

The UK Expert Committee on Pesticides (ECP)

Full Minutes of the meeting of the UK Expert Committee on Pesticides (ECP) held 27 April 2021

Due to the COVID-19 pandemic and lockdown measures that were in place, the meeting was held via Microsoft Teams.

Those present:

Chairman:

Prof W Cushley

Members:

Prof R Blackshaw; Mr R Davis; Mr M Dempsey; Dr J Garratt; Mr M Glynn; Dr M Hare; Dr C Harris; Prof T Hutchinson; Dr R Mann; Dr C Morris; Dr M Rose; Prof A Smith Prof D Spurgeon and Prof M Whelan

Assessors:

Dr S Jess (representing the Department of Agriculture, Environment and Rural Affairs, Northern Ireland); Ms G Reay (representing Scottish Government); Mr D Williams (Defra) and Mr M Williams (Welsh Government)

Advisors:

Ms E Butcher (Public Health England); Mr A Dixon (HSE); Dr J Hingston (HSE); Ms S Hugo (Defra); Mr B Maycock (FSA); Ms C Meacher (Defra); Dr J Newman (Environment Agency); Mr M Penrose (HSE); Dr C Snaith (HSE); Mr G Stark (HSE) and Ms M Wade (HSE)

Others:

Ms F Beacon (HSE); Ms L Boaz (HSE); Mr J Chambers (HSE); Mr T Fisher (HSE); Ms A Gane (HSE); Mr M Hawkins (HSE); Mr D Hurrell (Defra); Ms M Joao Pontes (Defra); Mr C King (Defra); Ms S Mattock (HSE); Mr B Neill (HSE); Mr D O'Neill (Defra); Mr C Rundle (HSE); Mr J Webb (Defra) and Dr B Woolacott (HSE)

Apologies:

Ms H Chambers; Prof T Lock; Mr A Burn (Natural England)

Agenda Item 1: Introduction

1.1 The Chair reminded the meeting of the confidentiality of the papers and their discussions. If Members believed that they had a commercial or financial interest in any of the items being discussed, they were required to declare their interest to the Chair and Secretariat prior to the meeting. They may then either be invited to absent themselves from the discussions; not participate and/or not be involved in any discussions and decision-making, unless invited to do so.

1.2 One Member identified a potential conflict of interest where they were aware their employer had previously been involved with an active substance that would be discussed within the meeting. As they had not been involved in this work, it was decided this was a non-personal, specific conflict and the Member could remain and participate in discussion on the relevant agenda item.

Agenda Item 2: Full Minutes of the previous meeting [ECP 1 (43/2021)]

2.1 The draft Full Minutes of the March 2021 meeting were agreed subject to minor amendments.

2.2 Members noted a point in the advice note for 'Insyst' on sugar beet in the minutes was not worded clearly (final bullet point of paragraph 4.4). As the advice note had been finalised the minutes would not be amended. The point should have stated: 'There were no risk to birds that required mitigation'. This wording does not change the advice the ECP provided.

Agenda Item 3: Matters Arising and Forward Business Plan [ECP 2 (43/2021)]

3.1 The Secretariat provided an update on matters arising from previous meetings and invited Members to suggest any additions/amendments to the forward business plan which would be incorporated before the next meeting.

Agenda item 4: Emergency Authorisation: 'Exirel 10SE' on wine grapes (ECP 3 – 3-2 (43/2021))

4.1 The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Exirel 10SE' (contains 100 g/l cyantraniliprole) intended for control of spotted wing drosophila (*Drosophila suzukii*) (SWD) on outdoor wine grapes.

4.2 The Committee was asked to advise on any new information that may impact on their previous advice provided at their April 2020 meeting. Members discussed the application, and their full advice can be found in Annex 1 of these minutes.

Agenda item 5: Emergency Authorisation: ‘Exirel 10SE’ on plum, cherry, outdoor and protected blueberry and outdoor and protected raspberry and blackberry [ECP 4 – 4-8 (43/2021)]

5.1 The Government has received four applications for emergency authorisations under Article 53 of Regulation 1107/2009 for the use of ‘Exirel 10SE’ (contains 100 g/l cyantraniliprole) intended for control of spotted wing drosophila (*Drosophila suzukii*) (SWD) on outdoor cherry, outdoor plum and damson, outdoor and protected blueberry and outdoor and protected raspberry and blackberry.

