

From: Vibeke Møller
Sent: Fri, 19 Oct 2018 13:00:24 +0000
To: 'Kirsten Jensen (kirsten.jensen@agro.au.dk)'
Subject: Vurdering af alternativer ifm dispensation til såning af roefrø bejdset med Gaucho WS 70 indeholdende aktivstoffet imidacloprid - Gebyrtype 9234 (MST-661-11357)

Miljøstyrelsen, Pesticider & Biocider har fået en dispensationsansøgning (vedlagt) til anvendelse af:

Roefrø bejdset med Gaucho WS 70 med aktivstoffet imidacloprid.

Miljøstyrelsen kan tillade såning af frø for en periode på indtil 120 dage til en begrænset, kontrolleret anvendelse, hvis det skønnes nødvendigt på grund af en fare, som ikke kan bekæmpes på nogen anden rimelig måde, jf. EU-forordning 1107/2009, artikel 53.

I den forbindelse er Miljøstyrelsen interesseret i at få oplyst, om Institut for Agroøkologi er bekendt med, hvorvidt der findes godkendte alternativer, til den ansøgte brug.

Hvis der ikke findes alternativer skal MST i forbindelse med dispensationen notificere EU.

Vi vedlægger derfor ansøgningen om dispensation samt udkast til notifikationskema, som vi beder Jer om at gennemgå og give Jeres evt. rettelser til.

Svar bedes sendt til pesticider@mst.dk og til vm@mst.dk med angivelse af sagsnr. (MST-661-11357).

Svaret bedes indsendt **senest den 1. november 2018**.

Dispensationen søges fra d. 1. februar 2019.

Venlig hilsen, Vibeke

Vibeke Møller

Funktionsleder (CK) | Pesticider & Biocider
+45 72 54 45 78 | vm@mst.dk

Miljø- og Fødevareministeriet

Miljøstyrelsen | Haraldsgade 53 | 2100 København Ø | Tlf. +45 72 54 40 00 | mst@mst.dk | www.mst.dk

From: Agnes Marchetti Villa on behalf of MST Pesticider & Biocider (enhedens postkasse)
Sent: Mon, 27 Aug 2018 11:06:03 +0200
To: Vibeke Møller
Subject: VS: Ansøgning om dispensation for brug af Gaucho WS 70 i bederoer
Attachments: Notifikationsskema 2018 Gaucho WS 70.pdf, Notifikationsskema 2018 Gaucho WS 70.docx

tvf

Venlig hilsen

Agnes M. Villa
Kontorfunktionær | Pesticider & Biocider
+45 72 54 42 17 | agnmv@mst.dk

Miljø- og Fødevarerministeriet
Miljøstyrelsen | Haraldsgade 53 | 2100 København Ø | Tlf. +45 72 54 40 00 | mst@mst.dk | www.mst.dk

Fra: Secher, Bo [<mailto:Bo.Secher@nordzucker.com>]
Sendt: 24. august 2018 11:10
Til: MST Pesticider & Biocider (enhedens postkasse)
Cc: Jørn Dalby; Desirée Börjesdotter
Emne: Ansøgning om dispensation for brug af Gaucho WS 70 i bederoer

Restlisten/ dispensation – Gebyrtype 9233+B el. 9234+B? Bed om faktureringsadresse med CVR.nr.

Til Miljøstyrelsen

På vegne af Danske Sukkerroedyrkere, Nordic Beet Research og Nordic Sugar fremsender jeg hermed ansøgning om brug af Gaucho WS 70 til bejdsning af udsæd af bederoer i 2019.

Hvis Miljøstyrelsen har spørgsmål eller kommentarer til ansøgningen, er Miljøstyrelsen selvkært meget velkommen til at vende tilbage med disse.

Ansøgningen gælder brug af bejdsset udsæd i Danmark. De benyttede frø vil blive oparbejdet på fabrikker i Danmark og i udlandet, og det er selvfølgelig en forudsætning, at bejdsede frø er tilgængelige.

Frøfirmaerne er således meget opmærksomme på denne ansøgning, og udfaldet af den, med henblik på at kunne planlægge produktionen af frø til 2019.

Ansøgningen er vedlagt som Word- og PDF dokument.

Miljøstyrelsen må meget gerne bekræfte modtagelsen af denne, og er det muligt at angive en behandlingstid må I meget gerne oplyse den.

Med venlig hilsen / Yours sincerely

Bo JM Secher

Head of Agricenter Denmark

Nordic Sugar Nykøbing Prinsholmvej 1 4800 Nykøbing F
Tel. +45 5488 3461 Mobile +45 20129038
<mailto:Bo.Secher@nordzucker.com>
<http://www.nordicsugar.com>

Reg. No 29781834

E-Mail Disclaimer

This e-mail may contain confidential information. If you are not the intended recipient and you receive this e-mail by mistake, you are not allowed to use the information, to copy it or distribute it further. Please notify us and return it to Nordic Sugar by e-mail and delete all attachments. Thank you for your assistance.

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-2019-
2	In case of repeated derogation: no. of previous derogation(s)	First
3	Names of active substances	Imidacloprid
4	Trade name of Plant Protection Product	Gaucho WS 70
5	Type of formulation and contents of active substance(s) <i>(e.g. 80% dry granule)</i>	Water dispersible powder for slurry seed treatment. 70% Imidacloprid
6	Applicant	Nordic Sugar, Prinsholmvej 1, DK 4800 Nykøbing F. Nordic Beet Research, Højbygårdvej 14, DK 4960 Holeby. Danske Sukkerroedyrkere, Axelborg, Axeltorv 3, DK 1609 København V.
7	Danger	Insect pests (See GAP table below)
8	Crop, plants or situation	Seed treatment of sugar-, fodder- and energy beet seeds for sowing
9	Minor or major use	Major use
10	Time period for authorisation	February 1 st 2019 to June 1 st 2019
11	Further limitations	The following conditions must be fulfilled in order to use the product: <ul style="list-style-type: none"> • Sugar-, fodder- and energy beets should be followed with a cereal crop such as winter rye, winter wheat, spring barley, spring wheat or spring oats in order to prevent flowering crop, in order to not attracting bees. • Any catch crop following the crop after beets must be of monocot type or non-flowering in order to not attracting bees. • In the case where a pneumatic seeder is used, a safety distance of no less than 25 m should be kept to any crop in its flowering stage attracting bees, or the seeder should be equipped with deflectors preventing any spread of dust. • Seed coating shall only be performed in professional seed treatment facilities. Those facilities must apply the best available

		techniques in order to minimise release of dust during application and seeding.
12	MRL: Reference to product code number in Annex I of regulation (EC) No 396/2005	Code: 0900010 MRL = 0,5
13	Compliance with MRL set in Regulation (EC) No 396/2005	Yes
14	Member State contact point	Bo JM Secher, bo.secher@nordzucker.com , Agricenter DK, Prinsholm vej 1, DK 4800 Nykøbing F.

