through checks and analyses that the fruit has been cultivated and stored according to the guidelines.
All **liability** for the impeccable soundness of the fruit with regard to the consumer, the business partners and the department of health remains however with the marketing organization and orchardist.

South Tyrolean fruit which has not been **proven** to be cultivated according to the guidelines and is not recognized by the certification body may not use the term "from integrated production" or similar terms.
If products from South Tyrol are used for trademarks requiring integrated production, these products must be proven to conform to the AGRIOS guidelines.

APPLICATION OF INTEGRATED PRODUCTION

Participation

Each producer and marketing organization wishing to take part in the AGRIOS program must submit a written application for participation in the program by the 28th of February of each year to a competent and independent certification body in which he declares that he:

- knows the guidelines and voluntarily and autonomously adheres to them,
- allows all necessary controls and analyses and
- recognizes the decisions of the certification body.

Integrated production must include the entirety of his pome orchards (environmentally conscious orchardist). All care measures executed after the end of the last harvest are effective for the new harvest and must be transferred into the current orchard register. The regulations and sanctions of the previous guidelines are applicable for all measures executed before these guidelines take effect.
The orchardist must see to it that AGRIOS-properties are not contaminated by forbidden substances (spray remains in the sprayer, spray drift from neighboring properties, etc.).

Each producer or the corresponding marketing organization must submit a current list of the participating fruit production area to the certification body within May 31st of each year.
If there are any changes in the cultivation data in regard to planting data or ownership occur after the original report, these are to be reported to the certification body within 15 days.

Exclusions

Exclusion from the program can be effected at the certification body on single properties or the entire orchard.

Partial exclusion, that is, exclusion of a part of an orchard, are accepted only when the affected area within a larger area is clearly distinguishable as a (varietal) sector, and when spray drift to bordering rows can be ruled out to a great extent. Clearly distinguishable are, for example, sectors of trees of approximately the same age in at least 5-6 rows, or sectors separated by natural borders such as roads, ditches, or hedges.
At application for exclusion, a sketch should be presented in which the sector to be excluded from the program and its immediate environment are clearly drawn in and the size of the sector is easily discernible. The certification body reserves the right to accept the exclusion or to decline it for sectors which are too small. A copy of the exclusion application must be included in the orchard register.

Voluntary exclusion must be effected through the marketing organization before or immediately after the implementation of an unauthorized measure. Applications for exclusion can no longer be accepted after notification of a forthcoming inspection or during the inspection itself.

Implementation of integrated production

a) Orchard manager

Every producer must appoint an orchard manager who is responsible for the implementation of integrated production, especially for all fertilizer and plant protection treatments. The orchard manager must also ensure that the responsibilities and competences are communicated internally within the organization.

b) Product procurement

If marketing organizations obtain the products from integrated production directly from the agricultural operation, a supply agreement or a declaration about the estimated crop must be on hand.
If marketing organizations obtain the products from integrated production from other marketing organizations, it must be ascertainable from the transport documents that the products stem from integrated production.

c) Non-conformity, improvement and preventive measures and complaints

The producers must keep records of detected non-conformities and the associated measures taken. In addition, they must ensure that non-conforming goods are not put into circulation as AGRIOS goods.
The producers must implement and record improvement and preventive measures and appraise their effectiveness.
The producers must record the handling of complaints.

d) Self-monitoring

The producers must implement self-monitoring of the correct application of the AGRIOS guidelines and document their results. In the case of agricultural producers, this must be accomplished before the controlling of the orchard register.

e) Internal audit

The marketing organizations must evaluate the effectiveness of the integrated production systems at least once yearly; the evaluation must be carried out by a person not involved in the evaluated activity. As a result of the self-monitoring, the internal audit and eventual complaints and non-conformities, improvement measures must be implemented when necessary.
In the case of agricultural producers, the documentation is checked by the employees of the marketing organization upon handing in the orchard register.

The orchard register

Orchardists who want to comply with the requirements of integrated production must record all cultivation measures in an **orchard register** in order to establish proof of an environmentally friendly method of production. The orchard register may be maintained in digital or paper form. The records must be retained for at least ten years.

In the orchard register, the orchardist keeps a continuous record of the various cultivation methods in his orchard.
The following information must be recorded in the orchard register:

- Identification of the orchard
- Begin of blossoming (for each variety)
- End of blossoming for new orchards
- Start of harvest (for each variety)
- Spray applications: date, product (trade name), amount, reason (i.e. pests, diseases, thinning, etc.)
- Fertilization: date, fertilizer, (trade name), concentration of nutrients, amount
- Herbicides: date, product (trade name), amount
- Irrigation
- Control of rodents
- Count of diseases, beneficial and harmful insects
- Ecological measures effected

In the orchard register, also the date of the end of blossoming for full-yield orchards can be recorded. If no such date is recorded, the controls will use the date specified by the Department for Horticulture and Viticulture.

The orchard register must be kept up to date and ready at all times for auditing.
In addition, the care measures executed after the end of harvest, such as autumn fertilization, use of herbicides or rodent control, must be entered into the current orchard register and transferred to the orchard register for the following year.

CONTROLS AND SANCTIONS IN THE INTEGRATED PRODUCTION

Range of controls

Farm checks
A specific share of the registered participants is controlled during the season by farm checks according to the specifications of the control plan. The participants to be controlled by farm checks are chosen by the certification body.

Controls of orchard registers
The orchard registers including the orchard register entries of all orchards are controlled in two phases: the first check is carried out before starting harvest, the second after application of the last spraying.

Storage controls
At the beginning of the marketing season, a preliminary examination will be made in each storage facility. During the season, further checkups will be made.

Content of controls

Controls by the certification body	
Control	**Control point**
Check of the orchard register and its entries	• Completeness of the entries • Compliance with the AGRIOS guidelines
Check of the plant protection equipment	• Participation in a checkup of functionality • Presence of drift-reducing technology
Examination of the storage facilities for plant protection substances	• Adherence to the regulations concerning the proper storage of plant protection products • Actual inventory of plant protection products (concordance with inventory lists, presence of substances no longer allowed) • Adherence to the regulations for proper disposal of empty packaging and obsolete plant protection products
Control in the orchards	• Concurrence of the area controlled with the area registered • Width of the herbicide strips • Execution of ecological measures
Collection of leaf, fruit, soil and outgrowth samples	• Residues of plant protection substances
Checks of the storage facility	• Exact and clear labeling of the AGRIOS products • Traceability of the product flow • Separation of the product circulation

Records of controls

At the examination of the producers and the storage facilities, the technician keeps a protocol which each participant receives a copy of. Upon discovery of any nonconformity, the sanctions provided for in the guidelines will be applied.

Sanctions for the producers

The non-issuance or the withdrawal of AGRIOS certification for the property/orchard concerned is imposed upon following grounds:

- From the orchard register the use of substances not allowed in the AGRIOS program is ascertained. If it is only a case of a recording error, the producer can make a written declaration within four calendar days of the discovery and request residue analysis at his own expense. If no residues of the substance in question are found, the certification of the corresponding property occurs. If however the residue analysis confirms the records, the certification of the entire farm is not issued/withdrawn.
- The orchard register shows the use of non-authorized plant protection substances whose active substance is authorized in the AGRIOS program. If this is only a recording error which the producer declares in writing and which can be comprehensibly proven within four calendar days of its discovery through plant protection inventory, delivery receipts and/or invoices, the certification of the lots affected can take place.
- Analyses show residues which exceed the maximum limits allowed by AGRIOS.
- Deficiencies found during the controls have not been corrected within the deadline set.

- The requirement of taking part in schooling within the stated period of time was not fulfilled.

The non-issuance or the withdrawal of AGRIOS certification for the entire orchards is imposed upon following grounds:

- Participation in controls has been refused or a participant fails to appear for controls without excuse.
- Residues of substances not allowed by the program are found in the analyses.
- The orchard register reveals that the ordinances for the protection of bees have been violated in the current and in the previous year.
- The spray device does not fulfill the prescribed requirements for drift-reducing technology (equipment, specifications regarding bed or multiple plantings, allowed proprietorship).
- The documents presented were manipulated or falsified.

The non-issuance or the withdrawal of AGRIOS certification for the lots concerned is imposed upon following grounds:

- When the orchard register shows that waiting periods are not adhered to.

A warning with the condition that the deficiencies determined be corrected within a certain deadline is delivered in the following cases:

- When the records in the orchard register are incomplete.
- When documents are missing from the orchard register.
- When the last checkup of functionality was effected more than 5 years before.
- When the soil analysis is missing or was effected more than 5 years before.
- When the confirmation of registration with an advisory organization is missing.
- When the storage area for plant protection substances contains products which are no longer allowed.
- When the storage area for plant protection substances does not meet regulations.
- When in farm checks the implementation of a measure (plant protection, herbicide, fertilizer) was detected which was not recorded in the orchard register.

A warning with the condition of attending a course pertaining to the topic within a certain time frame will be imposed in the following cases:

- When the orchard register shows that restrictions of the program regarding applications have not been followed (for example, number of applications, final dates for certain substances, maximum dosage).
- The orchard register reveals that the application restrictions of the program regarding fertilizer (for example, time of fertilization, maximum amount of nutrients per application or period) have not been adhered to.
- The orchard register shows the use of fertilizers not allowed in the program. If this is only a recording error which the producer declares in writing and which can be comprehensibly proven within four calendar days of its discovery through fertilizer inventory, delivery receipts and/or invoices, the grower must not participate in supplementary training.
- The orchard register reveals that the limitations of use in the area of irrigation (for example, maximum amount per irrigation period, the use of flood irrigation in orchards planted from 2021 on) were not adhered to.
- When in the course of residue analyses a substance is found which is allowed by the program but has not been recorded in the orchard register.
- When the orchard register reveals that the ordinances for the protection of bees have been violated in the current year. If a producer also violated these regulations in the previous year, his entire properties not will be certified.

- In the framework of a farm audit, the disregard of guideline regulations (for example, in appropriate application of mouse bait, inadmissible width of herbicide strips, improper disposal of leftover plant protection substances or waste) is determined.

An additional check including spot sampling for residue analysis is imposed in the following cases:

- The orchard register entries are incomplete or seem implausible.
  In the case that the results of the residue analysis confirm the orchard register entries are incomplete, the producer must carry the cost of the additional check and the chemical analysis. If the results of the analysis do not confirm the suspicions, there is no additional cost to the producer.

Sanctions for the processing and/or marketing organizations

If any nonconformity is discovered in the storage facility, the following sanctions are provided for:

- The product will be blocked.
- The blocked product must be repacked and/or relabelled.
- The correction measures provided for must be implemented.
- Non-conformity will be relayed to AGRIOS which will apply additional sanctions.

National guidelines for integrated production 2026

Crop protection and weed control
G.T.S. „Comitato nazionale per la difesa integrata"
Ministero per le politiche Agricole Alimentari e Forestali
Ministerial Decree Nr. 2722 - 17/4/2008

Note on the list:
For distinguish the technical recommendations from the mandatory obligations, the latter are printed in **bold lettering** and with yellow background.

