

Notification

AUTHORISATION IN THE SCOPE OF ARTICLE 53

Please note that, due to a danger to plant protection that cannot be contained by any other reasonable means, an authorisation in accordance with Article 53 of Regulation (EC) No 1107/2009, has been granted as follows:

1	Member State, and MS notification number	DK-2015-04
2	In case of repeated derogation: no. of previous derogation(s)	None
3	Names of active substances	Clothianidin, beta-cyfluthrin
4	Trade name of Plant Protection Product	Modesto FS 480
5	Type of formulation and contents of active substance(s) (e.g. 80% dry granule)	FS – Flowable concentrate for seed treatment Clothianidin 400 g/L Beta-Cyfluthrin 80 g/L
6	Applicant	Bayer Crop Science, Denmark
7	Danger	Psylliodes chrysocephala
8	Crop, plants or situation	Winter Oilseed rape
9	Minor or major use	Major
10	Time period for authorisation	1May - 31 August 2015
11	Further limitations	Seed treatment of winter oilseed rape indoor in closed industrial seed treatment facilities and authorization to sow the treated seeds
12	MRL: Reference to product code number in Annex I of regulation (EC) No 396/2005	0401060
13	Compliance with MRL set in Regulation (EC) No 396/2005	Yes, in compliance with the MRLS's of: Clothianidin: 0,02* mg/kg Beta-Cyfluthrin: 0,05 mg/kg
14	Member State contact point	Danish EPA Pesticides and Gene Technology Nina Sørup Hansen

15. GAP

GAP rev. 0, date: 2015-03-24

PPP (product name/code) Modesto FS 480 Formulation: Type: FS
 active substance 1 Clothianidin Conc. of as 1: 400 g/L
 active substance 2 Beta-cyfluthrin Conc. of as 2: 80 g/L

Applicant: Bayer Crop Science, Denmark

1	2	3	4	5	6	7	8	9	10	11	12
Use- No.	Crop and/ or situation Seed treatment to protect the seedling from damage by Psylliodes chrysocephala The harvested seeds are used for animal feed	F	Pests or Group of pests controlled Psylliodes chrysocephala	Application			Application rate			PHI (days) Not relevant - seed treatment	Remarks:
				Method / Kind The chemical is on the seed	Timing / Growth stage of crop & season When sowing	Max. number (min. interval between applications) a) per use b) per crop/season 1 application	kg, L product / ha a) max. rate per appl.: 0.0125 L/kg seed b) max. total rate per crop/season: 0.0125L/kg seed	g, kg as/ha a) max. rate per appl.: 0.005kg clothianidin/kg seed 0.001kg beta-cyfluthrin/kg seed b) max. total rate per crop/season: 0.005kg clothianidin/kg seed 0.001kg beta-cyfluthrin/kg seed	Water L/ha min / max		

16. Value of tMRL if needed

Not relevant, EU MRL's exist

17. Validated analytical method for monitoring of residues in plants and plant products.

EU methods exist

18. Function of the product

Insecticide for seed treatment

19. Type of danger to plant production or ecosystem.

Serious damage caused by cabbage stem flea beetles (*Psylliodes chrysocephala*).

Attacks of the cabbage stem flea beetles occur in cycles, which include some years of moderate attack and some years of heavy attack. In the fall of 2014, many cases of heavy attack were observed in Denmark and in the fall of 2015, even stronger attacks are expected. The lack of effective insecticides for seed treatments means that the crop has to be sprayed with pyrethroids 1-2 times more in comparison to an effective seed treatment procedure. More frequent spraying increases the resistance development in *Psylliodes chrysocephala* against pyrethroids.

Aarhus University has recently discovered the so-called kdr mutation that confirms resistance to pyrethroids of cabbage stem flea beetles in Denmark. In northern Germany and the UK is resistance of cabbage stem flea beetles towards pyrethroids a big problem, and there is virtually failure of control.

In order to delay the development of resistance, dispensation to use more effective insecticides are required, so the need for spraying can be reduced, and the development of resistance can thus be delayed. If cabbage stem flea beetles no longer can be controlled, it is a threat towards rape cultivation because severe attacks, requires re-sowing. Rape is the most important rotation crop in Denmark, and a very important crop for practicing IPM and biodiversity.

20. Size and effect of danger

Winter oil seed rape is cultivated on app. 150,000 ha in 2015. It can be very difficult or impossible to cultivate oil seed rape without effective chemical control of cabbage stem flea beetles.

Yield loss if there were no resistance against pyrethroids:

It would be necessary to spray one more time with the pyrethroids in average over the years.

The cost of this spraying will be 13 € for the insecticide + 9.50 € for the work. Total it would be 22.50 € pr. ha.

If we assume there are 150,000 ha, the cost for Danish agriculture will be about 3,350,000 € pr. Year.

Yield loss if there is resistance against pyrethroids:

On average over the years, a 15-20 % decrease in seed yields is expected caused by cabbage stem flea beetle. On average the yields in Denmark are 3.8 tons pr. ha. The prices have been 0.33 € pr. kg which results in a loss of value of 28,691,000 € pr. year in Danish agriculture.

In years with the heaviest attacks, winter oil seed rape will not be cultivated on many farms. It is estimated that areas with oil seed rape will change to cereals on many farms. On most of these farms there will be no break crops. Break crops increases yields in the following crop and decreases attacks of pest and diseases.

21. Absence of any other reasonable means

The only alternative control measure is the use of insecticides belonging to the group of pyrethroids. Using these kinds of insecticides will increase the risk of developing resistance in *Psylliodes chrysocephala*.

22. Rationale

Risk mitigation measures are prescribed as described in section 23.

23. Mitigation measures

Seed treatment is performed only indoor in professional seed treatment facilities by qualified personnel. Labelling of treated seed bags will be done according to EU regulation.

Seed drilling will be performed following best agricultural practices and only by professional users.

24. Applications in progress

No applications for this use are in progress.

25. Research activities

An EU-project (2013-2014) with the scope of investigating how neonicotinoid seed treatment products used on seed affects bees is ongoing. Preliminary results do not show any negative effect on vitality or wintering of bee hives.

No alternative products or methods have been found until now.