15. GAP

GAP rev., date: 2018-August-22

PPP (product name/code) Gaucho WS 70/(UVP) 04175778

Formulation: Type: WS

active substance 1 Imidacloprid

Conc. of as 1: 70%

Applicant: Nordic Sugar, Nordic Beet Research and Danske Sukkerroedrykere

User: Professional

1	2	3	4	5	6	7	8	9	10	11	12
Use- No.	Crop and/ or situation (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:
				Method / Kind	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	kg, L product / ha a) max. rate per appl. b) max. total rate per crop/season	g, kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
1	EPPO-kode and English name BEAVX, Sugar-, Fodder- and Energy Beet	F	EPPO-kode and English name APHIFA, Aphis fabae, Bean aphid PEGOHY, Pegomya hysciami, Beet fly MYZUPE, Myzus persicae, Green peach aphid ATOMLI, Atomaria linearis, Pygmy mangold beetle THRIAN, Thrips angusticeps, Cabbage thrips	Seed treatment	00 seed At sowing	a: 1 b: 1	a: 85-81 g b: 85-81 g	a: 60-57 g b: 60-57 g	Not applicable	N/a	Gaucho WS 70 will be used with 85 g product (60 g a.s.) per 100 000 seeds The calculations presume a usage of 95 000 seeds per ha. Myzus persicae transmits the very damaging virus yellows complex

16. Value of tMRL if needed, including information on the measures taken in order to confine the commodities resulting from the treated crop to the territory of the notifying MS pending the setting of a tMRL on the EU level. (PRIMO EFSA model to be attached)

EU MRL = 0,5

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

Can be delivered on request to authorities.

18. Function of the product

(E.g. systemic long acting insecticide; foliar fungicide, used for regular control, elimination scenario etc) in accordance with list D

Systemic insecticide.

19. Type of danger to plant production.

(Provide reasoning for what category the 120 day authorisation is given: quarantine pest; emergent pest, either invading non-native, or native; emerging resistance in a pest, etc. Whereas reference to the EU quarantine legislation may suffice for quarantine pests elaborate reasoning should be provided for the category 'any harmful pest')

The 120 day authorisation is given for the reason to control native harmful pests and avoid further development of resistance in some pests towards pyrethroids and pirimicarb.

GaUCHO WS 70 has shown to be very effective and is approved for the control of:

- Pygmy mangold beetle (*Atomaria linearis*). Present every year at varying levels, and can severely damage the seed and the emerging plants that it can cause plant losses and yield reduction.
- Cabbage thrips (*Thrips angusticeps*). Present every year and causes damage on stems and leaves on emerging plants that can cause plant losses and yield reduction.
- Green peach aphid (*Myzus persicae*). Present most years and the major vector for the very damaging “virus yellows” complex. In some years it causes significant yield reduction.
- Bean aphid (*Aphis fabae*). The aphid can form large colonies on younger leaves and can be very harmful and reduce the yield potential significantly.
- Beet fly (*Pegomya hycyami*). The larvae damage leaves severely. Can occur in two generations in some years and reduce yield potential.

In addition to the above mentioned pests, some other important insect species can occur with a negative impact on the beet yield.

The use of GaUCHO WS 70 will in addition act as a preventing factor in the development of green peach aphids tolerant against pyrethroids and pirimicarb.

20. Size and effect of danger

(Describe shortly the area affected, the development over time of the infestation, and the agronomic and economic effects it has)

In 2018, sugar-, fodder- and energy beets are grown on 39.000 hectares in Denmark. The area can vary from year to year. The crop is an important cornerstone for the 1100 growers and in their crop rotation. The sugar-, fodder- and energy beet crops also play a significant role in the crop rotation regarding Integrated Pest Management, biodiversity and soil protection as an important spring-sown crop. The sugar beet growing area is concentrated in southern and western Zealand and on the islands Lolland, Falster and Møn. Fodder- and energy beets are mainly grown in Jutland.

The most yield reducing pest is the “virus yellows” complex, which is transmitted by the aphid (*Myzus persicae*). It is documented in many European countries that the insect has developed tolerance to pyrethroids and pirimicarb, the two alternatives to Gaucho WS 70. The occurrence of aphids and thus the severity of the attacks by virus yellows, can vary greatly between years. It is, however, still remembered that the virus yellows caused severe yield reductions in Denmark prior to the registration of Gaucho WS 70. The yield reduction by virus yellows is estimated to be 10-20 percent.

In addition to the risk of virus yellows from green peach aphid, the other listed insects can reduce the yield during the establishment and growth of the crop. It has been documented in seed treatment trials that soilborne insects on average reduce the sugar yield by 3 percent. In years with severe attacks, the yield losses can be up to 20 percent. This estimation was made without the presence of virus yellows.

The total risk analysis results in an estimated sugar yield loss to be between 10 to 23 percent due to the insect pests controlled by Gaucho WS 70, which corresponds to a farm gate value of 70 - 150 million DKK. This value takes in to account the cost of two applications of pyrethroids and one application of pirimicarb and a seed treatment with Force 20 CS. In addition to the loss in sugar beets, fodder- and energy beets risk a loss at farm gate worth 10 - 20 million DKK.

An increased cost in sugar beet production will negatively impact the procurement of sugar beets to the two sugar factories in Denmark. This can have an effect on the economy in sugar production, and can result in reduced activities at the factories. And so lead to a reduction of the number of employees on the sites.

21. Absence of any other reasonable means

(Describe the alternative control measures (chemical, non-chemical and cultural) and indicate why they do not (in combination) suffice. Describe which, if any, authorisations for the pest to be controlled exist in other Member States.

In Denmark there is no alternative to control pygmy mangold beetle after the emergence of the beet crop. This pest can cause severe damage and reduce yield potential.

The efficacy of Gaucho WS 70 is due to the fact that it is systemic and has effect on damaging pests up to 12 weeks after sowing. Gaucho WS 70 affects the insects that are feeding on the plants.

An alternative control method of insects damaging seedling pests, is Force 20 CS (tefluthrin, 20 %). It is registered as a seed treatment in sugar-, fodder- and energy beets and belongs to the group of pyrethroids. The efficacy of tefluthrin is shown to be reduced under severe pest pressure of, for example, pygmy mangold beetle and thrips. It is not efficient to control aphids, and the experience is that the product has its best efficacy only until emergence of the seedlings.