5.2 The Committee was asked to advise on any new information that may impact on their previous advice provided at their April 2020 meeting. Members discussed the application, and their full advice can be found in Annex 2 of these minutes.

Agenda item 6: Emergency Authorisation: ‘Tracer’ on plum and cherry [ECP 5 – 5-4 (43/2021)]

6.1 The Government has received two applications for emergency authorisations under Article 53 of Regulation 1107/2009 for the use of ‘Tracer’ (contains spinosad) intended for the control of spotted wing drosophila (*Drosophila suzukii*) (SWD) on outdoor plum and cherry.

6.2 The Committee was asked to advise on whether there is any further information to support the case for need and on any new information that may impact on their previous advice provided at their April 2020 meeting. Members discussed the application, and their full advice can be found in Annex 3 of these minutes.

Agenda item 7: Emergency Authorisation: ‘Movento’ on sugar beet [ECP 6 – 6-2 (43/2021)]

7.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of ‘Movento’ (contains spirotetramat) intended for the control of *Myzus persicae* to protect against beet virus yellow (BVY) on sugar beet.

7.2 The Committee was asked to comment on HSE’s conclusion regarding the information which would be required to enable a more informed conclusion on the justification of a third foliar spray, and to provide views on the appropriate level of monitoring information required to be collated and submitted by the applicant to HSE. Members discussed the application, and their full advice can be found in Annex 4 of these minutes.

7.3 New information was presented about the monitoring data that was included in this application, and also a previous application for the use of Insyst (acetamiprid) as a foliar spray to control *Myzus persicae* on sugar beet which was considered by the Committee at

the March 2021 meeting. This new information changed the interpretation of the data and would have affected the Committee's discussion of the balance of evidence in the Insyst application.

Agenda item 8: Emergency Authorisation: 'Insyst' on field beans [ECP 7 – 7-2 (43/2021)]

8.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Insyst' (contains acetamiprid) intended for the control of bruchid beetle (*Bruchus rufimanus*) in field beans for seed crop production.

8.2 The Committee was asked to advise on the nature and relative degree of risk, highlight any concerns and advise if the risks could be further mitigated. Members were also asked to comment on the degree to which the limited requirements were met and on whether the proposed conditions of use along with the required record keeping are sufficient means to demonstrate that the use is controlled. Members discussed the application, and their full advice can be found in Annex 5 of these minutes.

Agenda item 9: Emergency Authorisation: 'Curatio' on organic apple and pears [ECP 8 – 8-2 (43/2021)]

9.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Curatio' (contains 380 g/l lime sulphur) intended for the control of apple scab (*Venturia spp*) on organic apple and pear.

9.2 The Committee was asked to advise on whether it was aware of any information that would negate the viability of the alternative method of scab control on these organic crops, on the appropriateness and proportionality of the risk assessments and on the novel risk mitigation measures proposed should an authorisation be granted. Members discussed the application, and their full advice can be found in Annex 6 of these minutes.

Agenda item 10: Emergency Authorisation: 'Benevia 10OD' on:

10.1 Leek [ECP 9 – 9-2 (43/2021)]

10.1.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 10OD' (contains 100 g/l cyantraniliprole) intended for the control of onion thrips (*Thrips tabaci*) on leek.

10.1.2 The Committee was asked if they were aware of any information that HSE has not accounted for in this evaluation that may alter the proposed recommendation. Members discussed the application, and their full advice can be found in Annex 7 of these minutes.

10.2 Kale, collard and outdoor brassicas [ECP 10 – 10-2 (43/2021)]

10.2.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 10OD' (contains 100 g/l cyantraniliprole) intended for the control of diamond-back moth (*Plutella xylostella*, DBM) on outdoor kale and collard and oriental brassicas.

10.2.2 The Committee was asked to advise on whether the HSE conclusion is justified. Members discussed the application, and their full advice can be found in Annex 8 of these minutes.