DISEASE	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
Scab *(Venturia inaequalis)*	Chemical measures Implementation of treatments according to biological cycles or a fixed or prolonged cycle in connection with the weather and the persistence of the fungicide. Interruption or strong limitation of scab treatments after the primary scab season, should no scab infestation be found in the orchard.	Lime sulphur Trifloxystrobin (1) Pyraclostrobin (1) Boscalid (2)(*) Sterol biosynthesis inhibitors (SBI)-see appendix (3) Pyrimethanil (4) Cyprodinil (4) Captan (5) Dithianon (5) Fluazinam (6) Dodine (7) Penthiopyrad (8)(*) Copper (9) Fluxapyroxad (10)(*) Potassium phosphonates (11) Bacillus subtilis Sulphur Potassium hydrogen carbonate Orange oil Laminarin	**(1) A maximum of 3 applications with Strobilurins per year independently of the disease** **(2) A maximum of 3 applications per year independently of the disease** **(3) A maximum of 7 applications with SBI per year independently of the disease, additionally a maximum of 1 further application with Difenoconazole or Mefentrifluconazole against scab, a maximum of 2 applications with Mefentrifluconazole per year** **(4) A maximum of 3 applications per year independently of the disease** **(5) Among Captan and Dithianon independently of the disease a maximum of 18 applications per year** **(6) A maximum of 6 applications per year independently of the disease** **(7) A maximum of 3 applications per year independently of the disease** **(8) A maximum of 2 applications per year independently of the disease** **(9) A maximum of 4 kg of pure copper per ha and year, including fertilizers containing copper** **(10) A maximum of 3 applications per year independently of the disease** **(11) Among Fosetyl-Aluminium and Potassium phosphonates a maximum of 10 applications per year independently of the disease**

DISEASE	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
Mildew *(Podosphaera leucotricha, Oidium farinosum)*	Agronomic measures Removal of afflicted buds during winter pruning Pruning of afflicted shoots in spring-summer Chemical measures Preventative treatment of susceptible varieties and slope or hill locations beginning pre-blossom, less susceptible varieties in valley locations beginning at the first signs of infestation.	Sulphur Sterol biosynthesis inhibi-tors (SBI)-see appendix (1) Pyraclostrobin (2) Trifloxystrobin (2) Boscalid (3)(*) Cyflufenamid (4) Penthiopyrad (5)(*) Bupirimate (6) Fluxapyroxad (7)(*) Meptyldinocap (8) Potassium hydrogen carbonate Lime sulphur Bacillus amyloliquefaciens Orange oil Laminarin	**(1) A maximum of 7 applications with SBI per year independently of the disease, additionally a maximum of 1 further application with Difenoconazole or Mefentrifluconazole against scab, a maximum of 2 applications with Mefentrifluconazole per year** **(2) A maximum of 3 applications with Strobilurins per year independently of the disease** **(3) A maximum of 3 applications per year independently of the disease** **(4) A maximum of 2 applications per year independently of the disease** **(5) A maximum of 2 applications per year independently of the disease** **(6) A maximum of 4 applications per year independently of the disease** **(7) A maximum of 3 applications per year independently of the disease** **(8) A maximum of 2 applications per year independently of the disease, only from mouse-ear stage to the begin of blossom**
European Canker *(Nectria galligena)*	Chemical measures Normally treatment is implemented in fall shortly before leaf fall and in spring at the first swelling of buds. In young and badly infested orchards, it is sensible to treat during leaf fall.	Copper (1)	**(1) A maximum of 4 kg of pure copper per ha and year, including fertilizers containing copper**
Collar Rot *(Phytophthora spp.)*	Chemical measures **Limit treatment to afflicted zones** Treatment starting at begin of vegetation period. Avoid bad drainage.	Copper (1) Fosetyl-Aluminium (2)	**A maximum of 2 applications per year against this disease** **(1) A maximum of 4 kg of pure copper per ha and year, including fertilizers containing copper** **(2) Among Fosetyl-Aluminium and Potassium phosphonates a maximum of 10 applications per year independently of the disease**

DISEASE	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
Fruit Rot *(Gloeosporium album)*	Chemical measures **Only pre-harvest treatments**	Captan (1) Pyraclostrobin (2) Boscalid (3)(*) Fludioxonil (4)	**(1) Among Captan and Dithianon independently of the disease, a maximum of 18 applications per year** **(2) A maximum of 3 applications with Strobilurins per year independently of the disease** **(3) A maximum of 3 applications per year independently of the disease** **(4) A maximum of 2 applications per year independently of the disease**
Fire Blight *(Erwinia amylovora)*	**Intervention level** **See notes of the local advisory board.**	Copper (1) Bacillus subtilis Aureobasidium pullulans Bacillus amyloliquefaciens Laminarin	**(1) A maximum of 4 kg of pure copper per ha and year, including fertilizers containing copper**
Alternaria *(Alternaria spp.)*	Chemical measures **Only pre-harvest treatments**	Pyraclostrobin (1) Boscalid (2)(*) Fludioxonil (3) Penthiopyrad (4)(*) Fluazinam (5) Mefentrifluconazole (6)	**(1) A maximum of 3 applications with Strobilurins per year independently of the disease** **(2) A maximum of 3 applications per year independently of the disease** **(3) A maximum of 2 applications per year independently of the disease** **(4) A maximum of 2 applications per year independently of the disease** **(5) A maximum of 6 applications per year independently of the Disease** **(6) A maximum of 2 applications per year independently of the disease**
Glomerella Leaf Spot **Apple Bitter Rot** *(Colletotrichum spp.)*	Agronomic measures Avoid overhead irrigation Promote leaf decomposition in the post-harvest period	Fludioxonil (1)	**(1) A maximum of 2 applications per year independently of the disease**
Remark: authorized SBI: Penconazole, Tetraconazole, Difenconazole, Mefentrifluconazole.			
(*)Independently of the disease a maximum of 4 applications per year with Boscalid, Fluxapyroxad and Penthiopyrad			

PEST	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
San Josè Scale *(Comstockaspis perniciosa)*	**Intervention level** **Presence** **If present, treatment at the end of winter when larvae emerge.**	Paraffin oil Pyriproxyfen (1)	**(1) A maximum of 1 application per year independently of the pest, only in pre-blossom**
Rosy Apple Aphid *(Dysaphis plantaginea)*	**Intervention level** **Presence**	Tau-Fluvalinate (1) Acetamiprid Flonicamid (2) Flupyradifurone (3) Pirimicarb Azadirachtin Potassium fatty acids	**(1) A maximum of 2 applications per year independently of the pest** **(2) A maximum of 1 application per year independently of the pest** **(3) A maximum of 1 application every other year independently of the pest**
Tortrix Moth *(Pandemis cerasana, Archips podanus, Adoxophyes orana, Pandemis heparana)*	**Intervention level** **Post-blossom: 2 larvae/100 shoots** **Summer: 3 larvae/500 fruits**	Mating disruption Bacillus thuringiensis Spinosad (1) Chlorantraniliprole (2) Emamectin benzoat (3) Tebufenozide (4)	**Internal pheromone traps or monitoring net** **(1) A maximum of 3 applications per year independently of the pest** **(2) A maximum of 2 applications per year independently of the pest** **(3) A maximum of 2 applications per year independently of the pest** **(4) A maximum of 2 applications per year independently of the pest**
Codling Moth *(Cydia pomonella)*	Give preference to disruption methods for treatment. **Intervention level** **First generation: Based on prediction models or trap catches** **Subsequent generations: After checking at least 500 fruits per hectare, count the number of boreholes:** **June - 3 bored fruits/1.000** **July - 5 bored fruits/1.000** **August - 8 bored fruits/1.000**	Mating disruption Granulovirus Spinosad (1) Chlorantraniliprole (2) Emamectin benzoat (3) Tebufenozide (4) Acetamiprid	**Internal pheromone traps or monitoring net** **(1) A maximum of 3 applications per year independently of the pest** **(2) A maximum of 2 applications per year independently of the pest** **(3) A maximum of 2 applications per year independently of the pest** **(4) A maximum of 2 applications per year independently of the pest**

PEST	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
Oriental Fruit Moth *(Cydia molesta, Grapholita molesta)*	**Intervention level** **Egg deposition or 1% boreholes upon checking at least 100 fruits/ha**	Bacillus thuringiensis Mating disruption Spinosad (1) Chlorantraniliprole (2) Emamectin benzoat (3) Granulosevirus	**(1) A maximum of 3 applications per year independently of the pest** **(2) A maximum of 2 applications per year independently of the pest** **(3) A maximum of 2 applications per year independently of the pest**
Leaf Miners *(Lithocolletis blancardella)* *(Leucoptera scitella)* *(Phyllonorycter corylifoliella)* *(Lyonetia clerkella)*	**Intervention level** **Ribbed Apple Leaf Miner: 5-6 mines per tree** **Spotted Tentiform Leaf Miner: 1 mine per long shoot** **Hawthorn Red Midget Moth: 1 mine per long shoot** **Apple Leaf Miner: 1 mine per long shoot**	Acetamiprid Spinosad (1) Chlorantraniliprole (2) Emamectin benzoat(3) Azadirachtin	**(1) A maximum of 3 applications per year independently of the pest** **(2) A maximum of 2 applications per year independently of the pest** **(3) A maximum of 2 applications per year independently of the pest**
Leopard Moth *(Zeuzera pyrina)*		Mating disruption	
Red Spider Mite *(Panonychus ulmi)* **Twospotted Spider Mite** *(Tetranychus urticae)*	**Intervention level** **See notes of the local advisory board.**	Pyridaben Hexythiazox Tebufenpyrad Milbemectin Paraffin oil Acequinocyl (1) Potassium fatty acids	**Against these pests a maximum of 2 applications per year, treatments with paraffin oil are not included in this limit.** **(1) A maximum of 1 application per year independently of the pest**
Apple Rust Mite *(Aculus schlechtendali)*		Paraffin oil Sulphur	
Greene Apple Aphid *(Aphis pomi)*		Azadirachtin Acetamiprid Flonicamid (1) Flupyradifurone (2) Pirimicarb Potassium fatty acids Paraffin oil Pyrethrins	**(1) A maximum of 1 application per year independently of the pest** **(2) A maximum of 1 application every other year independently of the pest**

