



Agrobío

English



www.agrobio.es





Agrobío





→ Company and Facilities

Agrobío is, nowadays, the first Spanish company to produce beneficial insects for Agriculture. It was pioneer in the production of bumblebees nationwide, thus contributing, in a decisive way, to the use of pollinating insects in the Iberian Peninsula.

Agrobío is located in the nerve-centre of the agricultural region of Almería, within the municipal area of La Mojonera (Almería). Its facilities take up an area of 15,000 square metres where the production centre, warehouses, offices, lab and R & D department are situated.

Nowadays, **Agrobío** consolidates as a leading company in the production of bumblebees nationwide, thus increasing its market share thanks to exports to other EU countries and Morocco.

From the experience of **Agrobío**, **Agrocontrol** emerges, with the purpose of substantially improving the current integrated pest management programs in the main protected and outdoor crops. It also makes organic agriculture under plastic viable. In this way, we pretend to favour the conservation of indigenous fauna, apart from selecting and rearing new species of natural enemies for crops and pests, which currently have no biological solution.



Thanks to our location and our own production, we offer and guarantee our clients a fast supply of high quality. Our products do not have to cover long distances in order to arrive to the place where they are required.



→ Express Service because pests do not wait

By means of the express order system, you can have the biological control organisms you need at your disposal in less than 24 hours.



→ Technical Service

Agrobío stands out for its excellent in-field technical crop advisory service and for its constant interest in managing its customers to get the most out of their beneficial insects' performance in all their crops.



→ R & D Department

From its beginnings, **Agrobío** has committed itself to the research and development of new products. Firstly, they improved the design of bumblebee hives. Later, own systems to produce auxiliary organisms have been created. **Agrobío**, in its constant eagerness to better itself, works with national and international public and private research institutions.



1 Bio-pollination line

2 Line of beneficial insects

- AMBLYcontrol[®]
- AMBLYCAcontrol[®]
- APHcontrol[®]
- DIGLYcontrol[®]
- ERMUNcontrol[®]
- MACROcontrol[®]
- NESIDIOcontrol[®]
- NESIDIOcontrol-P[®]
- ORcontrol[®]
- PHYTOcontrol[®]
- PLANTAcontrol[®]
- SWIRSccontrol[®]
- TRICHOfcontrol[®]
- Other beneficial insects

3 Line of agricultural products

- Pheromones
- Sticky traps:
 - Chromotropics
 - Tuta-Roll[®]
 - Delta traps
- Water traps:
 - TUTASAN[®]
 - FEROLITE[®]
- Moth and fly catchers
- Crop support clips
- Neem Oil

4 Line of apicultural products

- Apiinvert[®]
- Apifonda[®]



7 Bio-pollination line

Agrobío

Native bumblebees adapted to our climatology

More capacity More ventilation Greater production

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New Agrobío Beehive

→ **More capacity**

Agrobío has applied its technical team's knowledge together with own growers' experience, to create a new bumblebee hive which supplies its tireless bumblebees more space, safety and comfort. It is the beehive which has the largest capacity in the market.

→ **More ventilation**

The new bumblebee-hive has a ventilation chamber between the outer box and the inside box which permits a better air flux and avoids the condensation in the nest. The ventilation of the inside box is the largest in the market.

→ **Greater production**

The advantages of this bumblebee-hive result in a reduction in bumblebees' stress, increasing their vigour and pollinating capacity, which lead to an increase in the production.

Nowadays, **Agrobío** supplies two types of pollinators:

→ ***Bombus terrestris***, an ideal species for using in all the Mediterranean basin and geographical areas with similar climatology.

