

minor use major value*

If the EU** fails to provide plant protection solutions for minor use and speciality crops*** Is Europe ready to lose a market worth €70 billion/year, representing 22% of the total value of annual EU agricultural output?

* An awareness raising campaign promoted by the EU Agri-Food Chain Partners (AREFLH, CELCAA, COCERAL, Copa-Cogeca, ECPA, ESA, Freshfel, IBMA, PROFEL and Union Fleurs)

** European Commission, Council of the European Union, European Parliament, and Member States

*** Minor uses concern crops grown on relatively small acreage like fruits, herbs, and vegetables, cereals, including rice, seed crops and small crop seed treatments, hops, flowers and all those plants that need a tailor made plant protection product, whether it is for growing them, storage or transportation



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- 1 Field of healthy bok choy
- 2 An aphid
- 3 A bok choy with aphid and signs of aphid damage
- 4 A healthy bok choy

Crop Bok choy (Chinese cabbage)
(*Brassica rapa chinensis*)

Pest threat Aphid (superfamily Aphidoidea)

Region at risk Netherlands

Crop area at risk 60 ha

Potential pest impact The aphid can decimate bok choy plants, potentially inflicting a 100% loss of crops. Existing plant protection products for the bok choy are no longer effective against the aphid, new solutions are required to save the Dutch bok choy harvest.

What's the problem? Bok choy is just one of many fruits and vegetables that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, bok choy and other popular fruits and vegetables may no longer be grown in Europe.



- 1 Healthy hops plant
- 2 The pest threat - an alfalfa snout weevil
- 3 Hops root-stock damage
- 4 Beer - the reason we grow hops. No hops, no beer!

Crop Hops (*Humulus lupulus*)

Pest threat Alfalfa snout weevil (*Otiorrhynchus ligustici*)

Region at risk Germany

Crop area at risk 17,000 ha

Potential pest impact The alfalfa snout weevil destroys upwards of 25% of crops; this is a devastating loss which usually results in abandonment of production as potential harvests lose economic viability. There are currently insufficient plant protection solutions for European hops.

What's the problem? Hops are just one of many fruits and vegetables that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, hops and other popular fruits and vegetables may no longer be grown in Europe.



Crop Spring onion (Scallion, salad onion)
(genus *Allium*)

Pest threat Downy mildew

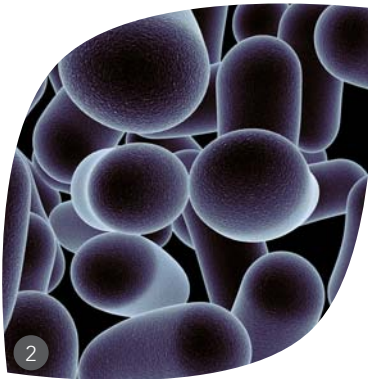
Region at risk United Kingdom

Crop area at risk 1,700 ha

Potential pest impact Downy mildew can render useless up to 50% of a spring onion harvest. In the UK the spring onion market is worth €30 million and provides jobs for around 1,500 people.

What's the problem? The spring onion is just one of many fruits and vegetables that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, the spring onion and other popular fruits and vegetables may no longer be grown in Europe.

- 1 Field of treated spring onions
- 2 Field of untreated and downy mildew infected spring onions
- 3 Moulds pose a serious threat to certain crops
- 4 Healthy harvested spring onions



- 1 Healthy bell pepper plant
- 2 Bacterial infections pose a serious threat to European crops
- 3 A diseased bell pepper
- 4 A healthy crop of bell peppers

Crop Bell pepper (genus *Capsicum*)

Pest threat *Xanthomonas*, a genus of Proteobacteria

Region at risk Portugal

Crop area at risk 1,700 ha

Potential pest impact Bacterial spot is one of the most devastating diseases in pepper and tomato crops grown in warm, moist environments. Once present *Xanthomonas* is almost impossible to control, and will result in major crop damage and fruit loss when environmental conditions remain favorable to the bacteria.

What's the problem? Bell peppers are just one of many fruits and vegetables that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, bell peppers and other popular fruits and vegetables may no longer be grown in Europe.



- 1 Impact of aphids on apple fruits
- 2 Healthy apples
- 3 Effect of aphids on apple tree
- 4 Colony of woolly apple aphids (*Eriosoma lanigerum*)

Crop Apple

Pest threat Woolly apple aphid (*Eriosoma lanigerum*)

Region at risk France

Crop area at risk 40,000 ha

Potential pest impact This aphid can quickly compromise from 20% till 100% of the entire production, bringing the tree also to complete death. Apples affected by black and sticky powder cannot be placed on the market.

What's the problem ? Apples are just one of many fruits and vegetables that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, apples and other popular fruits and vegetables may no longer be grown in Europe.



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- 1 The spring thrip (*Scirtothrips inermis*)
- 2 Impact of spring thrips
- 3 4 Healthy persimmon

Crop Persimmon (*Diospyros kaki*)

Pest threat Spring thrips (*Scirtothrips inermis*)

Region at risk Spain

Crop area at risk 10 000 ha

Potential pest impact The spring thrips attack the persimmon trees mostly during their flowering, altering the shape of the fruit and compromising the quality of the skin. It is estimated that the affected production can reach 15-20% of the cultivated area with an economic impact of €18-24 million.

What's the problem ? This is one case of many crops that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, many popular fruits and vegetables may no longer be grown in Europe.



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- 1 Carrot field with massive development of weeds
- 2 Mentha infestation
- 3 Camomille infestation
- 4 Clean field of carrots

Crop Brassica crops, carrots, red beets and onions

Weeds threat *Mentha sp.*, *Chamomille sp.*, *Sonchus sp.* and *Galinsoga*

Region at risk Baltic countries

Crop area at risk 26,300 ha

Potential pest impact Only 25-30% of the entire affected area can be used for production due to the lack of herbicides to control massive developments of weeds. In case of carrots, economic losses can reach 6.272 EUR/ha due to presence of weeds, problems with machinery used for harvesting, and less effective use of fungicides on carrots due to the “umbrella effect” from the leaves of the weeds.

What's the problem ? This is one case of many crops that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, many popular fruits and vegetables may no longer be grown in Europe.



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- 1 Healthy redcurrant
- 2 *Drosophila suzukii*
- 3 Impact of *Drosophila suzukii* on redcurrant
- 4 *Drosophila suzukii* is a threat for all small fruits including Blueberries, Gooseberries and Kiwiberries

Crop Redcurrant (*Ribes rubrum*)

Pest threat Spotted-wing *Drosophila* (*Drosophila suzukii*)

Region at risk Belgium

Crop area at risk 90 ha

Potential pest impact *Drosophila suzukii* is a new and very invasive pest affecting all small fruits. Damage is caused by larvae feeding on fruit pulp inside the fruit and berries. Reproduction in *Drosophila* species is particularly rapid with a short life cycle of 1 to 2 weeks depending of the climatic conditions. More than 50% of production is affected with an economic damage of 2050 €/ha.

What's the problem ? Redcurrant, Blueberries, Goseberries and Kiwiberries are only some of many other crops that rely on minor use and speciality crop protection solutions. If the EU fails to support the technologies required to produce speciality crops, many popular fruits and vegetables may no longer be grown in Europe.