PEST	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
Woolly Apple Aphid *(Eriosoma lanigerum)*	**Intervention level** **10 living colonies on checking 100 afflicted organs** Check presence of *A. mali* wasps which can effectively reduce infestation.	Acetamiprid Flupyradifurone (1) Pirimicarb Beauveria bassiana	**(1) A maximum of 1 application every other year independently of the pest**
Psyllids *(Cacopsylla melanoneura)* *(Cacopsylla picta)*		Etofenprox (1) Tau-Fluvalinate (2) Pyrethrins Azadirachtin Potassium fatty acids	**(1) A maximum of 3 applications per year independently of the pest, of which at least 1 application in pre-blossom** **(2) A maximum of 2 applications per year independently of the pest**
May Bug *(Melolontha melolontha)*	**Intervention level** **See notes of the local advisory board, only in years of mass flight.**	Acetamiprid	
Mediterranean Fruit Fly *(Ceratitis capitata)*	**Intervention level** **Presence of the first puncture holes**	Acetamiprid Etofenprox (1) Lambda-Cyhalothrin (2) Deltamethrin (2) Esfenvalerate (2)	**(1) A maximum of 3 applications per year independently of the pest, of which at least 1 application in pre-blossom** **(2) Use only in traps for mass capture**
Brown Marmorated Stink Bug *(Halyomorpha halys)*	**Intervention level** **See notes of the local advisory Board.**	Acetamiprid Tau-Fluvalinate (1) Etofenprox (2) Deltamethrin (3) Pyrethrins	**(1) A maximum of 2 applications per year independently of the pest** **(2) A maximum of 3 applications per year independently of the pest, of which at least 1 application in pre-blossom** **(3) A maximum of 1 application per year independently of the pest**
Cicadas	**Intervention level** **Presence**	Etofenprox (1) Azadirachtin Orange oil	**(1) A maximum of 3 applications per year independently of the pest, of which at least 1 application in pre-blossom**
Citrus Flatid Planthopper *(Metcalfa pruinosa)*		Acetamiprid Paraffin oil	

PEST	CRITERIA FOR INTERVENTION	ACTIVE INGREDIENT	REMARKS AND RESTRICTIONS
Red-belted Clearwing *(Synanthedon myopaeformis)*		Azadirachtin Paraffin oil Steinernema feltiae Mass trapping with juice traps	
Common voles **Water voles**		Zinc phosphide	

CRITERIA FOR INTERVENTION	ACTIVITY	WEEDS	ACTIVE INGREDIENTS
Agronomic measures Use of plant cover, mowing, mulching and/or ground tillage **Not allowed: tillage of the alleys in orchards with irrigation** Chemical measures **Chemical treatment of the alleys is not allowed.** Fall treatments recommended. The use of herbicides can be meaningful if: - the distance in the row between individual trees is less than 1.5-2 m - the trees have root systems above ground (i.e. quince rootstocks and BA29 for pears - M9 and M26 for apples). - there is danger of erosion (i.e. gradient above 5%). - low branches and small plots do not allow for mechanical measures. **Weed control must be confined to the tree row.** **The treated area may not exceed 30% of the total area.** **(1) Max. 9 l/ha/year with formulations containing 360 g/l, if post-emergence herbicides are used; max. 6 l/ha/year if pre-emergence herbicides are used. Max. 1 application per year within one hour of cutting the trees with products that provide use as a devitalizing agent.** **(2) Can be used as an alternative to MCPA, max. 1 application per year, only in mixture with Glyphosate** **(3) For each application as herbicide, the dose is 0,3 l/ha, against suckers 1 l/ha.** **(4) Max. 1 application per year** **(5) Can be used as an alternative to 2,4-D** **(6) From the end of winter to the beginning of blossoming** **(7) Among Oxyfluorfen, Pendimethalin, Propyzamide and Diflufenican a maximum of 1 application per year**	Post-emergence herbicide	Broadleaf weeds and grasses	Glyphosate (1) Pelargonic acid 2,4-D (2)
		Broadleaf weeds	Carfentrazone-ethyl (3) Pyraflufen-ethyl Fluroxypyr (4) MCPA (5)
		Grasses	Clethodim Cycloxydim Fluazifop-P-butyl Quizalofop-P-ethyl Propaquizafop
	Pre-emergence herbicide	Broadleaf weeds	Isoxaben (6)
		Broadleaf weeds and grasses	Oxyfluorfen (7) Pendimethalin (7) Propyzamide (7) Diflufenican (7) Clomazone Flazasulfuron

GROWTH REGULATORS

EFFECT	APPLICABLE SUBSTANCES	COMMENTS AND APPLICATION RESTRICTIONS	AGRONOMIC ALTERNATIVES (SUGGESTION)
Fruit set	Gibberellins (A4+A7) Gibberellins (A4+A7) + 6-Benzyladenine	Application only in the case of frost damage risk	Use of bees and bumblebees
Prevention of premature fruit fall	1-Naphthylacetic acid (1-NAA)	Product use recommended only when taking account of objective local parameters (variety, weather conditions, degree of ripeness)	
Prevention of fruit russetting	Gibberellins (A4+A7) Gibberellins (A4+A7) + 6-Benzyladenine		
Restriction of growth (regulation of the growth process of the plant)	Prohexadione calcium		
	1-Naphthylacetic acid (1-NAA)	Only under unfavorable weather conditions	
Thinning	6-Benzyladenine		With supplementary manual thinning
	1-Naphthylacetic acid (1-NAA)		With supplementary manual thinning
	6-Benzyladedine + 1-Naphthylacetic acid (1-NAA)		With supplementary manual thinning
	1-Naphthylacetamide (1-NAD)		With supplementary manual thinning
	Ethephon		With supplementary manual thinning
	Metamitron	A maximum of 2 applications per year	With supplementary manual thinning
Promoting uniform fruit shape	Gibberellins (A4+A7) Gibberellins (A4+A7) + 6-Benzyladenine		With supplementary manual thinning

Active ingredient list for integrated pome production 2026

The maximum dosages in the following list were obtained from the plant protection labels available at the time of authorization; no liability is assumed for possible errors or fallacies. The dosages of some plant protection substances differ according to the pests/diseases to be treated or according to the time of treatment. The corresponding specifications on the labels should be heeded.

INSECTICIDES

Active ingredient	Trade name	Max. applic. per year	Maximum dosage per hl	Maximum dosage per ha	Waiting period (in days)	Remarks
Acetamiprid	Epik SL, Gazelle, Kestrel, Kipe 50 SL	1 1 2 1	150 ml 150 g 35 ml 150 ml	1,5 l 1,5 kg 0,25 l 1,5 l	30 30 21 30	
Azadirachtin	Bemotius, Neemazal-T/S, Neemik Ten, Oikos	3 3 3 3	- - 400 ml 150 ml	1,5 l 3 l 3,9 l 1,5 l	3 3 3 3	
Bacillus thuringiensis	Agree, Bac MK, Belthirul, Biobit DF, CoStar WG, Delfin, Design WG, DiPel DF, Doctrin, Exitul, Kristal 32 WG, Lepinox Plus, Primial WG, Rapax AS, Sequra WG, Turex, Turibel, XenTari WG	3 2 2 8 6 6 3 8 2 2 8 - 8 3 8 3 2 4	200 g 125 g 125 g 100 g 100 g 100 g 200 g 100 g 125 g 125 g 100 g - 100 g - 100 g 200 g 125 g 100 g	2 kg 1 kg 1 kg 1,5 kg 1,5 kg 1 kg 2 kg 1,5 kg 1 kg 1 kg 1,5 kg 1,5 kg 1,5 kg 2 l 1,5 kg 2 kg 1 kg 1,5 kg	2 3 3 2 2 2 2 2 3 3 2 2 2 2 2 2 3 2	
Beauveria bassiana	Naturalis	10	-	2 l	0	
Chlorantraniliprole	Coragen, Pampero, Shenzi 200 SC, Vesticor, Voliam	2 2 2 2 2	20 ml 20 ml 20 ml 20 ml 20 ml	0,3 l 0,3 l 0,3 l 0,3 l 0,3 l	14 14 14 14 14	A maximum of 2 applications per year is allowed.
Deltamethrin	Decis Evo, Decis Trap, Meteor	1 - 1	50 ml - 80 ml	0,7 l 80 pcs. -	7 0 3	A maximum of 1 application per year is allowed.
Emamectin benzoat	Affirm, Affirm Opti	2 2	300 g 150 g	4 kg 2 kg	7 7	A maximum of 2 applications per year is allowed.
Esfenvalerate	Sumitrap	1	-	75 pcs.	0	Only for use in traps
Etofenprox	Sword up, Trebon up	3 3	50 ml 50 ml	0,75 l 0,75 l	7 7	A maximum of 3 applications per year is allowed. 1 further application is allowed, of which at least 1 application in pre-blossom.

Flonicamid	Afinto, Apyza WG, Flonic, Teppeki, Velmeri 500 WG	1 1 1 1 1	- - - - -	0,14 kg 0,14 kg 0,14 kg 0,14 kg 0,14 kg	21 21 21 21 21	A maximum of 1 application per year is allowed.
Flupyradifurone	Sivanto Prime	1 every other year	75 ml	0,9 l	14	A maximum of 1 application every other year is allowed.
Granulovirus	Carpostop, Carpovirusine Plus, Madex Top, Madex Twin, Virgo	3 - 10 21 3	50 ml 100 ml - - 50 ml	0,75 l 1 l 0,1 l 0,1 l 0,75 l	3 1 3 3 3	
Lambda-cyhalothrin	Karatetrap C	1	-	80 pcs.	0	Only for use in traps
Mating disruption	Checkmate CM-XL, CheckMate OFM, CheckMate Puffer CM, CheckMate Puffer CM-Pro, Checkmate Puffer Fruit Multi, CheckMate Puffer OFM, Cidetrak CM, Cidetrak CM Meso, Cidetrak OFM, Isomate C LR Max TT Isomate C/OFM, Isomate C plus, Isomate C TT, Isomate OFM rosso Flex, Isonet Z, Mister C, Mister C G, Mister C LR	- - - - - - - - - - - - - - - - - -	- - - - - - - - - - - - - - - - - -	300 pcs. 350 pcs. 3 pcs. 3 pcs. 3 pcs. 3 pcs. 500 pcs. 100 pcs. 425 pcs. 750 pcs. 1000 pcs. 1000 pcs. 500 pcs. 600 pcs. 300 pcs. 3 pcs. 3 pcs. 3 pcs.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Orange oil	Essen'ciel, Limocide, Oro-Quin, Prev-am Plus	6 6 6 6	800 ml 800 ml 800 ml 800 ml	4 l 4 l 4 l 4 l	3 3 3 3	
Paraffin oil	Agrumin, Biolid up, Chemol, Eko Oil Spray, EkoOil S, Isard, Ivenol Massò, Oleoter, Oliocin, Oliocin Plus, Opalene Fluid, Ovipron Top, Polithiol, Promanal Agro, Sipcamol E, Ultra Fine Oil, Vernoil	2 2 - - 4 1 - - - 2 2 4 - 2 2 - -	- 2500 ml 3000 ml 3500 ml 1000 ml 1000 ml 2500 ml - 3500 ml 4000 ml - 3500 ml 5000 ml 1000 ml 4000 ml 2500 ml 3500 ml	20 l 30 l - - 12 l 15 l 37,5 l 60 l - 40 l 20 l 35 l 75 l 15 l 40 l 37,5 l 35 l	0 20 20 20 0 0 1 20 20 20 0 20 Dormancy 0 20 1 20	