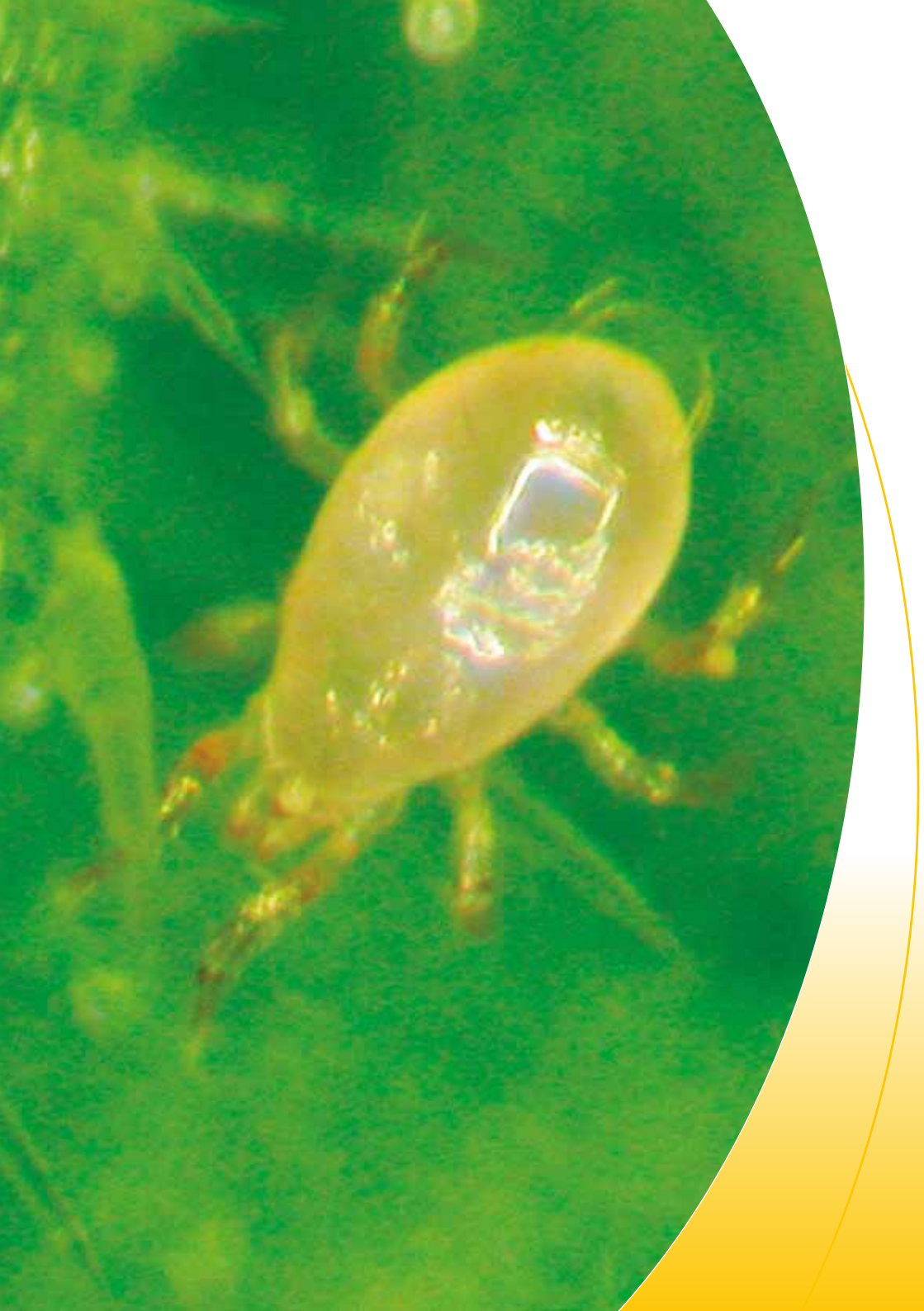
→ ***Bombus terrestris canariensis***, a subspecies indigenous to the Canary Islands. It can be only used in this archipelago.

Both types of bumblebees, in protected crops, have been widely used in tomato and in other crops, such as pepper, courgette, strawberry, aubergine, melon and watermelon, and it is increasing in recent years.

Using bumblebees, we get an increase in the production of the pollinated crops and an improvement in fruit quality.

In an indirect way, the labour cost is reduced, as well as the application of phytosanitary products. Thus, **Agrobío** contributes to improve the profitability of your crop.





2 Line of Beneficial Insects



1ST
COMPANY IN ALMERÍA
TO PRODUCE
BENEFICIAL INSECTS



Trichogramma achaeae



Using **Agrocontrol**, the company makes accessible to the growers the sustainable production techniques which give response to quality demands, food safety and traceability. These three concepts mark the rules of the game in the most demanding target markets.



→ **AMBLYcontrol[®]**

Amblyseius cucumeris

PACKAGING:

- Box of 250 sachets (1,000 individuals/sachet).
- Bottle of 5 litres (500,000 individuals/bottle), 2.5 litres (250,000 individuals/bottle) and 1 litre (50,000 individuals/bottle).

PEST: Predator of thrips eggs and nymphs.

DOSE: 100-200 individuals/m² is recommended.

CROPS: Horticultural (except tomato) and ornamental crops.



→ **AMBLYCAcontrol[®]**

Amblyseius californicus

PACKAGING: Bottle of 5,000 individuals.

PEST: Predator of red spider mites.

DOSE: From 1-10 individuals/m² is recommended.