10.3 Protected chinese cabbage [ECP 11 – 11-2 (43/2021)]

10.3.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 10OD' (contains 100 g/l cyantraniliprole) intended for the control of flea beetle and cabbage stem flea beetle (*Psylliodes chrysocephala*) on oriental cabbages grown under temporary and permanent protection.

10.3.2 The Committee was asked to advise on the nature and degree of risk identified to aquatic invertebrates and sediment dwelling invertebrates from drainflow when set against an emergency situation in a proposed treatment area of 54ha. The Committee was also asked to advise on whether setting a restriction to treat crops in polytunnels with sides down to meet the necessary mitigation of risk to non-target arthropods was more appropriate than a restriction to avoid spraying within 10m of the field boundary to reduce the effects on non-target insects or other arthropods. Members discussed the application, and their full advice can be found in Annex 9 of these minutes.

10.4 Strawberry [ECP 12 – 12-2 (43/2021)]

10.4.1 The Government has received an application for an emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 10OD' (contains 100 g/l cyantraniliprole) intended for the control of spotted wing drosophila (SWD) (*Drosophila suzukii*) on outdoor and protected strawberries.

10.4.2 The Committee was asked to advise on whether the risk to surface water via drainflow is impacted by the EU data gap on cyantraniliprole degradation in soils of pH 4.7 – 5.9. Members discussed the application, and their full advice can be found in Annex 10 of these minutes.

10.4.3 In consideration of the suite of emergency authorisation casework presented to ECP at the meeting, Members noted their increasing concern about the way emergency authorisations under Article 53 of Regulation 1107/2009 are being used and advised government to test robustly whether:

- Applicants have a viable strategy for avoiding long-term reliance on emergency authorisations;

- There is evidence that growers are sufficiently engaged in the management of identified risks in product use and data generation
- The cumulative impact of multiple authorisations containing the same active substance is taken into account

Agenda item 11: Date of next meeting

11.1 25 May 2021 – full business meeting – to be held virtually.

Agenda item 12: Any other business

12.1 SWD Control – Information paper [ECP 13 – 13-2 (43/2021)]

12.1.1 HSE presented an information paper which detailed the developments for the control of the fruit fly spotted wing drosophila (SWD) by chemical companies, researchers and AHDB. The paper highlighted considerable resources invested in developing alternative plant protection products to counter SWD. Members were of a view that despite considerable effort from all interested parties, there was no realistic resolution for the problem in sight.

12.2 Defra update

12.2.1 Defra informed the Committee that they would introduce a mechanism to feedback to Members on regulatory decisions.

12.3 Chair's Report

12.3.1 The Chair reported that in the paperwork reviewed for the meeting, Members had noted a number of areas where there was a lack of compliance with restrictions placed on the authorisations. Whilst compliance is not necessarily a subject of direct responsibility for the Committee, it is a matter of considerable interest and Members advised that they would like an overview of enforcement activities. The Secretariat will arrange for an overview to be provided at a future meeting.

Action: Secretariat

**Rachel Merrick
ECP Secretariat
May 2021**

ECP ADVICE TO GOVERNMENT: USE OF 'EXIREL 10SE' ON OUTDOOR GRAPES**Issue**

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Exirel 10SE' (100 g/l cyantraniliprole) intended for control of spotted wing drosophila (*Drosophila suzukii*) (SWD) on outdoor wine grapes.

Action required

2. The Committee is requested to advise on any new information that may impact on their previous advice.

Discussion

3. The Committee *noted* that:
 - This was the fourth consecutive application for this use.
 - Spotted Wing Drosophila in wine grapes is no longer an 'emergency' but an established pest and that there have been three seasons in which to gather data to support this application.
 - The case for need is still based upon qualitative views and has not changed since the first application for a derogation.
 - The applicant failed to provide the data that were a condition of authorisation in 2020 and the presented reasons suggested a lack of engagement with the necessary requirements to justify authorisation.
 - The applicant estimated the treated area would be around 550 ha in Wales and Southeast England but offered no further justification and it is therefore not possible for ECP to assess the scale of risk. The application period would be August to October 2021.
 - There is a lack of clarity concerning the decision of whether to spray or not; there is no threshold, rather the trigger will be an undefined, rapid increase in trap catches.
 - There is a limited number of alternative available products to provide season-long control and a risk of resistance developing.
 - Mitigation is necessary to achieve an acceptable risk to aquatic life.
 - No clear conclusion could be drawn on the risk from wine grapes grown in soils in the pH range 4.8 to 5.9.
 - The proposed long-term solution is the full authorisation of the product but, currently, there are outstanding data requirements and no application under review.
 - Implementation of a 10m unsprayed buffer zone potentially increases the risks of a) creating an in-field reservoir and b) contaminating the harvested crop. There was no information on whether this condition of authorisation had necessitated any changes in cropping and/or harvesting.