Pirimicarb	Aphox 50, Pirimor 17,5, Pirimor 50, Xintech 50	1 1 1 1	75 g 200 g 75 g 75 g	0,76 kg 2,2 kg 0,76 kg 0,76 kg	7 7 7 7	
Potassium fatty acids	Ciopper, Flipper, Nobil	5 5 5	2000 ml 2000 ml 2000 ml	10 l 10 l 20 l	0 0 0	
Pyrethrins	Asset Five, Biopiren Plus, Biovis, Flora Verd, Pireflor, Piretro ActiGreen, Pyganic 1.4, Several, Tersus	3 3 3 3 3 3 2 3 2	64 ml 160 ml 160 ml 160 ml 160 ml 160 ml 250 ml 160 ml 250 ml	0,96 l 2,4 l 2,4 l 2,4 l 2,4 l 2,4 l 2,5 l 2,4 l 2,5 l	1 1 1 1 1 1 7 1 7	
Pyriproxyfen	Admiral Gold, Brai, Eniful Expedient 10 EC, Juvinal Gold, Maracana, Proximo, Sinsajo	1 1 1 1 1 1 1 1	40 ml 50 ml 40 ml 50 ml 40 ml 50 ml 50 ml 50 ml	0,6 l 0,5 l 0,6 l 0,5 l 0,6 l 0,5 l 0,5 l 0,5 l	Start blossom Start blossom Start blossom Start blossom Start blossom Start blossom Start blossom Start blossom	A maximum of 1 application per year is allowed, only in pre-blossom.
Spinosad	Exsolant, Laser, Laser 120 SC, Success, Tracer 120	3 3 3 3 3	30 ml 30 ml 120 ml 120 ml 120 ml	0,45 l 0,45 l 1,8 l 1,8 l 1,8 l	7 7 7 7 7	A maximum of 3 applications per year is allowed.
Tau-Fluvalinate	Evure Pro, Mavrik Smart	2 2	120 ml 120 ml	0,6 l 0,6 l	30 30	A maximum of 2 applications per year is allowed.
Tebufenozide	Mimic	2	80 ml	0,9 l	14	

ACARICIDES

Active ingredient	Trade name	Max. applic. per year	Maximum dosage per hl	Maximum dosage per ha	Waiting period (in days)	Remarks
Acequinocyl	Kanemite	1	180 ml	1,8 l	30	A maximum of 1 application with Acequinocyl per year is allowed.
Hexythiazox	Acaroil SC, Edrizar SC, Flanco SC, Matacar FL, Nissorun, Picker Flow, Stiker Flow, Tenor SC	1 1 1 1 1 1 1 1	30 ml 30 ml 30 ml 36 ml 90 g 30 ml 30 ml 30 ml	0,3 l 0,3 l 0,3 l 0,36 l 1 kg 0,3 l 0,3 l 0,3 l	28 28 28 28 28 28 28 28	
Milbemectin	Milbeknock	2	125 ml	1,875 l	14	
Pyridaben	Nexter	1	75 ml	1 l	14	A maximum of 1 application with Pyridaben per year is allowed, leftovers may be used up until 19 May 2026.

Tebufenpyrad	Shinji, Shirudo	1 1	- -	0,5 kg 0,5 kg	7 7	A maximum of two treatments against spider mites are allowed per year, though treatments using paraffin oil are not included in this limit.

FUNGICIDES

Active ingredient	Trade name	Max. applic. per year	Maximum dosage per hl	Maximum dosage per ha	Waiting period (in days)	Remarks
Anilino-pyrimidines:						
Cyprodinil	Cardinal 50 WG,	3	-	0,5 kg	60	A maximum of 3 applications with Anilino-pyrimidines per year is allowed.
	Celerum,	3	100 ml	0,75 l	60	
	Chorus,	3	50 g	0,75 kg	21	
	Tarlys,	3	100 ml	0,75 l	60	
	Tayrex	3	100 ml	0,75 l	60	
Pyrimethanil	Brezza,	3	100 ml	1,5 l	56	
	Charco,	3	-	1,5 l	56	
	Papyrus Gold,	3	100 ml	1 l	56	
	Pretil,	3	-	1,5 l	56	
	Pyrimus 400 SC,	3	70 ml	1 l	56	
	Pyrogal,	3	-	1,5 l	56	
	Pyrus 400 SC,	3	70 ml	1 l	56	
	Scala	3	100 ml	1,5 l	7	
Aureobasidium pullulans	Blossom Protect new	9	-	2,25 kg	0	
Bacillus amylo-liquefaciens	Amylo-X	6	-	2,5 kg	0	A maximum of 6 applications per year is allowed.
Bacillus subtilis	Portento,	8	-	1,5 kg	0	
	Serenade Aso	6	-	8 l	0	
Bupirimate	Nimrod 250 EW	4	60 ml	0,9 l	14	Only apples, a maximum of 4 applications per year is allowed.
Captan and Dithianon:						
Captan	Avenger,	7	-	1,88 kg	21	A maximum of 18 applications with products from this group per year is allowed.
	Capital SH,	7	-	1,88 kg	21	
	Captain 80 WG,	7	-	1,88 kg	21	
	Captan Arvesta 80 WG,	10	180 g	2 kg	21	
	Khapo 80 WG,	7	-	1,88 kg	21	
	Malvin 80 WG,	10	180 g	2 kg	21	
	Merpan 80 WDG,	10	160 g	2 kg	21	
	Orthocide 80 WG	10	180 g	2 kg	21	
Dithianon	Alcoban,	6	-	0,5 kg	42	
	Bolster Flex,	6	-	0,5 kg	42	
	Caldera,	6	-	0,5 kg	42	
	Deed,	6	-	0,5 kg	21	
	Delan 70 WG,	6	50 g	0,75 kg	42	
	Delan SC,	6	70 ml	1,05 l	56	
	Ditoflo 700 WG,	6	50 g	0,75 kg	42	
	Dyonisus,	6	50 g	0,75 kg	42	
	Kuki 70,	6	-	0,5 kg	42	

	Ringo Massò	6	-	0,5 kg	21	
Dithianon + Potassium phosphonates	Delan Pro	6	170 ml	2,5 l	35	A maximum of 10 applications with Fosetyl-Aluminium and Potassium phosphonates is allowed.
Carboxamides:						
Boscalid	Bonafide,	3	25 g	0,375 kg	7	A maximum of 3 applications per year with Boscalid is allowed.
	Cantus,	3	25 g	0,375 kg	7	
	Filan WG,	3	25 g	0,375 kg	7	
	Palator	3	25 g	0,375 kg	7	
Fluxapyroxad	Sercadis,	3	20 ml	0,3 l	35	A maximum of 3 applications per year with Fluxapyroxad is allowed.
	Sercadis SC	3	20 ml	0,3 l	35	
Penthiopyrad	Fontelis	2	75 ml	1,125 l	21	A maximum of 2 applications per year with Penthiopyrad is allowed. A maximum of 4 applications per year with Carboxamides is allowed.
Copper	Airone Più,	9	420 g	4,2 kg	20	A maximum of 4 kg of pure copper are allowed per hectare and year, including fertilizers containing copper.
	Biocupro,	10	1200 ml	12 l	7	
	Bordo 20 Micro,	4	1000 g	5 kg	Start blossom	
	Bordo 20 Micro IQV,	4	1000 g	5 kg	Start blossom	
	Bordo Isagro WG,	16	600 g	7,5 kg	21	
	Bordoflow New,	10	1200 ml	12 l	7	
	Bussola WG NC,	16	600 g	7,5 kg	21	
	Champ 20 WG,	11	210 g	3,15 kg	Start blossom	
	Cobre Nordox Super 75 WG,	16	200 g	2 kg	21	
	Copperfiled 17 WG,	11	245 g	3,675 kg	Start blossom	
	Coprantol 30 WG,	11	170 g	2,55 kg	Start blossom	
	Coprantol Trio,	7	-	8,25 l	Start blossom	
	Cupravit Bio Advanced,	11	165 g	2,475 kg	Start blossom	
	Cupro Isagro WG,	13	300 g	3,5 kg	21	
	Cuprocaffaro Micro,	13	300 g	3,5 kg	21	
	Cuprofix Ultra Disperss,	-	250 g	3,75 kg	7	
	Cuproram 25 Flow,	12	300 ml	3,5 l	21	
	Cuproram 37,5 WG,	13	300 g	3,5 kg	21	
	Cuprosar 40 WDG,	4	500 g	2,5 kg	Start blossom	
	Cuprotek Disperss,	-	500 g	7,5 kg	7	
	Cuproxat SDI,	13	313 ml	2,5 l	21	
	Curenox Top Micro,	4	190 g	2,5 kg	Start blossom	
	Cutril Top,	7	430 ml	6,45 l	Start blossom	
	Cyprus 25 WG,	11	200 g	3 kg	Start blossom	
	Cyprus 25 WG Blu,	11	200 g	3 kg	Start blossom	
	Evoram 15,	11	280 g	4,2 kg	Start blossom	
	Flag,	7	430ml	6,45 l	Start blossom	
	Flowbrix,	8	-	3,2 l	21	
	Grifon Più,	9	420 g	4,2 kg	20	
	Hattrick 30 WG,	11	165 g	2,475 kg	Start blossom	
	Heliocuivre,	-	350 ml	3,5 l	Start blossom	
	Idrorame 193,	16	650 ml	6,5 l	40	
	Idrorame Flow,	16	650 ml	6,5 l	40	
	Input NC,	12	300 ml	3,5 l	21	
	Iperion,	13	300 g	3,5 kg	21	
	King,	16	350 ml	3,5 l	21	
	King 360 HP,	16	350 ml	3,5 l	21	