CROPS: Horticultural (except tomato) and ornamental crops.



→ **APHIcontrol[®]**

Aphidius colemani

PACKAGING: Bottle with mummies, from which hatch 500 adults.

PEST: Aphid parasitoid.

DOSE: From 0.25-1 individual/m² is recommended.

CROPS: Horticultural, ornamental and fruit crops.

→ **DIGLYcontrol**[®]

Diglyphus isaea

PACKAGING: Bottle of 100 or 250 adults.

PEST: parasitoid of leafminer larvae.

DOSE: From 0,25 - 0,5 individual/m² is recommended.

CROPS: Horticultural, ornamental and fruit crops.



→ **ERMUNcontrol**[®]

Eretmocerus mundus

PACKAGING: Bottle with pupae, from which hatch 3,000 or 5,000 adults.

PEST: Parasitoid of tobacco whitefly (*Bemisia tabaci*).

DOSE: From 1.5 - 3 individuals/m² for several consecutive weeks till control, is recommended.

CROPS: Horticultural, ornamental and fruit crops.



→ **MACROcontrol**[®]

Macrolophus caliginosus

PACKAGING: Bottle of 500 adults and nymphs.

PEST: Predator of whiteflies and thrips.

DOSE: From 0.5-1 individual/m² is recommended.

CROPS: Horticultural, ornamental and fruit crops.





→ **NESIDIOcontrol[®]**

Nesidiocoris tenuis

PACKAGING: Bottle of 500 adults and nymphs.

PEST: Predator of whiteflies and thrips.

DOSE: From 0.5-1 individual/m² is recommended.

CROPS: Horticultural, ornamental and fruit crops.

→ **NESIDIOcontrol-P[®]**

Planta con N. tenuis

PACKAGING: Flowerpot of *Dittrichia viscosa* with 200 adults and nymphs.

PEST: Banker plant for the early establishment of *N. tenuis*.

DOSE: From 20-30 flowerpots per hectare is recommended.

CROPS: Horticultural (specially in tomato and aubergine), ornamental and fruit crops.



→ **ORIcontrol[®]**

Orius laevigatus

PACKAGING: Bottle of 1,000 adults and nymphs.

PEST: Thrips predator.

DOSE: From 3-4 individuals/m² is recommended.

CROPS: Horticultural (except tomato), ornamental and fruit crops.



→ **PHYTOcontrol**[®]

Phytoseiulus persimilis

PACKAGING: Bottle of 2,000 individuals.

PEST: Predator of red spider mites.

DOSE: From 20 individuals/m², in hot spots and from 1-4 individuals/m² in the rest of the greenhouse are recommended.

CROPS: Horticultural, ornamental and fruit crops. In tomatoes, the specific strain **PHYTOcontrol-T**[®] must be used. This strain has the same packaging.



→ **PLANTAcontrol**[®]

Rhopalosiphum padi

PACKAGING: Flowerpot with wheat and 500 cereal aphids, adults and nymphs.

PEST: Banker plant for the establishment of *Aphidius colemani*.

DOSE: From 6-10 flowerpots per hectare is recommended.

CROPS: Horticultural, ornamental and fruit crops.



→ **SWIRScontrol**[®]

Amblyseius swirskii

PACKAGING:

- Bottle with 25,000 adults.
- Boxes of 250 or 500 sachets (250 mites/sachet).

PEST: Predator of whiteflies and thrips nymphs.

DOSE: Might vary from 50-150 individuals/m², depending on the crop.

CROPS: Horticultural (except tomato), ornamental and fruit crops.





→ ***TRICH*control[®]**

Trichogramma achaea

PACKAGING: Tarjetas de 50

- Cards of 50 dispensers, from which hatch, unless, 2,500 pupae/dispenser.

PEST: Parasitoid of *Tuta absoluta* eggs.

DOSE: From 25-100 individuals/m² is recommended.

CROPS: Horticultural, ornamental and fruit crops.

→→ **Other beneficial insects**



→ ***ADALIA*control[®]**

Adalia bipunctata

PACKAGING: Bottle of 100 or 250 larvae.

PEST: The larvae are aphid predators.

DOSE: The recommended dose is from 10-20 larvae/m².

CROPS: Several horticultural, ornamental and fruit crops.



→ ***APHIDO*control[®]**

Aphidoletes aphidimyza

PACKAGING: Bottle with pupae from which hatch 1,000 adults.

PEST: *Aphidoletes aphidimyza* larvae are aphid predators.

DOSE: The recommended release dose is from 5-10 individuals/m².