4. The Committee *agreed* with HSE's evaluation that:

- Risks to groundwater are acceptable for an Article 53 application, notwithstanding the data gap for aerobic soil degradation in the pH range 4.8 to 5.9
- An acceptable risk to birds, mammals, earthworms and other soil macro-invertebrates and non-target terrestrial plants has been demonstrated without the need for any risk mitigation.
- A standard risk mitigation phrase is required to prevent applications when the crop is flowering and flowering weeds are present in order to protect bees.
- The risk to non-target arthropods is unacceptable and requires mitigation using a 10m buffer zone with a 3-star (75% drift reduction) drift reduction technology
- There is a lack of alternative control methods available to control this pest.

5. The Committee *disagreed* with HSE's evaluation that:

- The applicant had demonstrated a clear case for need since there was a lack of evidence.
- That there was evidence to show that use either had been, or would be, controlled.

6. The Committee *advised* that:

- The aerobic soil degradation data gap should be addressed, but should not be viewed as an impediment to granting an authorisation in this case.
- The requirement for a 10m buffer zone within the crop as a non-standard risk mitigation measure for non-target arthropods (NTA) is acceptable, given the proposed scale of use.
- A condition of authorisation should be the collection and submission of data that will justify the case for need and demonstrate that use is controlled through appropriate pest management criteria. Such data to be a pre-requisite for the consideration of any future applications under Article 53, of Regulation 1107/2009.

Conclusion

7. On the basis of the evidence presented to ECP, the Committee agreed that an authorisation under Article 53 of Regulation 1107/2009 could be supported subject to the advice presented above.

ECP ADVICE TO GOVERNMENT: USE OF 'EXIREL 10SE' ON PLUM, CHERRY, OUTDOOR AND PROTECTED BLUEBERRY AND OUTDOOR AND PROTECTED RASPBERRY AND BLACKBERRY

Issue

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Exirel 10SE' (contains 100g/l cyantraniliprole) intended for control of Spotted Wing Drosophila (SWD) (*Drosophila suzukii*) on: outdoor cherry; outdoor plum and damson; outdoor and protected blueberry; and outdoor and protected raspberry and blackberry.

Action required

2. The Committee was requested to advise on whether it is aware of any new information that may impact on their previous advice; or has any comments or views for HSE to consider.

Discussion

3. The Committee *noted* that:
 - This is the 7th consecutive application for use in cherry and the 6th consecutive application for all other uses.
 - 'Exirel 10 SE' is not currently authorised in the UK, though the active substance cyantraniliprole is, with products on the market for use on brassicas.
 - There was no evidence that users had adhered to the three conditions of use mandated by the 2020 authorisations.
 - Limitation of use is to be ensured by restricting application to crops grown in specified counties but there is no description of how this will be achieved.
 - Usage data show greater use in Kent and the Southeast, reflecting both the greater area of susceptible crops grown in those counties and the higher numbers of SWD in the traps, but this does not demonstrate that grower/agronomist decision-making in deciding to spray is in line with the stated triggers.
 - SWD is now an established pest and the evidence base for the case for need has not changed since the first applications when it was considered to be an invasive pest and emergency control measures were needed.
 - There is no clarity around the decision-making of agronomists when advising to spray (or not).
 - Regulatory assessments indicate that two applications per year is not going to result in cumulative ecotoxicological effects over the life-cycle of the crops.
 - One part of the documentation states that the owner intends to re-submit an application to support the on-label authorisation of this product. New non-target arthropod data are being generated to address the unresolved risk. Following the

range-finding studies conducted by the owner, further studies are planned for early 2021, to support an application late 2021/early 2022.