	Kocide 2000,	-	250 g	-	Start blossom	
	Kop-Twin,	16	420 ml	4,2 l	21	
	Neoram Blu WG,	11	350 g	4,5 kg	21	
	Ossiclor 30,	8	400 g	4 kg	21	
	Ossiclor 35 WG,	8	340 g	3,4 kg	21	
	Ossiclor 35 WG Green,	8	340 g	3,4 kg	21	
	Pasta Caffaro Blu,	12	300 ml	3,5 l	21	
	Pasta Caffaro NC,	12	300 ml	3,5 l	21	
	Pasta Isagro Blu	12	300 ml	3,5 l	21	
	Patrol 35 WP,	10	260 g	2,2 kg	21	
	Poltiglia Caffaro 20 DF New,	16	600 g	7,5 kg	21	
	Poltiglia Caffaro 20 GD,	16	600 g	7,5 kg	21	
	Poltiglia Disperss,	-	500 g	7,5 kg	7	
	Poltiglia 20 PB Manica,	8	625 g	6 kg	7	
	Poltiglia 20 WG Green,	8	625 g	6 kg	7	
	Rame Caffaro Blu WG New,	11	350 g	4,5 kg	21	
	Rame Isagro WG Blu,	11	350 g	4,5 kg	21	
	S. Ramedit Blu WG,	11	350 g	4,5 kg	21	
	Selecta Disperss,	-	500 g	7,5 kg	7	
	Siaram 20 WG,	16	600 g	7,5 kg	21	
	Solution 20 Disperss,	-	500 g	7,5 kg	7	
	Supracaffaro 30 WG,	11	165 g	2,475 kg	Start blossom	
	Tri-Base,	13	313 ml	2,5 l	21	
	Tribasic Flow New,	7	430 ml	6,45 l	Start blossom	
	Zetaram 3B FL	13	313 ml	2,5 l	21	
Cyflufenamid	Cidely,	2	50 ml	0,5 l	14	A maximum of 2 applications per year is allowed.
	Rebel Top	2	50 ml	0,5 l	14	
Dodine	Syllit 544 SC,	2	85 ml	1,25 l	28	A maximum of 3 applications per year is allowed.
	Syllit 65	2	120 g	1,38 kg	40	
Fluazinam	Agharta,	3	100 ml	1 l	60	A maximum of 6 applications per year is allowed.
	Banjo,	3	100 ml	1 l	60	
	Embrace,	3	100 ml	1 l	60	
	Fluazinova Plus,	3	-	1 l	60	
	Kelsos,	3	100 ml	1 l	60	
	Morfeo liquido,	3	100 ml	1 l	60	
	Nando Maxi,	4	100 ml	1,5 l	63	
	Ohayo	1	100 ml	1 l	60	
Fludioxonil	Geoxe,	2	30 g	0,45 kg	3	A maximum of 2 applications per year is allowed.
	Stampa	2	-	0,4 kg	3	
<u>Fosetyl-Aluminium and Potassium phosphonates</u>						
Fosetyl-Aluminium	Aletil DF,	3	300 g	-	15	A maximum of 10 applications with Fosetyl-Aluminium and Potassium phosphonates is allowed.
	Alfil WG,	3	300 g	-	15	
	Aliette,	-	250 g	3,75 kg	28	
	Arpel WG,	3	300 g	-	15	
	Contender Plus,	6	150 g	1,8 kg	40	
	Contender WG,	3	300 g	-	15	
	Elios WG Top,	3	300 g	-	15	
	Fosim,	3	300 g	-	15	
	Golbex WG,	5	375 g	3,75 kg	15	
	Medeiro 80 WG Advance,	3	300 g	-	15	
	Optix Star Disperss,	5	250 g	3,75 kg	28	
	Plynio WG	3	300 g	-	15	

Potassium phosphonates	Aquicine, Boing, Century Pro, Mikonos Evo, Savial Forte	3 3 6 3 3	250 ml 250 ml - 250 ml 250 ml	2,5 l 2,5 l 1,9 l 2,5 l 2,5 l	35 35 35 35 35	
Laminarin	Vacciplant	20	-	1 l	0	
Lime sulphur	Polisolfuro di Calcio Polisenio, Sapulì	11 11	- -	22,5 l 22,5 l	30 30	
Meptyldinocap	Barkan, Karathane Star	2 2	60 ml 60 ml	0,6 l 0,6 l	Start blossom Start blossom	A maximum of 2 applications per year is allowed, only from mouse-ear stage to the begin of blossom, leftovers can be used up this year.
Orange oil	Essen'ciel, Limocide, Oro-Quin, Prev-am Plus	6 6 6 6	800 ml 800 ml 800 ml 800 ml	4 l 4 l 4 l 4 l	3 3 3 3	
Potassium hydrogen carbonate	Armicarb 85, Karma 85, Vitikappa	5 5 6	- - 500 g	5 kg 5 kg 7,5 kg	1 1 0	
<u>Sterol biosynthesis inhibitors (SBI)</u>:						
Difenoconazole	Agridif 250, Daman, Difcor 250, Difecol, Difenzone, Difference, Ditto, Divo, Driscoll, Mavita 250 EC, Nimbus 250 EC, Score 25 EC, Shardif 250 EC, Sponsor, Vertiaro	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	15 ml 20 ml - 15 ml 15 ml - 15 ml 15 ml - 15 ml 15 ml 15 ml 15 ml 15 ml 15 ml	- 0,3 l 0,15 l 0,3 l - 0,15 l - - 0,15 l 0,3 l - 0,3 l - 0,3 l 0,3 l	14 14 14 14 14 14 14 14 14 14 14 14 14 14 14	A maximum of 7 applications with sterol biosynthesis inhibitors per year is allowed, additionally 1 further application with Difenoconazole or Mefentrifluconazole against scab is allowed.
Mefentrifluconazole	Revyona, Revysion	2 2	- -	2 l 2 l	28 28	A maximum of 2 applications with Mefentrifluconazole per year is allowed.
Penconazole	Douro 10 WG, Douro 100 EC, Nexol 10 WG, Pykos, Radar 10 EC, Radar HP Scudex, Topas 10 EC, Topas 2,5 WG, Topas 200 EW, Visir Pencotech	4 4 4 4 3 3 4 3 3 3 4	40 g 40 ml 40 g 40 g 30 ml 100 ml 40 ml 30 ml 130 g 16 ml 50 ml	- - - - 0,5 l 1,5 l - 0,5 l 2 kg 0,25 l -	14 14 14 14 14 14 14 14 14 14 14	For each of the remaining active ingredients a maximum of 4 applications per year is allowed.
Tetraconazole	Brek, Concorde 40 EW, Domark 125, Domark 125 Plus, Emerald 40 EW,	3 3 4 4 3	50 ml 50 ml 24 ml 24 ml 50 ml	0,75 l 0,75 l 0,24 l 0,24 l 0,75 l	14 14 14 14 14	

	Framex,	3	50 ml	0,75 l	14	
	Galileo,	3	50 ml	0,75 l	14	
	Lidal,	3	50 ml	0,75 l	14	
	Sarumo,	3	50 ml	0,75 l	14	
	Sivil Top,	3	50 ml	0,75 l	14	
	Tomiris 125 EW	4	24 ml	0,24 l	14	
Strobilurins						
Pyraclostrobin	Cabrio EC	3	-	0,4 l	21	A maximum of 3 applications with Strobilurins per year is allowed.
Trifloxystrobin	Flint	3	15 g	0,225 kg	14	
Sulphur	Azumo 80 WG,	6	-	7,5 kg	3	
	Cosavet DF Edge,	5	-	7,5 kg	0	
	Heliosoufre S,	24	-	7 l	3	
	Kumulus Tecno,	10	-	6 kg	5	
	Machairas WG,	6	300 g	4,5 kg	5	
	Microbagnabile WG,	6	300 g	4,5 kg	5	
	Microsulf WG,	6	300 g	4,5 kg	5	
	Microthiol Disperss,	14	-	7,5 kg	0	
	Sulfur 80 WG,	6	300 g	4,5 kg	5	
	Thiamon Flow,	8	-	4 l	5	
	Thiamon Plus,	28	600 g	9 kg	0	
	Thiopron,	-	-	9 l	0	
	Tioflor WDG,	6	300 g	4,5 kg	5	
	Tiolene,	8	-	4 l	5	
	Tiosol 80 WG,	14	500 g	6 kg	5	
	Tiovit 800 L	8	-	4 l	5	
	Tiovit Jet,	28	600 g	9 kg	0	
	Tiowetting DF,	14	500 g	6 kg	5	
	Zolfo 80 Micronizzato,	16	400 g	4 kg	5	
	Zolvis 80 Sector,	5	-	7,5 kg	0	
	Zolvis 80 WDG,	10	-	6 kg	5	
	Zolvis Ottanta WG	14	-	6 kg	5	

HERBICIDES

Active ingredient	Trade name	Max. applic. per year	Maximum dosage per ha	Waiting period (in days)	Remarks
Post-emergence herbicide:					
Carfentrazone-ethyl	Affinity Plus,	-	1 l	7	As herbicide max. 0,3 l/ha, against suckers max. 1 l/ha
	Spotlight Plus	-	1 l	7	
Clethodim	Brixton	1	1,33 l	10	
Cycloxydim	Stratos Ultra	-	5 l	28	
Fluazifop-P-butyl	Fusilade Max	-	2,5 l	28	
Fluroxypyr	Nitide,	1	1,5 l	15	A maximum of 1 application per year is allowed.
	Tidex,	1	1,5 l	15	
	Tomidan	1	1,5 l	15	
Glyphosate	Barbarian Biograde 360,	-	6,33 l	21	Max. 9 l/ha/year with formulations containing 360 g active ingredient/l if only post-emergence herbicides are used; max. 6 l/ha/year if pre-emergence herbicides are also used. Max. 1 application per year within one hour of cutting the trees with products that provide use as a devitalizing agent.
	Barclay Gallup Biograde 360,	-	6,33 l	21	
	Clinic ST,	-	6,33 l	21	
	Clinic TF,	-	8 l	0	
	Freeway 360,	3	6,33 l	7	
	Glifene Biograde,	-	6,33 l	21	
	Glister Star,	3	6,33 l	0	
	Hopper 480,	-	4,75 l	0	
	Logrado 360 SL,	3	9 l	28	

	Lograd 490, Montana 450, Pantox 360 Super, Roundup Future, Roundup Power 2.0, Roundup Ultramax, Taifun MK CL, Tartan, Touchdown, Weedmaster Pro 540	- 1 - 3 3 3 3 - - 2	4,65 l 4,8 l 6,33 l 4,75 l 5 l 3,16 kg 9 l 6,33 l 6,33 l 2,66 l	0 28 21 7 21 7 0 0 21 0	
Glyphosate + 2,4-D	Kyleo	1	1,5 l	30	Can be used as an alternative to MCPA.
MCPA	Erbitox M Pro, Fenoxilene 200, Mistral, Regran Extra, U46 M Class, U46 M Star	1 1 1 1 1 1	0,72 l 1,8 l 1,8 l 0,72 l 1,8 l 0,72 l	80 80 80 80 80 80	Can be used as an alternative to 2,4-D.
Pelargonic acid	Beloukha	2	16 l	3	
Propaquizafop	Agil, Zetrola	1 1	2 l 2 l	30 30	
Pyraflufen-ethyl	Revolution	2	2 l	7	
Quizalofop-P-ethyl	Apache, Hanukys, High Top, Leopard 5 EC	1 1 - 1	3 l 3 l 1,25 l 3 l	30 30 35 30	
Pre-emergence herbicide:					
Clomazone	Rexxar	-	0,5 l	0	
Flazasulfuron	Chikara 25 WG	1	0,024 kg	60	
Diflufenican	Mohican 500 SC	1	0,6 l	0	Among Diflufenican, Oxyfluorfen, Pendimethalin and Propyzamide a maximum of 1 application per year
Oxyfluorfen Pendimethalin Propyzamide	Dribbling 240 EC, Effield SC, Hereu, Hereu SC Domitrel 400 CS, Prestigan Eko, Stomp Aqua Kerb Flo	1 1 1 1 1 1 1 1	0,5625 l 0,27 l 0,5625 l 0,27 l 3 l 3 l 2,5 l 3,5 l	0 0 0 0 0 0 0 0	The use of Oxyfluorfen is allowed only between the last decade of September and the first decade of May. The use is allowed only from November to the beginning of February.
Isoxaben	Gallery	-	1,2 l	0	The use is allowed only from the end of winter until the beginning of blossoming.