Another control method registered for use in the sugar-, fodder- and energy beets crop is foliar applications with pyrethroids or pirimicarb. However, at least seven independent resistance mechanisms are described for aphids and in several studies in different European countries pyrethroides show no to low efficacy to control aphids.

The alternatives which include broad acre applications with pyrethroids will negatively affect all insects in the fields, including beneficial insects (insect predators).

Application for Derogation of Gaucho WS 70 has been submitted in a number of European countries, for instance in Germany, Belgium, France, Poland and will be so also in Sweden.

22. Rationale

(Reason the risk management decision based on the findings of 15 to 18, containing especially a description of measures taken to ensure consumer protection).

Gaucho WS 70 has been approved for many years and have been used widely in many crops. The product has now been banned in the EU, because of a perceived risk of a negative impact on bees.

The use as a seed treatment in sugar-, fodder- and energy beets can be categorised as a use with a minuscule risk of impact on bees. For the following reasons:

- Sugar-, fodder- and energy beets seeds are pelleted, and the a.s. are contained in the inner layers of the pellet. There is for this reason no direct contact with the a.s. in the seeder, and only very limited possibility of contaminated dust or risks when handling the seed.
- Sugar-, fodder- and energy beets are a non-flowering crop, and beet fields are normally kept without growth of flowering weeds. There will be no bees foraging in beet fields. Should there be a few flowering weeds, those will have their own roots and will not be contaminated.
- With the limitations imposed (see point 11), there will be no flowering crops in the field until at least two years after the sugar-, fodder- and energy beets. Any a.s. in the soil will therefore be decomposed.
- There is very rarely guttation in sugar-, fodder- and energy beets. Especially when compared to other crops. Research has concluded that it is unlikely that bees will be contaminated with a.s. because of drinking the guttation from sugar-, fodder- and energy beet leaves.

- Gaucho WS 70 is in addition an important product in order to counteract or avoid resistance, especially towards green peach aphid. This species is highly resistant to both pyrethroids and pirimicarb in other growing regions, as found in Great Britain.
- The effects of Gaucho WS 70 are highly selective towards beet-damaging species, giving the pest must digest a part of the beet for any uptake of the a.s.. The alternative treatment with one or two applications with a pyrethroid will impact all insects in the field, and therefore will be detrimental to beneficial insects such as Marygold, Carabidea and others. The use of Gaucho WS 70 therefore can have a positive environmental impact.

23. Mitigation measures

(Describe what mitigation measures are taken if needed for minimising risk to humans, animals, and the environment, attach summary risk assessment. Describe what measures are taken to limit and control use)

Mitigation of any possible impact on bees have been implemented through the listed limitations in use. See point 11.

24. Applications in progress

(The use notified may have been applied for already, or a suitable alternative PPP may be in the process of authorisation. Describe such applications, including a possible date of authorisation)

25. Research activities

(Describe the research efforts undertaken and/or in progress, their aims, their funding, and their expected date of results. This is needed for all categories of dangers, except quarantine pests that can still be eliminated, or infrequent pests, for which no official application for a normal authorisation or extension of use of the plant protection product exists. In case of a repeated notification: indicate the state of works of the research projects.)

Testing and evaluation of alternative control measures has been undertaken in field trials and in demonstration plots by Nordic Beet Research (NBR) and Nordic Sugar.

The seed treatment alternative to Gaucho 70 WS, tefluthrin, is being tested by NBR and compared to untreated crops in two field trials with natural pest infestation in both Denmark and Sweden in 2018. In the same trials, different chemical strategies to control insects after emergence are tested. In addition to these trials, the presence of virus yellows in Denmark is being monitored, also by NBR, in a large scale trial network in collaboration with Sweden, Germany, Belgium and the Netherlands. The work is funded by NBR.

A 5 ha demonstration area has been established in a grower's field, with an alternative seed treatment (Force 20 CS, tefluthrin 20%). The area has been followed by Nordic Sugar through the season, and control measures has been established when damage thresholds were exceeded. The area has been treated two times with insecticides in 2018 due to severe attacks by bean aphids. One application with a pyrethroid and one application with pirimicarb. The demonstration will continue in 2019. The demonstrations are funded by Nordic Sugar.

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-2019-
2	In case of repeated derogation: no. of previous derogation(s)	First
3	Names of active substances	Imidacloprid
4	Trade name of Plant Protection Product	Gaucho WS 70
5	Type of formulation and contents of active substance(s) <i>(e.g. 80% dry granule)</i>	Water dispersible powder for slurry seed treatment. 70% Imidacloprid
6	Applicant	Nordic Sugar, Prinsholmvej 1, DK 4800 Nykøbing F. Nordic Beet Research, Højbygårdvej 14, DK 4960 Holeby. Danske Sukkerroedyrkere, Axelborg, Axeltorv 3, DK 1609 København V.
7	Danger	Insect pests (See GAP table below)
8	Crop, plants or situation	Seed treatment of sugar-, fodder- and energy beet seeds for sowing
9	Minor or major use	Major use
10	Time period for authorisation	February 1 st 2019 to June 1 st 2019
11	Further limitations	<p>The following conditions must be fulfilled in order to use the product:</p> <ul style="list-style-type: none"> • Sugar-, fodder- and energy beets should be followed with a cereal crop such as winter rye, winter wheat, spring barley, spring wheat or spring oats in order to prevent flowering crop, in order to not attracting bees. • Any catch crop following the crop after beets must be of monocot type or non-flowering in order to not attracting bees. • In the case where a pneumatic seeder is used, a safety distance of no less than 25 m should be kept to any crop in its flowering stage attracting bees, or the seeder should be equipped with deflectors preventing any spread of dust. • Seed coating shall only be performed in professional seed treatment facilities. Those facilities must apply the best available

		techniques in order to minimise release of dust during application and seeding.
12	MRL: Reference to product code number in Annex I of regulation (EC) No 396/2005	Code: 0900010 MRL = 0,5
13	Compliance with MRL set in Regulation (EC) No 396/2005	Yes
14	Member State contact point	Bo JM Secher, bo.secher@nordzucker.com , Agricenter DK, Prinsholm vej 1, DK 4800 Nykøbing F.

