

A three-story brick house with a thatched roof and a flowering tree in the foreground. The house has white window frames and a black metal fence in front. The background shows a clear blue sky and bare trees.

Toelating van groene gewasbeschermingsmiddelen in Nederland

Jaarcongres Landbouw zonder Chemie – Hoe dan?
27 februari 2020

Tonnie Engels

Wetgeving betreffende het op de markt brengen van gewasbeschermingsmiddelen

- 1962 Bestrijdingsmiddelenwet in Nederland
- 1991 Richtlijn 91/414/EEG
- 2009 Verordening (EG) 1107/2009 (van kracht in 2011)

European Commission, DG ENV, 2008

Biopesticides can control crop pests effectively with minimal environmental impact when used as part of an Integrated Pest Management programme.

However, their regulation is governed by a system originally designed for chemical pesticides and this can act as a barrier to investment in biopesticide research and development (R&D).

Wat is een groen gewasbeschermingsmiddel?

- Ctgb: laag-risico middelen van **natuurlijke oorsprong** zoals van planten, dieren, micro-organismen of bepaalde mineralen, of nagemaaakte middelen die identiek zijn aan de natuurlijke stof en een **laag risico** hebben voor mens, dier, milieu en niet-doelwit organismen (Green Deal, 2017) - Biopesticiden
- Nefyto (December 2019):
 - Middelen die gebruikt mogen worden in de **biologische teelt**
 - Gewasbeschermingsmiddelen van **natuurlijke oorsprong** (micro-organismen, virussen, plantenextracten, feromonen)
 - Middelen waarvan de actieve stof door de EU als laag-risico stof is erkend en die door het Ctgb als **laag-risico** middel zijn toegelaten

Toelatingen Ctgb

- 29 groene middelen toegelaten in 2018 (op een totaal van 120)

In merendeel van deze middelen is de w.s. een signaalstof (feromoon) of micro-organisme zoals een bacterie, virus of schimmel:

- 8 middelen op basis van een laag-risicostof
- 13 middelen op basis van een werkzame stof die is aangemerkt als **potentieel** laag-risico
- 8 middelen met een **geringe** impact op mens, dier en milieu die **niet volledig** voldoen aan de laag-risicocriteria

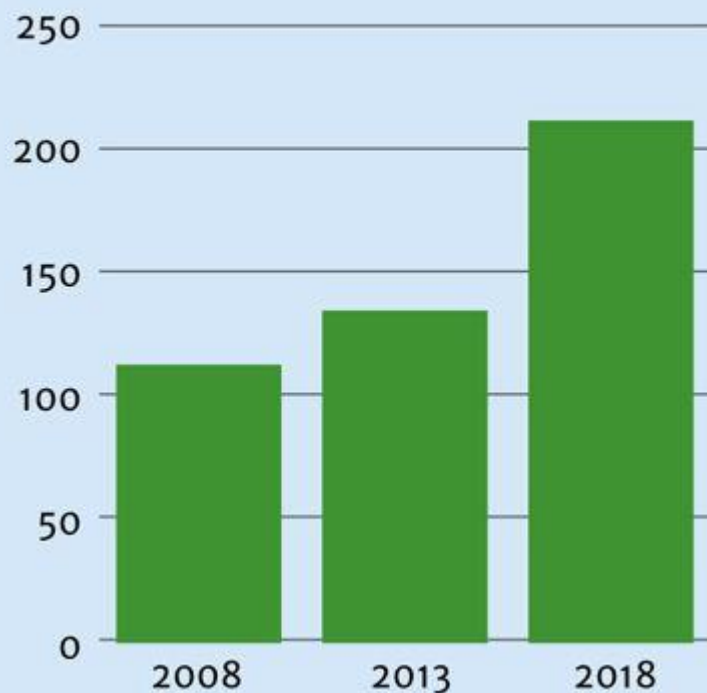
Toegelaten laag-risico middelen in Nederland