CROPS: Horticultural, ornamental and fruit crops.

→ **CHRYSOcontrol**[®]

Chrysoperla carnea

PACKAGING: Bottle of 500 or 1,000 larvae.

PEST: *Chrysoperla carnea* larvae are voracious aphid predators and they can help to control other pests such as whiteflies, thrips ...

DOSE: From 10-20 individuals/m² for several consecutive weeks is recommended.

CROPS: Several horticultural, ornamental and fruit crops.



→ **CRYPTOcontrol**[®]

Cryptolaemus montrouzieri

PACKAGING: Tube with 25 adults.

PEST: Predator of mealybugs, although it feeds on aphids.

DOSE: The recommended release dosage is from 2-10 individuals/m².

CROPS: Several horticultural, ornamental and fruit crops.



→ **ENCARcontrol**[®]

Encarsia formosa

PACKAGING: Bottle with pupae, from which hatch 3,000 adults.

PEST: Parasitic wasp of *Trialeurodes vaporariorum* larvae.

DOSE: The recommended dosage is from 2-4 individuals/m² for several consecutive weeks till control.

CROPS: Several horticultural, ornamental and fruit crops.





→ **EPHEScontrol**[®]

Ephestia kuehniella

PACKAGING: Bottle of 10g of *Ephestia kuehniella* eggs.

MODE OF ACTION: These lepidopteran's eggs are used to feed and/or establish predators in several crops, in a preventive way (without pest presence).



→ **EREMIcontrol**[®]

Eretmocerus eremicus

PACKAGING: Bottle with pupae, from which hatch 5,000 adults.

PEST: Parasitoid wasp of *Bemisia tabaci* and *Trialeurodes vaporariorum* larvae.

DOSE: Dosages can vary between 1.5-3 individuals for several consecutive weeks till control.

CROPS: Several horticultural, ornamental and fruit crops.



→ **ERVIcontrol**[®]

Aphidius ervi

PACKAGING: Bottle with mummies, from which hatch 250 adults.

PEST: *Aphidius ervi* is an endoparasitoid wasp of the aphids *Macrosiphum euphorbiae* and *Aulacorthum solani*.

DOSE: The release of 1-2 individuals/m², in weekly-introductions of 0.25 individual/m² is recommended.

CROPS: Several horticultural, ornamental and fruit crops.

→ **FELTIcontrol**[®]

Feltiella acarisuga

PACKAGING: Bottle with 250 larvae.

PEST: Its larvae feed exclusively on phytophagous mites of the genus *Tetranychus*.

DOSE: The advised release dose is 250 individuals per spot, carrying out a weekly-release for 3-4 weeks.

CROPS: Several horticultural, ornamental and fruit crops.



→ **HYPOcontrol**[®]

Hypoaspis miles

PACKAGING: Tube with 10,000 adults.

PEST: Predator of sciarid fly larvae, thrips pupae, springtails, nematodes, leafminer pupae and gall midges.

DOSE: The recommended release dosage is from 200 to 500 individuals/m².

CROPS: It is mainly used in seedbeds, as well as other crops just before or after the transplant.





→ ***NEMATOcontrol -S[®], -H[®] y -C[®]***
Steinernema feltiae, Heterorhabditis
megidis y Steinernema carpocapsae

PACKAGING: Sachet of 5 million or 50 million nematodes (juvenile stage) in gel substrate.

PEST: The nematodes parasitize several insect species, mainly its larval stages, which present soft cuticle or epidermis. Some of its hosts include Coleopteran, Lepidopteran and Sciarid fly larvae.

DOSE: The application dose varies from 500,000 to 1 million individuals/m², in a unique application, or in a weekly-frequency, depending on the infection in the crop.

CROPS: They can be used in all the crops affected by ground pests or pests that pass part of their life cycle on the soil.

3 *Line of agricultural products*



Agrobio has a whole line of products to help growers to control their crop pests.

→ **Pheromones**

Agrobio sells more than 50 different pheromones.

Horticultural crops:

- *Helicoverpa armigera*
- *Spodoptera exigua*
- *Spodoptera littoralis*
- *Tuta absoluta*
- Thrips (*Frankliniella occidentalis*)...

Fruit crops:

- *Prays oleae*
- *Dacus oleae*
- *Euzophera pinguis*
- *Ceratitidis capitata*
- *Lobesia botrana* (*)...

Cereal crops:

- *Chilo supressalis*

→ **Sticky traps**

Cromotropic traps: They have different and attractive colours for the insects. They are essential for monitoring and mass trapping (whiteflies, leafminers, Sciarid flies, aphids...) in protected horticultural and ornamental crops.