RODENTICIDES

Active ingredient	Trade name	Max. applic. per year	Maximum dosage per ha and year	Waiting period (in days)	Remarks
Zinc phosphide	Ratron GL, Ratron GW	- -	2 kg 2 kg	- -	

OTHER PRODUCTS

Active ingredient	Trade name	Max. applic. per year	Maximum dosage per hl	Maximum dosage per ha	Waiting period (in days)	Remarks
1-Naphthylacet-amide (1-NAD)	Amid Thin W, Diradone, Geramid-Neu, Thin Ger 30 SL	- - - -	120 g 120 g 200 ml 267 ml	1 kg 1 kg - -	90 90 30 7	
1-Naphthylacetic acid (1-NAA)	Dirager, Fixormon SL, Hergon WP, Monex, Obstauxin, Obsthormon 24a	1 2 - 3 - -	40 ml - 150 g 100 g 30 ml 30 ml	0,4 l 0,2 l 2,25 kg 1,5 kg 0,3 l 0,3 l	7 7 90 7 7 7	
6-Benzyladenine	Agrimix TOP, Braitex Pro, Brancher Dirado, Cylex Plus, Exilis, GerBAthin 2 LG, MaxCel, MaxCel 2 SL	- - - 1 - - 1 1	100 ml 100 ml 100 ml 750 ml 1000 ml 1000 ml 750 ml 750 ml	1,5 l 1,5 l - - 10 l 10 l - -	0 0 0 90 0 0 90 90	
6-Benzyladenine + Gibberellins (A4 + A7)	Agrimix PRO, Aramis Plus, Perlan, Plis, Profile, Profile Plus, Progerbalin LG, Promalin NT, Prorex	- - - - - - - - -	90 ml 90 ml 125 ml 90 ml 125 ml 125 ml 125 ml 100 ml 90 ml	0,9 l 0,9 l 1,25 l 0,9 l 1,25 l 1,25 l 1,25 l - -	0 0 0 0 0 0 0 0 0	
Ethephon	Ethrel, Gerephon SL	2 2	40 ml 40 ml	0,6 l 0,6 l	14 14	1 treatment with a maximum of 0,6 l/ha or 2 treatments with a maximum each of 0,375 l/ha are allowed, only until 15 June, only on apples.
Gibberellins (A4 + A7)	Agrimix GOLD, Gerlagib LG, Gibb Plus, Nectar, Nectar Plus, Novagib, Regulex 10 SG	- - - - - - -	130 ml 50 ml 130 ml 50 ml 50 ml 50 ml 6 g	1,3 l 0,5 l 1,3 l 0,5 l 0,5 l 0,5 l 0,09 kg	0 0 0 0 0 0 20	
1-Methylcyclo-propene (1-MCP)	SmartFresh	3	-	-	0	
Metamitron	Brevis	2	-	2,2 kg/ application 4,4 kg/year	60	A maximum of 2 applications per year is allowed.
Prohexadione calcium	Corto WG, Kudos, Regalis Plus, Xadion	2 2 - 2	- - - -	1,25 kg 1,25 kg 2,5 kg/ application 3 kg/year 1,25 kg	30 30 0 30	
Sheep fat	Trico	-	-	20 l	0	

WETTING AGENTS (EXAMPLES)

Active ingredient	Trade name	Max. applic. per year	Maximum dosage		Waiting period (in days)	Remarks
			per hl	per ha		
Isodecylalcohol ethoxylate	Bagnante Cifo, Vector	- -	100 ml 100 ml	1 l 1 l	0 0	
Pinolene	Nu-Film-P	-	-	0,4 l	0	
Sorbitan monooleate ethoxylate	Bagnante Sariaf, Mago	- -	150 ml 150 ml	1,5 l 1,5 l	0 0	

Fertilizer index

The fertilizer listed in the following index may be used in integrated production. The updated list is published on the AGRIOS website www.agrios.it.

Abenta NT
Abies Fe
Abilene
Abyss
Acadian MPE
Acti-Mang 600
Actiflow B 2.0
Actiflow Ca560
Actiflow Green Ca
Actiflow Green Mg
Actiflow MgO 500
Actiflow Mn 560
Actiflow Zn 680
Actinet
Actisel
Active Dry
Active Plus
Adimel+ Gold
Adivel neutro
AG-Life
Agri Bio Aktiv
Agrialgae biologico
Agrialgae fogliare
Agrialgae radicale
Agrifol P.S. 20-20-20
Agriorganico 10%
Agriplant 1 20-5-10 (+2)
Agriplant 20-20-20
Agripollina
Agristallatico
Agro N fluid
AgroArgentum Forte
AgroCyprum
AgroFerrum
Agrofert MB
Agroleaf Power Total 20-20-20
Agrolution pHLow 10-50-10
Agrolution Special 13-5-28
Agrolution Special 14-7-14
Agrolution Special 14-8-22
Agromag 9 L Complex
Agroman 9 L Complex
Agromaster 15-7-15
Agromol 5 L
Agros-3
Agrozin 9 L Complex
Akra Blatt
Akra DGC
Akra Kombi
Akra Start
Alamo
Aleado 96
Aleado WS
Alex PK
Alexin 95 PS
Alfaplus
Alga Attiva Bio
Alga Ca
Alga Tonic
Algacifo 3000
Algaenergy
Algafert eco
Algalea Maxima
Algaman
Algaren Twin
Algastrong
AlgiCal
Algimag
Algonia
Algrum
Alical
Alika
Amalgerol Essence PB
Ambition Algae Gen2
Amminoalg Bio+
Ammonium Nitrate
Amylis Endo
Antifrost Mo
Apfel Energy
Aquamin
Aquasatis
Arpa SOP – Solfato di Potassio
Asperium
Assorb pH 3.0
Atriva 250
ATS
ATS Kristall 90/20
ATS L. (Blütenselekt)
ATS Top 15
Avantgarde
Axical
Axifert 20 NV
Axifert Final
Axifert Start
Axifert Universal
Axotech
Az Veg
Az Veg Boro
Az Veg Ca-Mg
Az Veg Molibdeno
Azocor 105
Azofol
Azolon Fluid 28
Azoman

Azos 300

Bacillus Mix
Bactibac
Barrier Si-Ca
Base 6.12.18
Baseball
Baseos Liq Endo
Baseos Orga Evergreen
Basfoliar Avant Natur SL
Basfoliar Force SL
Basfoliar Kelp BIO SL
Basfoliar Plantae Bio SL
Basic NPK 4-7-19
Belfrutto MB
Benefit PZ
Betabio
Betabio active
Biimore
Bio 20
Bio Aktiveg
Bio Att
Bio Energy
Bio Energy Veg
Bio Trix
Bio Veria Powder
Bio-D
Bio-Dung
Bio-Rex
BioAgenasol
Bioaksxter M31 Agricoltura
Biobacter
Biocure
Biofer 25 (TerComposti Spa)
Biofol Suspension 2
Bioforge
Biogas-slurry
Biogesso
Biokalium
Biokalium 338
Biokelp
Biomit
Biomit SR
Biomyz 600
Bionic CK
Biopollina
Biopromoter Ev 3-9
Biosol
Biostimolante Alga Special
Biotrissol NPK 6-5-5
Bioup FL
BitterMag
Biuron
BIWI
BlackHum
Blackjak bio
Blanka
Blas
Blattab
Blaukorn 12-12-17
Blaukorn Classic
Blaukorn Premium
Blaukorn Pro
Blok 5
Blok L
Blok Sinergy
Bluactive 11.11.16
BM 86 AA
Bolikel XP
Bor PK 17
Borato di calcio CL
Borea 300
Borlanda (Fertenia)
Boro 6 Ca LG
Boro KB 19
Bortrac 100 FL
Botrifend
Bryosei
Butterfill Ca Mg
Butterfill K
Butterfill S 33%

Ca‘ Verde 4F
Ca‘ Verde Pollina
Ca‘ Verde Stallatico
Ca“ Verde Activa 4-3-3
CaK Complex
Cal LS
Calamag
Calanit
Calbit C
Calce agricola viva – Branntkalk gemahlen
Calce agricola viva – Branntkalk körnig
Calcikorn GS
Calcio Bio L
Calcio C
Calcioenergy
Calciogreen Forty
Calciomix
Calciprill (Algenkalk)
Calcisan Green
Calcisol HQ
Calcisol Plus
Calcium Tiller
Calcypit
Calibitt
Calibitt R
Calibra EU
Calitech
Calmag 195
Calsol
Caltop 18
Caltrac 560 Plus
Calxpro

Cama 104
Camas
CAN
Canela
CaNova
Capfol
Carbo-Eco Ca
Carbo-Eco Cu
Carbo-Eco Fe
Carbo-Eco K
Carbo-Eco Mg
Carbo-Eco Mn
Carbo-Eco Zn
Carbonato di calcio – Kohlesaurer Düngekalk
Carrier Cu WDG
Carrier Fe WDG
Carrier Mn
Carrier Zn
Cattle manure
Cell out
Cerbero Green 11-22-30
Cerbero Green 13-40-13
Cerbero Green 15-5-30
Cerbero Green 20-20-20
Cerbero NPK 15.5.30
Cerbero NPK 20.20.20
Cerea Blu
CereaPhos40
Cerys
Cerys Natur
Cet 46 Green
Chelal 3
Chelal Cu
Chelal Fe
Chelal Hydro +
Chelal Hydro NF
Chelal Mg
Chelal Mn
Chelal Noor +
Chelal Omnical
Chelal RD +
Chelal RD NF
Chelal Zn
Chelcup 15 Cu
Chelene
Chelonia Cu93
Cheram
Cifo KS 64
Cigophol K300
Citocalcium
Citoveg Radicale
Citra Grow
Click Horto
Clinsol
Clorcal Plus
Cloruro di calcio CL
Colorado
Complex Blu NPK 12.12.17
Complex Fruttorto 9.6.18
Complex Gray 5.8.18+2
Compost
Condor
Copper Kela 15 Cu
Cosmo 10-14-17+15
Cosmo 12-5-17
Cosmo 18-7-9
Cremalga
CreScal Fe-SA
CRF 900
Crisco
Crystalfer
Crystalmonio
Cubico
Cynoyl Z Special
Cytomax

Daglas
DAP 18-46
DC 44 0-10-30
DC Borstart 6-10-16
DC Frucht 12-5-15
Decco Green Protege
Decco Shield
Decide
Defense
Dentamet
Dinamico Micro
Dingo
Dirasol 65S
Dix Bio
Dix natur
Dolokorn 90
Dolophos 15
Dolophos 16
Dolophos 26
Dünger 20

Easyfer
Ecoferro 250 Plus
Ecokup Hydro 46
Ecolenergy Apfel
Ecolverdepiù
Eisenchelat 6%
eK-Ion MAX
Ekokel Cu
Ekokel Man
Ekokel Zin
EKOprop
EKOprop NX
ELFO combi phyto
EliteSea
EnerGemma
Enrich N3
Entec 26

Entec perfect 14-7-17
Entec solub 21
Epso Combitop
Epso Top
Eptasol
Eranthis
Esamix Mg
Escalante
Essemax
Esta Kieserit granulare
Esta Kieserit polvere
Euroactiv Agro
Euroalg S
Eurofert Special
Europlus
Evohl
Expando
Extractiv