15. GAP

GAP rev., date: 2018-August-22

PPP (product name/code) Gaucho WS 70/(UVP) 04175778

Formulation: Type: WS

active substance 1 Imidacloprid

Conc. of as 1: 70%

Applicant: Nordic Sugar, Nordic Beet Research and Danske Sukkerroedrykere

User: Professional

1	2	3	4	5	6	7	8	9	10	11	12
Use- No.	Crop and/ or situation (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:
				Method / Kind	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	kg, L product / ha a) max. rate per appl. b) max. total rate per crop/season	g, kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
1	EPPO-kode and English name BEAVX, Sugar-, Fodder- and Energy Beet	F	EPPO-kode and English name APHIFA, Aphis fabae, Bean aphid PEGOHY, Pegomya hysciami, Beet fly MYZUPE, Myzus persicae, Green peach aphid ATOMLI, Atomaria linearis, Pygmy mangold beetle THRIAN, Thrips angusticeps, Cabbage thrips	Seed treatment	00 seed At sowing	a: 1 b: 1	a: 85-81 g b: 85-81 g	a: 60-57 g b: 60-57 g	Not applicable	N/a	Gaicho WS 70 will be used with 85 g product (60 g a.s.) per 100 000 seeds The calculations presume a usage of 95 000 seeds per ha. Myzus persicae transmits the very damaging virus yellows complex

16. Value of tMRL if needed, including information on the measures taken in order to confine the commodities resulting from the treated crop to the territory of the notifying MS pending the setting of a tMRL on the EU level. (PRIMO EFSA model to be attached)

EU MRL = 0,5

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

Can be delivered on request to authorities.

18. Function of the product

(E.g. systemic long acting insecticide; foliar fungicide, used for regular control, elimination scenario etc) in accordance with list D

Systemic insecticide.

19. Type of danger to plant production.

(Provide reasoning for what category the 120 day authorisation is given: quarantine pest; emergent pest, either invading non-native, or native; emerging resistance in a pest, etc. Whereas reference to the EU quarantine legislation may suffice for quarantine pests elaborate reasoning should be provided for the category 'any harmful pest')

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Gaicho WS 70 has shown to be very effective and is approved for the control of:

- Pygmy mangold beetle (*Atomaria linearis*). Present every year at varying levels, and can severely damage the seed and the emerging plants that it can cause plant losses and yield reduction.
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- Green peach aphid (*Myzus persicae*). Present most years and the major vector for the very damaging “virus yellows” complex. In some years it causes significant yield reduction.
- Bean aphid (*Aphis fabae*). The aphid can form large colonies on younger leaves and can be very harmful and reduce the yield potential significantly.
- Beet fly (*Pegomya hycyami*). The larvae damage leaves severely. Can occur in two generations in some years and reduce yield potential.

In addition to the above mentioned pests, some other important insect species can occur with a negative impact on the beet yield.

The use of Gaicho WS 70 will in addition act as a preventing factor in the development of green peach aphids tolerant against pyrethroids and pirimicarb.

20. Size and effect of danger

(Describe shortly the area affected, the development over time of the infestation, and the agronomic and economic effects it has)

In 2018, sugar-, fodder- and energy beets are grown on 39.000 hectares in Denmark. The area can vary from year to year. The crop is an important cornerstone for the 1100 growers and in their crop rotation. The sugar-, fodder- and energy beet crops also play a significant role in the crop rotation regarding Integrated Pest Management, biodiversity and soil protection as an important spring-sown crop. The sugar beet growing area is concentrated in southern and western Zealand and on the islands Lolland, Falster and Møn. Fodder- and energy beets are mainly grown in Jutland.

The most yield reducing pest is the “virus yellows” complex, which is transmitted by the aphid (*Myzus persicae*). It is documented in many European countries that the insect has developed tolerance to pyrethroids and pirimicarb, the two alternatives to Gaucho WS 70. The occurrence of aphids and thus the severity of the attacks by virus yellows, can vary greatly between years. It is, however, still remembered that the virus yellows caused severe yield reductions in Denmark prior to the registration of Gaucho WS 70. The yield reduction by virus yellows is estimated to be 10-20 percent.

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An increased cost in sugar beet production will negatively impact the procurement of sugar beets to the two sugar factories in Denmark. This can have an effect on the economy in sugar production, and can result in reduced activities at the factories. And so lead to a reduction of the number of employees on the sites.

21. Absence of any other reasonable means

(Describe the alternative control measures (chemical, non-chemical and cultural) and indicate why they do not (in combination) suffice. Describe which, if any, authorisations for the pest to be controlled exist in other Member States.

In Denmark there is no alternative to control pygmy mangold beetle after the emergence of the beet crop. This pest can cause severe damage and reduce yield potential.

The efficacy of Gaucho WS 70 is due to the fact that it is systemic and has effect on damaging pests up to 12 weeks after sowing. Gaucho WS 70 affects the insects that are feeding on the plants.

An alternative control method of insects damaging seedling pests, is Force 20 CS (tefluthrin, 20 %). It is registered as a seed treatment in sugar-, fodder- and energy beets and belongs to the group of pyrethroids. The efficacy of tefluthrin is shown to be reduced under severe pest pressure of, for example, pygmy mangold beetle and thrips. It is not efficient to control aphids, and the experience is that the product has its best efficacy only until emergence of the seedlings.

Another control method registered for use in the sugar-, fodder- and energy beets crop is foliar applications with pyrethroids or pirimicarb. However, at least seven independent resistance mechanisms are described for aphids and in several studies in different European countries pyrethroides show no to low efficacy to control aphids.

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Application for Derogation of Gaucho WS 70 has been submitted in a number of European countries, for instance in Germany, Belgium, France, Poland and will be so also in Sweden.

22. Rationale

(Reason the risk management decision based on the findings of 15 to 18, containing especially a description of measures taken to ensure consumer protection).

Gaucho WS 70 has been approved for many years and have been used widely in many crops. The product has now been banned in the EU, because of a perceived risk of a negative impact on bees.

The use as a seed treatment in sugar-, fodder- and energy beets can be categorised as a use with a minuscule risk of impact on bees. For the following reasons:

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- Sugar-, fodder- and energy beets are a non-flowering crop, and beet fields are normally kept without growth of flowering weeds. There will be no bees foraging in beet fields. Should there be a few flowering weeds, those will have their own roots and will not be contaminated.
- With the limitations imposed (see point 11), there will be no flowering crops in the field until at least two years after the sugar-, fodder- and energy beets. Any a.s. in the soil will therefore be decomposed.
- There is very rarely guttation in sugar-, fodder- and energy beets. Especially when compared to other crops. Research has concluded that it is unlikely that bees will be contaminated with a.s. because of drinking the guttation from sugar-, fodder- and energy beet leaves.

- Gaucho WS 70 is in addition an important product in order to counteract or avoid resistance, especially towards green peach aphid. This species is highly resistant to both pyrethroids and pirimicarb in other growing regions, as found in Great Britain.
- The effects of Gaucho WS 70 are highly selective towards beet-damaging species, giving the pest must digest a part of the beet for any uptake of the a.s.. The alternative treatment with one or two applications with a pyrethroid will impact all insects in the field, and therefore will be detrimental to beneficial insects such as Marygold, Carabidea and others. The use of Gaucho WS 70 therefore can have a positive environmental impact.