- Residues trials data requirements have been partially met. Trials for outdoor blueberries were submitted but no data were provided for cherries. A deadline of 2022 has been given to the applicant for generation and submission of these data. However, the applicant has stated no budget has been assigned to this for 2021, so it is judged highly unlikely the deadline will be met. Overall, there is evidence that the owner is reducing support to progress an application for on-label authorisation.
- The prospect of alternative plant protection products is several years away at least, but research into a range of alternatives for a long-term solution is active and ongoing.
- Evidence of adherence to the export restriction on raspberries and blackberries was submitted, in the form of declarations signed by growers and producers that they did not export any, with the reason given that the quality of the crop is such that it cannot be taken long distances and so it is not feasible.
- The applicant states that due to budgetary constraints, SWD trap counts were discontinued on many sites at the end of 2018. The Committee noted that these are high value crops and the potential financial loss to growers is a key part of the applicant's case for need; adequate pest monitoring is an essential component of IPM and should therefore be considered a production cost alongside other inputs.
- Several of the alternative control options emerging from research programmes also depended upon an on-label authorisation.

4. The Committee *agreed* with HSE's evaluation that:

- There were a limited number of alternative available products and, consequently a risk of resistance developing.
- Non-dietary exposures can be mitigated by requirements to use closed cabs and wear suitable PPE when applying products, handling concentrate, handling contaminated surfaces and/or entering recently treated areas.
- Consumer exposures were acceptable for all uses.
- The quantitative groundwater assessment predicted environmental concentrations in groundwater values within those already assessed for other cyantraniliprole products where comparable data are available. There is a data gap for aerobic soil degradation in the pH range 4.8 to 5.9 and no clear conclusion could be drawn on the risk for crops grown in soils in this pH range. In the absence of data on the area of crops grown on such soils, the scale of risk cannot be evaluated.
- An acceptable risk to birds, mammals, earthworms and other soil macro-invertebrates and non-target terrestrial plants has been demonstrated without the need for any risk mitigation.
- For non-target arthropods a non-standard risk mitigation measure of a 10m buffer zone with a 3-star drift reduction technology is required to ensure an acceptable risk when using a broadcast air assisted sprayer.

- For honeybees a standard risk mitigation phrase is required for all uses to prevent applications when the crop is flowering, and flowering weeds are present.
- An acceptable risk to aquatic life has been identified providing that a 10m no-spray buffer zone is applied when using a broadcast air assisted sprayer.
- There is a need for a more robust stewardship scheme to demonstrate that use is controlled.

5. The Committee *disagreed* with HSE that:

- Use is limited and controlled.
- There was a convincing permanent control solution

6. The Committee *advised* that:

- New information on the behaviour of growers in failing to keep necessary records, and lack of evidence on information used to determine whether to spray, did not provide assurance that the use was being sufficiently controlled. This represented a change in advice from ECP on this aspect of this case.
- The case for need for these uses should be updated to reflect that fact that SWD was no longer an invasive species.
- Stewardship recording should encompass both the reporting of when and why sprays were applied and the spray programme for the crop, in order to demonstrate that use is both needed and controlled. Given the limited crop areas involved it should be possible to collect and synthesise complete data.
- The intentions of the owner with respect to a permanent solution via an on-label authorisation remains to be determined.
- The area of each crop grown on soils in the pH range 4.8 to 5.9 should be established to define the scale of potential risk from the data gap.

Conclusion

7. On the basis of the evidence presented to the ECP, the Committee agreed that it could not support the granting of an emergency authorisation under Article 53 of Regulation 1107/2009 because: i) there is no evidence that use is controlled; ii) there is no evidence that growers have complied with conditions of use in previous authorisations; iii) the product owner is reducing support for securing on-label authorisation.

ECP ADVICE TO GOVERNMENT: USE PF 'TRACER' ON PLUM AND CHERRY**Issue**

1. The Government has received two applications for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Tracer' (spinosad) intended for control of the fruit fly spotted wing drosophila (*Drosophila suzukii*) (SWD) on outdoor plum and cherry.