F1
F1 (furos twin)
F2
F3
Farben H 50
Ferade 100
Ferade 48
Ferland
Ferland Trio
Ferri-Chel 100
Ferri+plus 50
Ferrilene Trium
Ferroman
Ferronove
Ferropiù-Mg
Ferrostrene Premium
Fertigonia 10-40-10
Fertigonia 10-5-35
Fertigonia 16-8-24
Fertigonia 18-18-18
Fertigonia 20-20-20
Fertigonia 25-10-10
Fertildung
Fertilpollina
Fertilvegetal
Fertimicro Gr
Fertiprotec
Fertiveg Verde
Fertizolfo Bio
Ferysol Top 31
Fidelius FL
Filfert Attivo
Fill 25-20-15
Fill 26-6-18+2MgO
FiloCal Calcium
FiloCal Foliar Feed
Fimum Fruchtkalk
Final K
Fito-PK
Fito-PK Crystal
Fitoman PK
Fitoman PK32
Fitoman Plus
Fitomax-gold
Fitostim Alga
Fixa Calcium NG
Fixa Mn
Fixa Mo
Floral 20.20.20
Floral K
Floristar
Flow shade
Flowplex B
Flowplex Ca
Flowplex Mg
Flowplex Mn
Flowplex Zn
Fluisol organico
Folano Ca29
Foliacin
Foliastop Bio
Folical
Folicist
Foliflo BCa
Foliflo Excellent
Foliflo Mg
Foliflo Mn
Foliflo Zn
Folur
Fosblend
Fosblend FL
Fosfid'or
Fosfisan
Frontiere
Frubell
Fructol +
Fructol NF
Fruit Max
Fruttorto
Fruwachs Mg
Fuego
Fuentes
Fulet
Fulvin 40-22
Fumier Humus – S
Fungicrops Bio
Furiak
Furiak Plus
FytoFert S
FytoFert ZS

Garvek
Gen Rame
Geo-Live
GER-ATS LG

Gerfos
Gerfos K
Giove
Glucosei
Gold Dry
Gorfrut
Green Power
Green Watersave
Greenmix
Greenstim
Grena Gold 10,5
Grow More 12-48-8
Grow More 19-19-19
Grow More 20-20-20
Grow More 30-10-10
Grow More 4-10-46
Grow More 9-15-30
Grumifol

Haifa Cal Agri
Haifa Cal GG
Haifa Cal Prime
Haifa DKP
Haifa MAG
Haifa MAP
Haifa Micro Cu EDTA
Haifa Micro Fe EDDHA 5,2% O-O
Haifa MKP
Haifa NIT
Haifa ProteK
Haifa SOP
Haifa SOP Bio
Haifa Top-Iron
HaifaStim Force
HaifaStim VIM S
HaifaStim Vital
HaifaStim Wall-Up
HaifaStim Wall-Up S
HaiFer 52
HaiFer Max 60
Hakaphos Naranja 15-5-30
Hascon 12
Hascon M10
Hendosar
Hersbrucker Gesteinsmehl
HF-Power
Hi-Q Melo
HiSense
HiSense TRP
Hold Plus
Hortyflor
Humic Super
Humifirst sl
Humilig 8-8
Humipromoter
Humostall IV Gamma
Humotech
Humovegetal
Humovegetal 500
Hydrofert 15-30-15+2MgO
Hydromag 500
Hyperkorn 0-26-0

I’M Bio-Calcio
Idrofeed 18.11.27
Idrofeed 30.5.10
Idrofloral 15-10-30
Idrofloral 20-20-20
Idrofloral 35-5-8
Idrofloral 8-5-44
Idrol-Veg
Ilda NPK 10-5-15
Ilsac-on
IlsaLife
IlsaPolicos
IlsaVega
Ilverde
Impulsive Premium F
inO Cal-250
inO Flow-Mg500
inO Flow-Mn500
inO Flow-Zn680F
inO Green-NMg
inO Soufre-N
Intact Nutrix
Invita
Iron 4
IronGlep 7 WPG
Ironleaf Mn
Iside
Italpollina

Jafgreen Frutti

K-Bomber 56
K-Energy
K-express ZF
K-Force
K-Leaf
K&A Demon
K&A Evidence 2.0
K&A Fort-Soil
K&A sil-ka
K&A Vitalvega
Kalex
Kalidos LG
Kaliente
Kalis PK
Kalisop fein
Kalisop gran.
Kalitol +
Kalitol NF
Kalkkorn
Kally 27

Kamab 26
Kamasol Black
Kamasol Ca
KAN 27 granulare
Kappa G
Kappa V
Kappa V +
Kappabrix
Keliron Top
Kelpak
Ken
Keylan Fe
Killer Frost
Kiraly Fe G
Klozer
Kohlensaurer Magnesiumkalk 95
Kriss Biologico
Kynetic4
Kytos LG

Labifol Movical
Labifol Resulta 18-16-18
Labifol Spydone
Labifol Sugar-K
Labimancin
Labin 10-10-40
Labin 18-18-18
Labin Materia Organica 84%
Landamine Cu
Landamine Zn
Laphrassea
Last N
LAT Complex 14/10/20+11SO3
LAT Complex 15/15/15+8SO3+Zn
LAT Complex 20/20+8SO3+Zn
LAT Complex SOP 12/12/17+3,5MgO+13SO3+B+Zn
LAT Complex SOP 15/5/18+2,5MgO+24SO3+B+Zn
Leaf K
Leaf P-Ca
Leaf-Fall
Leafix
Lebosol-Ferro Citrato
Lebosol-HeptaEisen
Lebosol-HeptaKupfer
Lebosol-HeptaMangan
Lebosol-HeptaZink
Lebosol-Kalium 450
Lebosol-Magnesium 400 SC
Lebosol-MagSoft SC
Lebosol-Manganese 500 SC
Lebosol-Silizium
Lebosol-Zinco 700 SC
Lemon Jac
LG 81
Libamin Mix
Lieta-veg
Ligoplex Ca
Ligoplex Mg
Linea Phoska Max (reg. SIAN: ISSIK)
Linfor V
Liquid concentrate from digestate (biogas slurry)
Liquid manure
Litoman Ultra
Lower 7
Lysodin Veg

Macht SF
Macys BC 28
Madeira
Maganit
Magasul
Magnesio solfato LG
Magnesiogreen Attivato
Magnesium 16 PG
Magnisal
Magnisal Prills
Magnital
MAGyK ZM
Mainstay Calcio
Maior 0-42-50
Maior plus
Mangan 10 LG S
Mangan 32 PG
Manganese 134
Mango
Manna Horngrieß
Manna Lin A
Manna Lin B
Manna Lin K
Manna Lin M
Mannafert V
Manni-Plex Ca
Manni-Plex Multi Mix
Mantrac Pro
Manygrow
MAP Arpa Speciali 12-61
MAP solub
Maral NPK
Maral Zn/Mn
Maxflow Ca
Maxi Plex TF
Maxical
Maxifrutto
Maxilife
Mazinca 140
MC Cream
MC Extra
Medeo
Megafol
Meta
Metalosate Multiminerale
MG85S

Micosat F Len
Micosat F Mo
Micosat F Tab Plus
Micosat F Uno
Micoter Attivo Sol
Micotric L
Microspeed 130
MicroSync Ca-Zn
MicroSync Fe
MicroSync Mn
Microweed Calcio
Microweed Ferro
Microweed Magnesio
Microweed Manganese
Microweed Zinco
Microzin
Minus Calcio
Minus Ferro
Minus Multi
Minus Rame
Mirante
Mitsei
MKP Arpa Speciali 0-52-34
Molex
Monafos
Multi Ca
Multi-K Agri
Multi-K GG
Multi-K Prills
Multi-Max
Multicote AGRI 13.5.21+Mg+S
Multicote AGRI 15.6.31+Mg
Multicote AGRI 16.21.21
Multicote Agri 5.7.21 + Mg + S
Multifeed 14.7.28+2MgO
Multifeed 20.20.20
Multifeed 20.5.10+2MgO
Multifeed 21.11.21+2MgO
Multisei NT
MycoUp
Myr Calcio
Myr Clorosi
Myr Ferro
Myr Magnesio
Myr Potassio
Myster Vegetale

NAC 27 N
Nadir
Nano T Cu Bio
Nano.T
Nano.T CaPO
Natural Force
Natural Wax Mn-Zn
Naturblack
Nature
Naturgipskorn
Naturgrena
Naturgrena Life
Naturgrena Plus
Nectar Intense
NEM 2 (furos twin)
Nemakil 330
Neo-Man 500
Neobit New
Neotrem
Neutral
Nevio
Nevio Bio
Newcal
Nippon NK 13-46 cristallino
Nippon NK 13-46 granulare
Nitracid
Nitrophoska Perfect
Nitrophoska solub
Nitrophoska Special
Nitrophoska Super
Nitroplus Stoller
Nov@
Nov@ GR
Nova Calcium
Nova Ferti-K
Nova MagPhos
Nova MAP
Nova N-K
Nova PeaK
Nova PeKacid
Nova Potassium
Nova SOP
NovaTec Classic 12-8-16
NovaTec Nitroriz 32
NovaTec Premium 15-3-20
NovaTec Solub 21
NPK (MgO-SO3) 12-6-18 (4-17)
NPK (MgO) 13-10-12 (3)
NPK 12-12-12
NPK 15-5-20 Micro
NPK 20-10-10
NPK 9-6-18 Micro
NPK Original Gold
NPK Performance 5-7-14
NPK Performance 9-7-14
Nutex Beta
Nutex Mag Plus
Nutracil
Nutriactiva 4-4-12
Nutriactiva NP 5.30
Nutriactiva WP Argentum BTC
Nutriactiva WP Aurum BTC
Nutriactiva WP Folium BTC
Nutribio N 10 Special
Nutricomplex 18-18-18
Nutricomplex 8-24-24
Nutricomplex Arancio 7-12-40

Nutricomplex Azzurro 13-40-13
Nutricomplex Citrus & Fruits
Nutricomplex ennepi 60
Nutricomplex Rosso 15-5-30
Nutricomplex Verde 23-6-6
Nutrisan 12.20.30
Nutrisan 14.40.12
Nutrisan 20.20.20
Nutrisan 20.5.30
Nutrisan 27.15.14
Nutrisan special
Nutristart
Nutriter vigneto e frutteto

Oasi Gel
Oasi Gel Life
Oasi Gel Sprint
Oasi Melo
Obstkorn Blau 12-12-17
Obstkorn Plus 15-5-20
Obstkorn Super 20-5-10
Omistar
OmyaPro Calcium
Optycal
Orgacote Starter
Organ Star
Organagro
Orosoil
Orostim
Oscorna Horngrieß
Oscorna Hornspäne
Oxy 380 eco