- Er zijn 16 laag-risico middelen toegelaten in NL (gebaseerd op):
 - *Trichoderma atroviride* strain SC1
 - *Isaria fumosorosea* Apopka stam 97
 - *Bacillus amyloliquefaciens* stam FZb 24
 - *Coniothyrium minitans* stam CON/M/91-8
 - COS-OGA (oligosacharide)
 - **ijzer(III)fosfaat (11)**

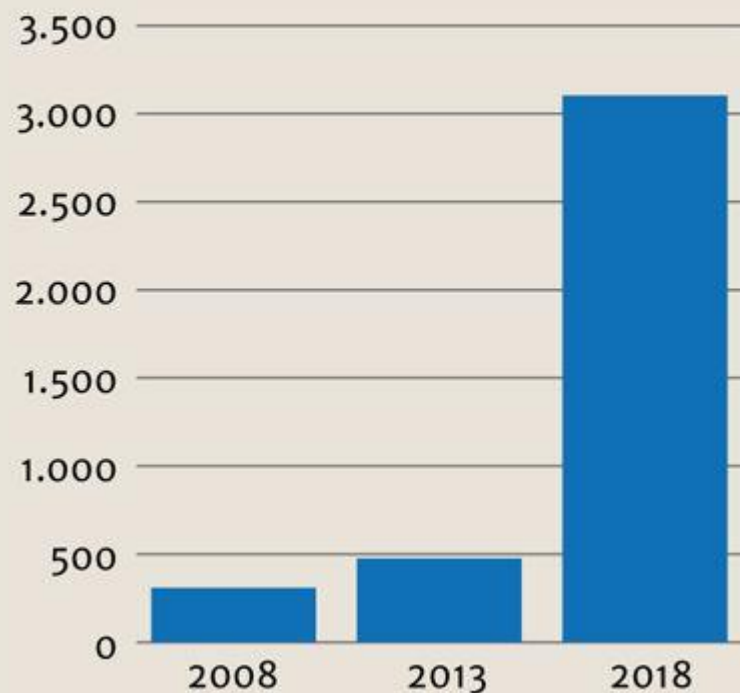
Afzet

(Bron Nefyto, Graadmeter groene gewasbescherming, december 2019)

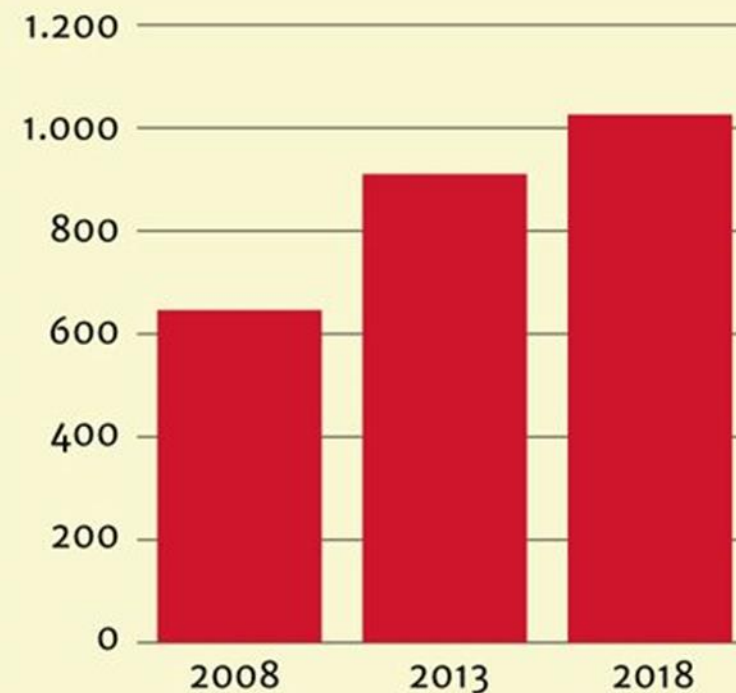
Gewasbeschermingsmiddelen van natuurlijke oorsprong, afzet actieve stof (ton)



Laag-risico stoffen, afzet actieve stof (kg)



Toegestaan in biologische teelt, afzet actieve stof (ton)



Afzet

(Bron Nefyto, Graadmeter groene gewasbescherming, december 2019)



Farming without plant protection products

Can we grow
without using
herbicides,
fungicides and
insecticides?