Action required

2. The Committee is requested to advise on:
 - Whether there is any further information to support the case for need.
 - Any new information that may impact their previous advice.

Discussion

3. The Committee *noted* that:
 - This was the seventh emergency application for plum and eighth emergency application for cherry for this use.
 - The case for need presented by the applicant remains qualitatively the same as at the first submission in 2014, but the scenario has changed from that of a newly-invasive to an established pest.
 - The estimated treated area will be around 850ha in England and Scotland with an application period of June to September 2021.
 - The removal of the need to apply for a derogation under Article 53 of Regulation 1107/2009 depends upon a full authorisation of the product and there is no evidence to suggest that progress is being made in achieving this.
 - The export restrictions set on the emergency authorisation for 2020 were not complied with, as approximately 530 tonnes of treated produce were exported to five different countries. Due to Great Britain no longer being part of the EU an export restriction can no longer be a regulatory requirement and it is the responsibility of industry to ensure compliance with market standards.
 - The failure to comply with data requirements and the clear evidence of ignoring previously set conditions undermines confidence that this sector has complied with past conditions of use, or will comply in the future.
 - An acceptable risk to aquatic life depended upon a 50m buffer zone.
4. The Committee *agreed* with HSE's evaluation that:
 - An acceptable risk to birds, non-target arthropods, soil-organisms and non-target plants has been demonstrated without the need for any risk mitigation.

- An acceptable risk to bees is possible provided use is restricted to when neither the crop nor weeds are in flower and bees are not foraging.
- A 50m buffer zone was required to mitigate the risk to aquatic life.
- Controlled use has not been demonstrated because no usage information has been presented in response to data requirements set as conditions of authorisation in 2020.
- The 2022 deadline to receive residue trials data is unlikely to be met as the applicant has not assigned a budget in 2021 to generate the data required.

5. The Committee *advised* that:

- The proposed area for treatment meets the need for use to be limited.
- The lack of data weakens the case for continuing need against an established pest, as opposed to emergency intervention against a newly-arrived pest.
- A reasoned and evidenced case for continuing need should be a requirement for repeat applications, with an expectation of annual updates.
- Evidence of failure to comply with conditions of authorisation should be interpreted as use not being controlled.

Conclusion

6. On the basis of the evidence presented to ECP, the Committee agreed that it was unable to support an emergency authorisation under Article 53 of Regulation 1107/2009 because: i) there was no evidence of continuing need; ii) there was no evidence that use would be controlled; iii) there was evidence of substantial non-compliance with conditions set by Government for the last derogation.

ECP ADVICE TO GOVERNMENT: USE OF 'MOVENTO' ON SUGAR BEET**Issue**

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Movento' for control of *Myzus persicae* to protect against beet virus yellow (BVY).

Action required

2. The Committee was invited to:
 - Comment on HSE's conclusion regarding the information which would be required to enable a more informed conclusion on the justification of a third foliar spray.
 - Provide views on the appropriate level of monitoring information required to be collated and submitted by the applicants to HSE.

Discussion

3. The Committee *noted* that:
 - The case for need could not be evaluated because there were no data in the application to define the scale and level of risk to the crop. Members observed that data on crop sowing dates being collected by BBRO could have helped understand this aspect.
 - BBRO forecasts indicate that aphid flight was not expected until mid/late May and that numbers were predicted to be low.
 - There are two alternative products currently authorised for this use and no evidence to suggest that these will not afford sufficient control.
 - Members have not seen any data that quantify the potential yield losses from a late season migration in relation to known mid-summer population decline of *Myzus persicae*.
 - The applicant explained that decisions on whether to treat a crop in the monitoring data from 41 national sites do not use the reported aphid counts but are based on monitoring elsewhere in the field. This is of considerable concern to Members because it calls into question the reliability of monitoring (different results obtained depending upon where samples are taken) and the effectiveness of decision-making. Members' evaluation of these data indicates that in 40-50% of cases the wrong decision on whether to spray may have been taken.
 - These data do not provide evidence that use of any foliar sprays in this crop is robustly controlled and undermine confidence that this condition of authorisation will be satisfied.