We supply two types of these traps:

a) Sheets:

- Large format: 40x25 cm (available in boxes of 250 units).
- Medium format: 20x25 cm (available in boxes of 500 units).
- Small format: 10x25 cm (available in boxes of 1,000 units).
- Available colours: yellow, dark blue and light blue.

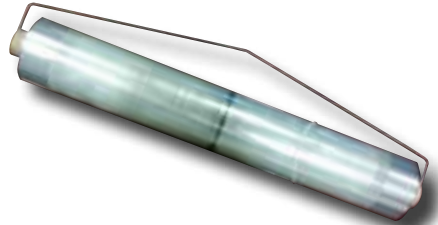
b) Rolls:

- Large format: 30 cm x100 m.
- Small format: 15 cm x 100 m.

Available colours: yellow and blue.

Tuta-Roll® : It is a transparent roll with dry glue and covered with *Tuta absoluta* pheromone.

PACKAGING: Rolls with 36 cm x 20 m used to mass trapping of *Tuta absoluta*.



Delta traps: it is a roof made of corrugated light plastic intended for monitoring and mass trapping of Lepidoteran pests (moths) which are present in protected and outdoor crops.

DOSE:

- For pest detection and monitoring: from 4 to 6 traps per hectare.
- For mass trapping: from 6 to 15 traps per hectare.



→ **Water traps**

They are specially designed for mass trapping of the tomato moth *Tuta absoluta*. Effective and enables to reduce pesticides treatments and to monitor the pest.

TUTASAN® traps:

- Self-maintenance of water level device.
- Possibility of elevation from 20 to 40 cm by means of lower rod.
- Anchorage of the pipette of drip irrigation.
- Basket with an easy anchorage, for placing the pheromone centered and protected.



FEROLITE® traps:

In addition to the characteristics of TUTASAN®, these traps include a specific light, produced by solar energy, to capture *Tuta absoluta*.

DOSE FOR BOTH:

- For massive capture: from 20 to 40 traps per hectare.





→ ***Moth and fly catcher traps***

Traps specifically indicated for controlling lepidopterans and dipterans, respectively, both indoor and outdoor crops.

TYPES OF MOTH CATCHERS:

- Funnel trap.
- Nadel trap.

TYPES OF FLY CATCHERS:

- Funnel trap: plastic or glass.

DOSE:

- In indoor crops: 4 traps per hectare.
- In outdoor fruit and horticultural crops: 2 traps/km².
- In citrus crops: among 1 and 2 traps per hectare. They will be placed in south side of the trees and 2 m above ground level.



→ **Crop support clips**

Hose clips for tomato, pepper, aubergine and cucumber crops. Easy use and fast crop support. There is an important saving in labor.

PACKAGING:

- Boxes of 6,500 units.
- Boxes of 9,000 units (for pepper crop).



→ **Neem Oil**

Natural essence made from several parts of the *Azadirachta indica* tree, mainly from seeds, with insecticide, fungicide, acaricide and nematocidal effects.

It is effective mainly in larval and pupa stages, causing a sequence of synergistic effects as changes in the development and mating, sterilization, etc.

Neem oil is compatible with all IPM programs.

PACKAGING:

- Bottles with 1 or 5 liters.

DOSE:

- Between 1 or 2 cc. by leaf spraying.
- Between 3 or 5 liters per hectare by fertirrigation.



4 *Line of apicultural products*



→ **Apiinvert**

Apiinvert is liquid syrup of maximum purity, composed of sucrose, glucose and fructose in exact proportions to keep stable for a long time. The high proportion of fructose reduces the crystallization in the honeycomb, even at low temperatures. Thanks to its careful manufacturing process, Appinvert do not contain substances which are difficult for the bees to digest.

APPLICATION:

This product is recommended among flowering periods and for the end of hibernation.

PACKAGING:

- Carafe of 14 kilos.



→ **Apifonda**

Apifonda is a sweetened preparation of doughy texture intended for feeding bees.

A thin film of syrup wraps the sugar crystals. Without any effort, the bees can remove and ingest this product.

APPLICATION:

This product is recommended as stimulant in spring, for forming colonies among flowering period and as food for the beginning of hibernation.

PACKAGING:

- Boxes of 12.50 kg (divided into sachets of 2.5 kg).
- Boxes of 15 kg.





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All our products comply with the most demanding quality levels. Agrobío is not responsible for the possible negative effects caused by product misuse, while its application, transport or storage by the final buyer.