IN-DEPTH ANALYSIS

Panel for the Future of Science and Technology

EPRS | European Parliamentary Research Service

Scientific Foresight Unit (STOA)

PE 634.416 – March 2019

EN

7. General conclusions

- Crop yield cannot decrease but has to increase to close the yield gap and to feed 11 billion people in the future in a sustainable way.
- Increase in yield within the sustainability borders of the planet implies, besides other measures, no further land use changes and adequate crop protection.
- Crop production in the EU without PPPs is not realistic at the moment, but there are indications that reductions are possible without or with acceptable yield losses; the (financial) risk for the grower is however an important aspect to consider.
- Modern PPPs are more specific towards target pests. As a consequence, more PPPs are needed in some crops.
- There is a considerable loss of biodiversity by the applications of PPPs, both synthetic as well as natural, but this loss is surpassed by changes in land use (expansion of arable land).
- The lower yield in organic farming is partially due to less efficient crop protection compared to conventional farming.
- Therefore, organic production should be higher priced than conventional production. However, if all food were produced in organic systems, lower income classes would switch to cheaper and unhealthy food. The potential negative health effects thereof (obesitas, ...) are more important as a risk than the exposure to PPPs.
- There is no clear indication that natural PPPs are better for biodiversity or the environment.
- Assuming that a fixed amount of food should be produced to feed the world population, the higher land use of organic production has a negative impact on the biodiversity at the global level.
- To improve the sustainability of crop production the sustainable intensification of the IPM system by pursuing sustainability targets is the most promising. They include the reduction of PPPs by new technologies, precision farming, development of resistant varieties by both, classical and new breeding techniques. Organic farming, agro-ecology and agroforestry have on average less potential in this respect, but can be beneficial in a restricted number of specific situations, such as buffering nature reserves from intensive agriculture.
- New technologies in breeding, crop protection, precision farming, ... will further decrease the use and dependence on PPP's.
- PPPs are amongst the best studied compounds in our life. Their risk is not zero, but acceptable and in accordance with current scientific insights. Re-evaluations every 10 years ensure regularly updated risk assessments.
- Safety factors in the evaluation of the risk of PPPs are much higher than safety factors used for other risks in our daily life.
- The perception of risk of PPPs by the general public is diametrically opposed to the risk classification of scientists.
- Multiple actors are involved in risk communication, resulting in conflicting messages. Scientists are considered less neutral than one could expect. Some actors are framed as ideology-driven and others are suspected to work on demand for non-governmental organizations (NGOs) or the chemical industry. Neutral key opinion leaders are however needed as the worst that could happen would be that people believe that risk assessments are arbitrary and their results depend on who pays for them.

Gewasbeschermingsbeleid

- 1 Effectief maatregelenpakket
 - Weerbare gewassen, vruchtwisseling en het stimuleren van natuurlijke vijanden, duurzaam bodembeheer
- 2 Effectief laag-risico middelenpakket
 - Beschikbaarheid laag-risico middelen
- 3 Systeemaanpassingen
 - Precisielandbouw, pleksgewijze toepassing

Prioriteit

- Voedselveiligheid
- Voedselzekerheid
- Veiligheid gebruiker / toepasser
- Milieu
- Economisch belang
- Politiek
-

Ontwikkelingen

- 1 Reductie pakket chemische middelen
 - Strengere eisen bij renewal / herregistratie en weinig nieuwe stoffen en middelen
- 2 Innovatieve landbouwtechnologieën
 - Precisielandbouw, City Farming, veredeling, robots
- 3 Veranderde teeltsystemen
 - Strokenteelt, weerbare bodems/gewassen/teelten, groene middelen, biostimulanten
- 4. Toelating, beter passend toetsingskader
 - Laag-risico middelen, groene middelen, biostimulanten

A large, two-story brick house with a thatched roof and a flowering tree in the foreground. The house has multiple windows and a chimney. A black metal fence is visible in the foreground, and two bicycles are parked near the base of the house. The scene is set against a clear blue sky.

Bedankt voor uw aandacht!