23. Mitigation measures

(Describe what mitigation measures are taken if needed for minimising risk to humans, animals, and the environment, attach summary risk assessment. Describe what measures are taken to limit and control use)

Mitigation of any possible impact on bees have been implemented through the listed limitations in use. See point 11.

24. Applications in progress

(The use notified may have been applied for already, or a suitable alternative PPP may be in the process of authorisation. Describe such applications, including a possible date of authorisation)

25. Research activities

(Describe the research efforts undertaken and/or in progress, their aims, their funding, and their expected date of results. This is needed for all categories of dangers, except quarantine pests that can still be eliminated, or infrequent pests, for which no official application for a normal authorisation or extension of use of the plant protection product exists. In case of a repeated notification: indicate the state of works of the research projects.)

Testing and evaluation of alternative control measures has been undertaken in field trials and in demonstration plots by Nordic Beet Research (NBR) and Nordic Sugar.

The seed treatment alternative to Gaucho 70 WS, tefluthrin, is being tested by NBR and compared to untreated crops in two field trials with natural pest infestation in both Denmark and Sweden in 2018. In the same trials, different chemical strategies to control insects after emergence are tested. In addition to these trials, the presence of virus yellows in Denmark is being monitored, also by NBR, in a large scale trial network in collaboration with Sweden, Germany, Belgium and the Netherlands. The work is funded by NBR.

A 5 ha demonstration area has been established in a grower's field, with an alternative seed treatment (Force 20 CS, tefluthrin 20%). The area has been followed by Nordic Sugar through the season, and control measures has been established when damage thresholds were exceeded. The area has been treated two times with insecticides in 2018 due to severe attacks by bean aphids. One application with a pyrethroid and one application with pirimicarb. The demonstration will continue in 2019. The demonstrations are funded by Nordic Sugar.

From: Kirsten Jensen
Sent: Tue, 30 Oct 2018 10:06:23 +0000
To: MST Pesticider & Biocider (enhedens postkasse);Vibeke Møller
Cc: Charlotte Hamann Knudsen;Michael Kristensen;Helena Øhlenschläger Larsen
Subject: Svar: Ansøgning om dispensation - bederoer (Gaucho WS 70) MST-661-11357

Til Miljøstyrelsen

Vedhæftet sendes svar vedr. ansøgning om dispensation for brug af bejdsemidlet Gaucho WS 70 i bederoer (MST-661-11357).

Med venlig hilsen

Kirsten Jensen
Institutsekretær

Inst. for Agroøkologi
Aarhus Universitet
Forsøgsvej 1
4200 Slagelse

Tlf.: 8715 8184
Email: Kirsten.Jensen@agro.au.dk

Tlf.: 8715 0000
Web: www.au.dk



Miljøministeriet
Miljøstyrelsen
Pesticider og Biocider
Haraldsgade 53
2100 København Ø

Vedr. vurdering af bekæmpelsesmidlers effektivitet – Bekendtgørelsens § 55 stk. 1

Vedhæftet fremsendes svar vedr. dispensationsansøgning for Gaucho WS 70, udarbejdet af lektor Michael Kristensen og akademisk medarbejder Helena Øhlenschläger Larsen, Institut for Agroøkologi, Forsøgsvej 1, AU Flakkebjerg 4200 Slagelse.

Med venlig hilsen



Kirsten Jensen

**Sekretariat, AGRO
Flakkebjerg**

Kirsten Jensen

Institutsekretær

Dato: 30. oktober 2018

Direkte tlf.: 87158184
E-mail:
kirsten.jensen@agro.au.dk

Afs. CVR-nr.: 31119103

Reference: MST-661-11357

Side 1/1

Miljøstyrelsen
Pesticider og Biocider
Haraldsgade 53
2100 København Ø

Vedr. dispensationsansøgning til såning af bederoefrø bejdset med Gaucho WS 70 indeholdende imidacloprid (sagsnr. MST-661-11357)

Det anbefales hermed, at der gives dispensation til såning af bederoefrø bejdset med Gaucho WS 70 indeholdende imidacloprid. Følgende punkter danner baggrund for denne beslutning:

- Bederoer rammes af en kompleks sammensætning af skadedyr efter deres såning i det sene forår. De mest signifikante er ferskenbladlus, bedebadlus, runkelroebiller, og bedefluer. Derudover er der en række skadedyr, såsom trips, minerfluer, jordlopper, gammauglen, og tusindben, som nogle år giver betydende problemer.
- Det er muligt at anvende godkendte midler indeholdende pyrethroider eller carbamatet pirimicarb mod bedebadlus og ferskenbladlusen, men der findes ikke godkendt alternative midler mod alle; fx den betydende skadegører på rødderne runkelroebillen. For de fleste af de jordlevende skadedyr gælder det dog at sædskifte er den bedste metode til at undgå store problemer.
- Ferskenbladlusen er en betydningsfuld vektor af virus sygdomme til bederoer. Problemet med disse sygdomme er stort set forsvundet efter at bejdning af bederoefrø blev indført. Ferskenbladlusene kan overvintre i Danmark, hvilket den tidligere gjorde især i roekuler, som ikke optræder så meget længere, men den kommer også flyvende fra syd hvert år. Der er udbredt carbamate- og pyrethroidresistens hos ferskenbladlus i Europa og ferskenbladlus der ankommer til Danmark om foråret vil med stor sandsynlighed have en eller flere resistensmekanismer overfor pyrethroider og carbamater. Ferskenbladlusen kan med stor sandsynlighed ikke bekæmpes med de godkendte midler.
- Der kendes ikke til insekticidresistens hos andre af de relevante skadedyr i bederoer.
- Bekæmpelsen af mange af bederoernes skadedyr med pyrethroider eller carbamat vil ske på et tidspunkt, hvor de naturlige fjender er i gang med at etablere sig og vil være et stort tilbageslag for deres aktivitet.
- En profylaktisk anvendelse af systemiske neonikotinoider i Danmark forekommer problematisk både med hensyn til generelle miljøhensyn og mere specifikt deres effekt overfor bier, men en anvendelse på en ikke blomstrede afgrøde, hvor der på de pågældende marker ikke må sås blomstrende afgrøder som efterafgrøde eller i det kommende år, må betragtes at have noget nær ingen effekt på bier.

Dept. of Agroecology
Aarhus University
Forsøgsvej 1
DK-4200 Slagelse

Michael Kristensen
Associate Professor

Date: 30 October 2018

Direct Tel.: +45 8715 8116
Mobile Tel.: +45 29645725
E-mail: mikr@agro.au.dk

Journal no.:
Reference: MK

Page 1/2

- Vedr. varsling ift. behovet for at anvende bejdsede bederoefrø til såning vurderer vi, at dette ikke vil være muligt. Det vil være muligt ligesom i 1980-90'erne at varsle omkring bladlus, men set i lyset af den udbredte insekticidresistens hos ferskenbladlus og ønsket om at bevare skadedyrenes naturlige fjender vurderes dette at være en dårlig løsning.