Parade
Patentkali
Pentac-5 Ala
PentaCalcium
Perfosfato semplice
Perfosfato triplo
Perlka
Pharmamin M
Phenix
Phos 60 EU
Phos-Phik 0-30-20
Phosfik Ca
Phosfo PK
Phoska-Max 30-20
Phostrade Ca
Phostrade Mg
Photon SG50
Phylgreen
Phylgreen Kuma
Phytofert
PhytoGreen-BioBooster
PhytoGreen-Calciumborate
PhytoGreen-CalciumCarboxylate
PhytoGreen-FruitColour
PhytoGreen-FruitCombi
PhytoGreen-Mg500
PhytoGreen-Mn27
PhytoGreen-Molibdeno
PhytoGreen-Succo d’alga
Phytonik Plus
Pical-Max
Pig manure
Plantafol 20.20.20
Plantafol 5.15.45
Plantech
Plantflor 400
Plantosol-N65
Pocho
Polis
Pollina pellettata (TerComposti Spa)
Pollinamatura
POLY-FEED 11-42-11+2MgO+ME
Poly-Feed 11.44.11
POLY-FEED 12-18-27+2MgO+ME
POLY-FEED 14-7-28+2MgO+ME
POLY-FEED 15-5-30+2MgO+ME
POLY-FEED 16-6-31+2MgO+ME
POLY-FEED 18-18-18+2MgO+ME
POLY-FEED 19-9-19+2MgO+ME
POLY-FEED 20-20-20+ME
POLY-FEED 26-10-16+ME
POLY-FEED 26-12-12+2MgO+ME
POLY-FEED DRIP 14-7-21+ME
Poly4
Polyfeed Foliar Accrescimento
Polysulphate Granular
Poni cristallino
Poni granulare
Power Soil
Power Soil Fe
Pratiko 21
Prodigy Plus
ProLiq Calcium LQ
Pushy

Qrop K Plus
Qualical 250
Quicelum
Quik-Link

RA.AN 13156
Rame Zolfo Plus
Ramos
Red
Red Ball 12.6.15
Red Bloc SW
Red Radicale
Red Skin LG
Repente
Reploid Frass
Resistar

Resolve
Rewind
Rexolin Q48
Rheobor FL
Rhyno
Rumisan Stabilized

S3 Rinverdente
Scudo K
Seaweed Grow PK 15-32
Seaweed Mix
Seiland
Separated slurry – solid phase
Sequestrene Life
Sequestrene NK 138 Fe
Sequifill 6.0 TSS
Sferosol
Sheep manure
ShutCrop L
SIC Phoska
Silacon
Silforce Eco
Siliforce
Siltop evo
Silver
Siveg GR
Slurry
Soil Pro
Soil Pro 2.0
Solar Calcium nitrate
Solar MAP
Solar Potassium nitrate
Solfato Ammonico
Solfato Ammonico – Petrokemija
Solfato Ammonico Arpa
Solfato di Potassio 50+44 SO3- Pastorelli
Solinure FX 13-40-13
Solinure FX 18-9-18
Solinure GT 20-20-20
Soluplant 12.20.24+2MgO
Soluplant 12.36.12+2MgO
Soluplant 12.9.35+2MgO
Soluplant 15.5.30
Soluplant 18.18.18
Soluplant 18.6.26+2MgO
Soluplant 20.10.20
Soluplant 20.20.20
Soluplant 20.5.10+2MgO
Solupotasse
soluSOP 52
Solustar Mg
Solvero
Sonar 7-15
SOP solub
Soybils@
Speedes
Spinab Bio
Spray Plus
Sprühdünger Tipo 21
Sprühdünger Tipo 26
Sprühdünger Tipo 27
Sprühdünger Tipo 30
Sprühdünger Tipo 5
Stallatico pellettato (TerComposti Spa)
Starblend 12.36.12+2MgO
Starblend 12.6.21+5MgO
Starblend 18.18.18
Starblend 22.5.10+4MgO
Starsoil
Steric K DS
Steric P DS
StickUp Demetra
Stimulante Plus
Stimulase S
StyriaFert N+
StyriaFert NK Pellets
StyriaFert Veggie DE
Subest
Sugared
Sugarplex Reflexo
Sulfon SC 700
Sunred
SunStop LG
Super Humus
Superbios liquido
SuperCalibro
Superstallatico
Supreme Ca
Supreme K
Supreme N
Supremo L 101 B+Ca
Supremo L 262 Mn+N
Supremo W 10-50-10
Supremo W 15-5-30
Supremo W 20-20-20
Supremo W 8-17-41
Sweet
Symbiomyco Grow

Tangerkast
Target Plus
Tayson
Tellus
Terium
Terra 33 5.10.18
TerraMadre
TerraSana
Thiomax S
Tifi
Tixyl
Topstim 66
Tradecitrus
Tradecorp Cu
Tradecorp Fe

Tradecorp Mn
Tradecorp Zn
tradefer
Trafos K
Trainer
Tri-Start Mega
Triash
Tribù
Tricho
Turi-L
Turn-on

Ultraferro
Ultrasol 11.42.11+2MgO+TE
Ultrasol 12.18.27+2MgO+TE
Ultrasol 13.5.30+2MgO+TE
Ultrasol 18.18.18+2MgO+TE
Ultrasol 24.6.12+2MgO+TE
Ultrasol K Plus
Umienergy 16
Unik Mix 7-8-13
Unik Mix 9-6-21
Uniko 25,5
Unimar
Uniphos K
UnIron Plus
Unisol 10-40-10+2
Unisol 15-5-30+2
Unisol 20-20-20
Unisol 24-6-12+2
Unisol 8-12-38+2
UniZim
Urea 46 – Petrokemija
Urea 46 N
Urea 46% prilled
Urea Rumisan
Urikane Flash
Usbergo

Valagro EDTA Cu
Vangog
Vegafoil
Vegand
Veganofluid
Vegastar 3.5.12
Vegastar 4.9
Vegenergy
Vegetal B60
Vegetal Red
Vegetal SD
Vegex Crisoil
Venta 4-7-15
Vera Pollina
Verdenta
Verdenta VG
Verdero
Verian
Vertyplus
Vhera
Vhera Life
Vhera MB
Vignafrut MB
Vit-Org VG
Vitalcombi
Vitalfosca L
Vitaltrek
Vitalumi
Vitalumi Star
VitaMel – Bio
Vitanica Si
Vitastim Top4
Vitelice P
Vivema Soil
Vulcano

Welgro Mar
Welgro Potasio
Welgro Standard Plus
Welgro T.20+Micro
Werthy
Whitch
Wuxal Aminocal (pflanzlich)
Wuxal Boron
Wuxal Calcium Suspension
Wuxal Combi Mg
Wuxal K 40
Wuxal Manganese
Wuxal Super
Wuxal Top P

Xedalig-Fe

YaraAmplix Actisil
YaraAmplix Optivi
YaraBela Extran 33,5
YaraLiva Tropicote
YaraMila Nutriplus
YaraMila Oro
YaraMila Partner
YaraMila Power
YaraMila Rubino
YaraMila Ultra
YaraSuna Rigenera
YaraSuna Riserva
YaraTera Amnitra
YaraTera Calcinit
YaraTera Krista K Plus
YaraTera Krista MAG
YaraTera Krista MAP
YaraTera Krista MgS
YaraTera Krista MKP
YaraTera Kristalon Blue
YaraTera Kristalon Lilac
YaraTera Kristalon Orange

YaraTera Kristalon Special
YaraTera Kristalon White
YaraTera Kristalon Yellow
YaraVita Balance
YaraVita BioMaris
YaraVita BioNUE
YaraVita Calliv
YaraVita Coptrel 500
YaraVita Frutrel
YaraVita KombiPhos
YaraVita Magphos
YaraVita Manliv
YaraVita Seniphos
YaraVita Stopit
YaraVita Zinliv
YAS 20-20-20
YAS 8-5-42 + 2MgO + Micro

Zacate
Zeolitite Zem70
Zeorame Micro
Zeover Ammendante
Zeus
Zinc 10 LG S
Zinc fast
Zinco 134
Zintrac 700
Zn-Golden-Biotrissol
Zolferro Energy
Zolfo granulare – Manica

Plant fortifiers

Bicarbonato di sodio Green Has Italia
Bicarbonato di Sodio Serbios
Caolino Agri (Veneta Mineraria)
Caolino Bitossi BPLN
Crysil SC
Distillato di legno
Estratto integrale di castagno a base di tannino
Green Has Italia
Gel di Silice (Kalos)
Green C
Mastro 50
Olio Vegetale Supercote Technology
Polvere di roccia (BioKimia)
Polvere di roccia (Cifo)
Polvere di roccia (Compo Expert)
Polvere di roccia (Sala)
Polvere di roccia Chabasite Green Has Italia
Polvere di roccia-Caolino-Surround WP
Power C
Propoli Lea
Propoli Serbios
Propolis (Nuova Sunchemical)
Sapone molle di potassio
Silgreen
Terios Liquido
Terios Top
Zeolite 95 Serbios
Zeolite Bitossi
Zeolite Fertenia Micronizzata
Zeolite Fertenia Micronizzata
Zeover Corroborante
Zeovitan

Basic substances

Basei Lec
Carpet
Cimex
Color
Compact
Emy
Equiset
Equisetum arvense (Seipasa)
Invelop White Protect
Naturdai Carbobasic
Naturdai Equibasic
Omyca
Plan Tonic
Pomaplus
Terra
Urtibasic
Valesco
Verde

Ecological measures

At least two of the items chosen from this list must be realized in each **year of cultivation**. The points effected must be recorded in the orchards register.

Ecological compensations areas and care of the orchard environment:
- In at least one production area, there is a pond with a minimum area of 50 m².
- In at least one production area, there is a standard-sized tree.

Choice of cultivar and planting system:
- The farm includes an orchard with a fungus resistant variety.
- Single row planting is chosen at the time of planting.

Fertilization and soil management:
- Nitrogen fertilization is effected after N-min tests (analysis must be enclosed).
- Early leaf analysis is effected in the orchard.
- At least in one orchard the tree strip is kept green the whole season and/or is kept free of grass using alternative methods without herbicides.
- At least in one orchard the lanes are mulched alternately.

Irrigation
- Control of soil moisture is effected using a tensiometer or other device for measuring soil moisture.
- In at least one production area, drip technology satisfies the water requirements.

Biological or biotechnical defense mechanisms:
- Orchards in the zone infested by May bugs are covered by ground nets.
- Mating disruption is used against codling moth, oriental fruit moth, tortrix moth and leopard moth.
- Juice traps are used to fight clear wing borers.
- Traps for mass trapping of garden chafers are used.
- Traps for mass trapping of mediterranean fruit fly are used.
- Nesting boxes are set up in the orchard to attract titmice.
- In at least one production area, perches for raptors were constructed.
- Hiding places for weasels, hedgehogs, shrews or grass snakes are created in the orchard (rock piles, pipes, stick piles).
- Predatory mites are introduced into at least one orchard.
- Shoots infected with mildew or aphids are removed.

Pest control:
- Pheromone traps are placed and the moth catches are regularly registered.

Drift reduction:
- In order to reduce the drift to neighboring property, a hedge was planted.

Mechanical blossom thinning:
- A mechanical blossom thinner has been used for thinning.