EU-kommissionen har forbudt anvendelsen af bl.a. imidacloprid til udendørs anvendelse i landbruget. Dette er sket på baggrund af en omfattende og velargumenteret rapport fra EFSA, EU's agentur for fødevarsikkerhed som konkluderer, at neonikotinoiderne er farlige for både honningbier og vilde bier.

Det anbefales, at der arbejdes på at finde på alternative metoder til bekæmpelse af skadedyr i forbindelse med roedyrkning end ved brug af bederoefrø bejdsset med midler som er velbegrunderet forbudt af EU.

Udkast til notifikationsskema til EU er vedhæftet.

Med venlig hilsen

Michael Kristensen
Lektor

Helena Øhlenschläger Larsen
Akademisk Medarbejder

From: Kirsten Jensen
Sent: Fri, 2 Nov 2018 11:40:11 +0000
To: MST Pesticider & Biocider (enhedens postkasse);Vibeke Møller
Cc: Charlotte Hamann Knudsen;Michael Kristensen;Helena Øhlenschläger Larsen
Subject: Svar: Opdateret svar dispensationsansøgning - bederoer (Gaucho WS 70) MST-661-11357

Til Miljøstyrelsen

Vedhæftet sendes opdateret svar vedr. dispensationsansøgning (bederoer) for Gaucho WS 70 (MST-661-11357). – Jeg vedhæfter også notifikationskema sendt til Miljøstyrelsen tidligere i dag.

Med venlig hilsen

Kirsten Jensen
Institutsekretær

Inst. for Agroøkologi
Aarhus Universitet
Forsøgsvej 1
4200 Slagelse

Tlf.: 8715 8184
Email: Kirsten.Jensen@agro.au.dk

Tlf.: 8715 0000
Web: www.au.dk



Miljøministeriet
Miljøstyrelsen
Pesticider og Biocider
Haraldsgade 53
2100 København Ø

Vedr. vurdering af bekæmpelsesmidlers effektivitet – Bekendtgørelsens § 55 stk. 1

Vedhæftet fremsendes opdateret svar vedr. dispensationsansøgning for Gaucho WS 70, udarbejdet af lektor Michael Kristensen og akademisk medarbejder Helena Øhlenschläger Larsen, Institut for Agroøkologi, Forsøgsvej 1, AU Flakkebjerg 4200 Slagelse.

Med venlig hilsen



Kirsten Jensen

**Sekretariat, AGRO
Flakkebjerg**

Kirsten Jensen

Institutsekretær

Dato: 02. november 2018

Direkte tlf.: 87158184
E-mail:
kirsten.jensen@agro.au.dk

Afs. CVR-nr.: 31119103

Reference: MST-661-11357

Side 1/1

Miljøstyrelsen
Pesticider og Biocider
Haraldsgade 53
2100 København Ø

Vedr. dispensationsansøgning til såning af bederoefrø bejdsset med Gaucho WS 70 indeholdende imidacloprid (sagsnr. MST-661-11357)

Det anbefales hermed, at der gives dispensation til såning af bederoefrø bejdsset med Gaucho WS 70 indeholdende imidacloprid. Følgende punkter danner baggrund for denne beslutning:

- Bederoer rammes af en kompleks sammensætning af skadedyr efter deres såning i det sene forår. De mest signifikante er ferskenbladlus, bedebadlus, runkelroebiller, og bedefluer. Derudover er der en række skadedyr, såsom trips, minerfluer, jordlopper, gammauglen, og tusindben, som nogle år giver betydende problemer.
- Det er muligt at anvende godkendte midler indeholdende pyrethroider eller carbamatet pirimicarb mod bedebadlus og ferskenbladlusen, men der findes ikke godkendt alternative midler mod alle; fx den betydende skadegører på rødderne runkelroebillen. For de fleste af de jordlevende skadedyr gælder det dog at sædskifte er den bedste metode til at undgå store problemer. Vi kender ikke til alternativer, som ikke er insekticid baserede.
- Ferskenbladlusen er en betydningsfuld vektor af virus sygdomme til bederoer. Problemet med disse sygdomme er stort set forsvundet efter at bejdsning af bederoefrø blev indført. Ferskenbladlusene kan overvintre i Danmark, hvilket den tidligere gjorde især i roekuler, som ikke optræder så meget længere, men den kommer også flyvende fra syd hvert år. Der er udbredt carbamate- og pyrethroidresistens hos ferskenbladlus i Europa og ferskenbladlus der ankommer til Danmark om foråret vil med stor sandsynlighed have en eller flere resistensmekanismer overfor pyrethroider og carbamater. Ferskenbladlusen kan med stor sandsynlighed ikke bekæmpes med de godkendte midler.
- Der kendes ikke til insekticidresistens hos andre af de relevante skadedyr i bederoer.
- Bekæmpelsen af mange af bederoernes skadedyr med pyrethroider eller carbamat vil ske på et tidspunkt, hvor de naturlige fjender er i gang med at etablere sig og vil være et stort tilbageslag for deres aktivitet.
- En profylaktisk anvendelse af systemiske neonicotinoider i Danmark forekommer problematisk både med hensyn til generelle miljøhensyn og mere specifikt deres effekt overfor bier, men en anvendelse på en ikke blomstrende afgrøde, hvor der på de pågældende marker ikke må sås blomstrende afgrøder som efterafgrøde eller i det kommende år, må betragtes at have noget nær ingen effekt på bier.

Dept. of Agroecology
Aarhus University
Forsøgsvej 1
DK-4200 Slagelse

Michael Kristensen
Associate Professor

Date: 2 November 2018

Direct Tel.: +45 8715 8116
Mobile Tel.: +45 29645725
E-mail: mikr@agro.au.dk

Journal no.:
Reference: MK

Page 1/2

- Vedr. varsling ift. behovet for at anvende bejdsede bederoefrø til såning vurderer vi, at dette ikke vil være muligt. Det vil være muligt ligesom i 1980-90'erne at varsle omkring bladlus, men set i lyset af den udbredte insekticidresistens hos ferskenbladlus og ønsket om at bevare skadedyrenes naturlige fjender vurderes dette at være en dårlig løsning.

EU-kommissionen har forbudt anvendelsen af bl.a. imidacloprid til udendørs anvendelse i landbruget. Dette er sket på baggrund af en omfattende og velargumenteret rapport fra EFSA, EU's agentur for fødevarer sikkerhed som konkluderer, at neonikotinoiderne er farlige for både honningbier og vilde bier.

Det anbefales, at der arbejdes på at finde på alternative metoder til bekæmpelse af skadedyr i forbindelse med roedyrkning end ved brug af bederoefrø bejdset med midler som er velbegrunderet forbudt af EU.

Udkast til notifikationsskema til EU er vedhæftet.

Med venlig hilsen

Michael Kristensen
Lektor

Helena Øhlenschläger Larsen
Akademisk Medarbejder

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-2019-
2	In case of repeated derogation: no. of previous derogation(s)	First
3	Names of active substances	Imidacloprid
4	Trade name of Plant Protection Product	Gaucho WS 70
5	Type of formulation and contents of active substance(s)	Water dispersible powder for slurry seed treatment. 70% Imidacloprid
6	Applicant	Nordic Sugar, Prinsholmvej 1, DK 4800 Nykøbing F. Nordic Beet Research, Højbygårdvej 14, DK 4960 Holeby. Danske Sukkerroedyrkere, Axelborg, Axeltorv 3, DK 1609 København V.
7	Danger	Insect pests (See GAP table below)
8	Crop, plants or situation	Seed treatment of sugar-, fodder- and energy beet seeds for sowing
9	Minor or major use	Major use
10	Time period for authorisation	February 1 st 2019 to June 1 st 2019
11	Further limitations	The following conditions must be fulfilled in order to use the product: <ul style="list-style-type: none"> • Sugar-, fodder- and energy beets should be followed with a cereal crop such as winter rye, winter wheat, spring barley, spring wheat or spring oats in order to prevent flowering crop, in order to not attracting bees. • Any catch crop following the crop after beets must be of monocot type or non-flowering in order to not attracting bees. • In the case where a pneumatic seeder is used, a safety distance of no less than 25 m should be kept to any crop in its flowering stage attracting bees, or the seeder should be equipped with deflectors preventing any spread of dust. • Seed coating shall only be performed in professional seed treatment facilities. Those facilities must apply the best available

		techniques in order to minimise release of dust during application and seeding.
12	MRL: Reference to product code number in Annex I of regulation (EC) No 396/2005	Code: 0900010 MRL = 0,5
13	Compliance with MRL set in Regulation (EC) No 396/2005	Yes
14	Member State contact point	Bo JM Secher, bo.secher@nordzucker.com , Agricenter DK, Prinsholm vej 1, DK 4800 Nykøbing F.

15. GAP

GAP rev., date: 2018-August-22

PPP (product name/code) Gaucho WS 70/(UVP) 04175778

Formulation: Type: WS

active substance 1 Imidacloprid

Conc. of as 1: 70%

Applicant: Nordic Sugar, Nordic Beet Research and Danske Sukkerroedrykere

User: Professional

1	2	3	4	5	6	7	8	9	10	11	12
Use- No.	Crop and/ or situation (crop destination / purpose of crop)	F G or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application			Application rate			PHI (days)	Remarks:
				Method / Kind	Timing / Growth stage of crop & season	Max. number (min. interval between applications) a) per use b) per crop/ season	kg, L product / ha a) max. rate per appl. b) max. total rate per crop/season	g, kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
1	EPPO-kode and English name BEAVX, Sugar-, Fodder- and Energy Beet	F	EPPO-kode and English name APHIFA, Aphis fabae, Bean aphid PEGOHY, Pegomya hysciami, Beet fly MYZUPE, Myzus persicae, Green peach aphid ATOMLI, Atomaria linearis, Pygmy mangold beetle THRIAN, Thrips angusticeps, Cabbage thrips	Seed treatment	00 seed At sowing	a: 1 b: 1	a: 85-81 g b: 85-81 g	a: 60-57 g b: 60-57 g	Not applicable	N/a	Gaicho WS 70 will be used with 85 g product (60 g a.s.) per 100 000 seeds The calculations presume a usage of 95 000 seeds per ha. Myzus persicae transmits the very damaging virus yellows complex

16. Value of tMRL

EU MRL = 0,5

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

Can be delivered on request to authorities.

18. Function of the product

Systemic insecticide.

19. Type of danger to plant production.

The 120 day authorisation is given for the reason to control native harmful pests, to control a resistant pest and to avoid further development of resistance in some pests towards pyrethroids and pirimicarb.

Beets are affected by a complex composition of pests after their germination in late spring. The most significant are green peach aphid, bean aphid, pygmy mangold beetle, beet fly and cabbage thrips. Gaucho WS 70 has shown to be very effective and is approved for the control of:

- Pygmy mangold beetle (*Atomaria linearis*). Present every year at varying levels, and can severely damage the seed and the emerging plants that it can cause plant losses and yield reduction.
- Cabbage thrips (*Thrips angusticeps*). Present every year and causes damage on stems and leaves on emerging plants that can cause plant losses and yield reduction.
- Green peach aphid (*Myzus persicae*). Present most years and the major vector for the very damaging “virus yellows” complex. In some years it causes significant yield reduction.
- Bean aphid (*Aphis fabae*). The aphid can form large colonies on younger leaves and can be very harmful and reduce the yield potential significantly.
- Beet fly (*Pegomya hycyami*). The larvae damage leaves severely. Can occur in two generations in some years and reduce yield potential.

In addition to the above mentioned pests, some other important herbivorous as well as soil dwelling insect species, the Silver Y moth, beet leafhoppers, leafminig flies, springtails, blister beetles, and milipedes, can occur with a negative impact on the beet yield.

The green peach aphid is a significant vector of virus diseases for beets. The problem with these diseases has largely disappeared after the introduction of neonicotinoid seed treatments in 1995. The green peach aphid can overwinter in Denmark, as it used to do in beets stored for winter, which does not appear so much nowadays. It is flying in from the south every year. There is widespread carbamate and pyrethroid resistance in green peach aphids throughout Europe, and green peach aphids arriving in Denmark in the spring will most likely have one or more resistance mechanisms to pyrethroids and carbamates. Most likely the establishing population of green peach aphid can't be combated with the approved insecticides based on pyrethroids and carbamate. The use of Gaucho WS 70 will in addition act to control green peach aphids resistant to pyrethroids and pirimicarb in the early phase of their establishment.

20. Size and effect of danger

In 2018, sugar-, fodder- and energy beets are grown on 39.000 hectares in Denmark. The area can vary from year to year. The crop is an important cornerstone for the 1100 growers and in their crop rotation. The sugar-, fodder- and energy beet crops also play a significant role in the crop rotation regarding Integrated Pest Management, biodiversity and soil protection as an important spring-sown crop. The sugar beet growing area is concentrated in southern and western Zealand and on the islands Lolland, Falster and Møn. Fodder- and energy beets are mainly grown in Jutland.

The most yield reducing pest is the “virus yellows” complex, which is transmitted by the green peach aphid. It is documented in many European countries that the insect has developed resistance to pyrethroids and pirimicarb, the two alternatives to Gaucho WS 70. The occurrence of aphids and thus the severity of the attacks by virus yellows, can vary greatly between years. It is, however, still remembered that the virus yellows caused severe yield reductions in Denmark prior to the registration of Gaucho WS 70. The yield reduction by virus yellows is estimated to be 10-20%.

In addition to the risk of virus yellows from green peach aphid, the other listed insects can reduce the yield during the establishment and growth of the crop. It has been documented in seed treatment trials that soilborne insects on average reduce the sugar yield by 3%. In years with severe attacks, the yield losses can be up to 20%. This estimation was made without the presence of virus yellows.

The total risk analysis results in an estimated sugar yield loss to be between 10-23% due to the insect pests controlled by Gaucho WS 70, which corresponds to a farm gate value of 70-150 million DKK. This value takes in to account the cost of two applications of pyrethroids and one application of pirimicarb and a seed treatment with Force 20 CS. In addition to the loss in sugar beets, fodder- and energy beets risk a loss at farm gate worth 10-20 million DKK.

An increased cost in sugar beet production will negatively impact the procurement of sugar beets to the two sugar factories in Denmark. This can have an effect on the economy in sugar production, and can result in reduced activities at the factories and lead to a reduction of the number of employees on the sites.

21. Absence of any other reasonable means

It is possible to use approved insecticide containing pyrethroids or the carbamate pirimicarb against cabbage thrips, bean aphid, beet fly and green peach aphid. In the case of the green peach aphid resistance is expected and efficacy to be strongly decreased or absent. In the case of the other pests susceptibility is expected.

In Denmark there is no alternative to control pygmy mangold beetle after the emergence of the beet crop. This pest can cause severe damage and reduce yield potential. The crop rotation practised in beet farming in Denmark minimize problems with the pygmy mangold beetle and other soil dwelling pests, but doesn't completely remove the problems with these pests.

The efficacy of Gaucho WS 70 is due to its systemic effect on damaging pests up to 12 weeks after sowing. Gaucho WS 70 affects the sap-feeding, leaf-eating and root-eating insects in the most vulnerable phase of the plant.

An alternative control method of insects damaging seedling pests, is Force 20 CS (tefluthrin, 20 %). It is registered as a seed treatment in sugar-, fodder- and energy beets and belongs to the group of pyrethroids. The efficacy of tefluthrin is shown to be reduced under severe pest pressure of, for example, pygmy mangold beetle and thrips. It is not efficient to control the establishment of the green peach and beet aphids. The experience from multiple field trials is that the product has its best efficacy only until emergence of the seedlings.

The alternatives which include broad acre applications with pyrethroids will negatively affect all insects in the fields, including beneficial insects (insect predators). The early treatments, where Gaucho WS70 are active, will occur at a time when the natural enemies are beginning to settle and will be a major setback for their activity and could increase the pest levels later in the season.

We estimate that it will not be possible to setup a decision support system to evaluated using treated or untreated seeds. It could be considered to establish a warning system monitoring green peach aphid arrival and resistance status, as in the 1980-90s, but considering the widespread insecticide resistance of the green peach aphid and the desire to preserve the natural enemies of the various pests. This is considered a bad solution.

The crop rotation practised in beet farming in Denmark minimize problems with the soil dwelling pests. We are not aware of other non-insecticide alternatives.

Application for Derogation of Gaucho WS 70 has been submitted in a number of European countries, for instance in Germany, Belgium, France, Poland and will be so also in Sweden.

22. Rationale

Gaucho WS 70 has been approved for many years and have been used widely in many crops. The product has now been banned in the EU, because of a perceived risk of a negative impact on bees.

The use as a seed treatment in sugar-, fodder- and energy beets can be categorised as a use with a minuscule risk of impact on bees. For the following reasons:

- Sugar-, fodder- and energy beets seeds are pelleted, and the a.s. are contained in the inner layers of the pellet. There is for this reason no direct contact with the a.s. in the seeder, and only very limited possibility of contaminated dust or risks when handling the seed.
- Sugar-, fodder- and energy beets are a non-flowering crop, and beet fields are normally kept without growth of flowering weeds. There will be no bees foraging in beet fields. Should there be a few flowering weeds, those will have their own roots and will not be contaminated.
- With the limitations imposed (see point 11), there will be no flowering crops in the field until at least two years after the sugar-, fodder- and energy beets. Any a.s. in the soil will therefore be decomposed.
- There is very rarely guttation in sugar-, fodder- and energy beets. Especially when compared to other crops. Research has concluded that it is unlikely that bees will be

contaminated with a.s. because of drinking the guttation from sugar-, fodder- and energy beet leaves.

- Gaucho WS 70 is in addition an important product in order to counteract or avoid resistance, especially towards green peach aphid. This species is highly resistant to both pyrethroids and pirimicarb in other growing regions in Europe.
- The effects of Gaucho WS 70 are highly selective towards beet-damaging species, giving the pest must digest a part of the beet for any uptake of the a.s.. The alternative treatment with one or two applications with a pyrethroid will impact all insects in the field, and therefore will be detrimental to beneficial insects such as ladybugs, Carabidea ground beetles and others. The use of Gaucho WS 70 therefore can have a positive environmental impact.

23. Mitigation measures

Mitigation of any possible impact on bees have been implemented through the listed limitations in use. See point 11.

24. Applications in progress

25. Research activities

Testing and evaluation of alternative control measures has been undertaken in field trials and in demonstration plots by Nordic Beet Research (NBR) and Nordic Sugar.

The seed treatment alternative to Gaucho 70 WS, tefluthrin, is being tested by NBR and compared to untreated crops in two field trials with natural pest infestation in both Denmark and Sweden in 2018. In the same trials, different chemical strategies to control insects after emergence are tested. In addition to these trials, the presence of virus yellows in Denmark is being monitored, also by NBR, in a large scale trial network in collaboration with Sweden, Germany, Belgium and the Netherlands. The work is funded by NBR.

A 5 ha demonstration area has been established in a grower's field, with an alternative seed treatment (Force 20 CS, tefluthrin 20%). The area has been followed by Nordic Sugar through the season, and control measures has been established when damage thresholds were exceeded. The area has been treated two times with insecticides in 2018 due to severe attacks by bean aphids. One application with a pyrethroid and one application with pirimicarb. The demonstration will continue in 2019. The demonstrations are funded by Nordic Sugar.