- There was no evidence that agronomists, when scouting the crop, sampled a minimum of 12 plants at five locations.
- On the basis of buffer zone requirements, Movento appears to have less ecotoxicological risk than the previously authorised product, Insyst.

4. The Committee *agreed* with HSE's evaluation that:

- The case for need has not been demonstrated.
- The predicted exposure to operators, workers and bystanders/residents is within acceptable limits.
- Consumer risks are acceptable. ECP supported use of US data in conducting the assessment as a pragmatic approach.
- Predicted levels of spirotetramat and its metabolites in groundwater are within acceptable levels.
- An acceptable risk to birds, mammals, aquatic organisms, bees, soil organisms and non-target plants was demonstrated without risk mitigation.
- The risk to non-target arthropods is acceptable providing a 5m buffer zone is applied

5. The Committee *disagreed* with HSE's evaluation that:

- Current stewardship proposals are sufficient to meet the requirement of use being limited and controlled.

6. The Committee *advised* that:

- At a minimum, Government should expect to see data that define the scale of risk (area of crop, locations, predicted losses etc.) and the direction of pest population growth in order to be able to reach a balanced evaluation of the case for need.
- The applicants' submission raised substantial doubts about their pest monitoring procedure. There is a need to review data to understand the scale of potential error in decision-taking. The primary question to be addressed is the relationship between counts from sampled plants and the frequency distribution of plant counts at the field scale. This applies to all applications for applications under Article 53 of Regulation 1107/2009 for foliar sprays for this use and is necessary to restore confidence that use can be sufficiently controlled.
- Data to be submitted by the applicant should include the number of plants sampled and average aphid counts/plant.
- Where industry is using Article 53 of Regulation 1107/2009 derogations to construct a pesticide tool-box, Government should take into account what data they have on comparative toxicity in scheduling use and authorisation.

Conclusion

7. On the basis of the evidence presented to ECP, the Committee agreed that it could not support the granting of an emergency authorisation under Article 53 of Regulation 1107/2009 because: i) there is no evidence of a case for need; ii) the weakened case for controlled use.

ECP ADVICE TO GOVERNMENT: USE OF 'INSYST' ON FIELD BEANS**Issue**

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Insyst' (acetamiprid) intended for control of bruchid beetle (*Bruchus rufimanus*) in field beans grown for seed crop production.

Action required

2. The Committee is invited to:
 - Advise on the nature and relative degree of risk.
 - Highlight any concerns and advise if the risks could be further mitigated.
 - Comment on the degree to which the limited requirements are met.
 - Comment on whether the proposed conditions of use along with the required record keeping are a sufficient means to demonstrate that the use is controlled.

Discussion

3. The Committee *noted* that:
 - This was the first emergency application for this product under Article 53 of Regulation 1107/2009.
 - The proposed treated area will be around 7,500 – 8,000 ha with an application period of 1 May to 29 July 2021.
 - The efficacy assessment indicated that other insecticides used in the crop had some effect on bruchid beetles but that there was evidence of resistance. Committee members were unable to find the supporting material cited as Foster (2017) to evaluate this statement. None of these insecticides have a label authorisation for the control of bruchid beetles and are not considered suitable alternatives. Non-dietary exposures can be mitigated by requirements for operators to wear suitable PPE when handling the product.
 - An acceptable risk to birds, mammals, bees, soil macro and soil micro-organisms and non-target plants has been demonstrated without the need for any risk mitigation.
 - The acceptable risk to earthworms reported from the assessment was based upon a field study which the Committee had previously criticised.
 - For non-target arthropods, it was not clearly demonstrated that there will be recovery to populations in-field from those off-field, however there is the potential for recovery due to the use being a single application by late July. The off-field assessment cannot be completed because there is no endpoint for fresh residues

as the studies were not conducted to a suitably low application rate - a 5m buffer zone with three-star DRT will provide some mitigation for this risk.

- A product (deltamethrin) already authorised for use on field beans is known to be efficacious against bruchid beetles but the applicants have not proposed this option.

4. The Committee *agreed* with HSE's evaluation that:

- the case for need to control bruchid beetle is accepted due to a lack of alternatives to control the pest and its impact on the crop.
- use is limited by the restriction of use to field beans grown for seed production and the requirement for appropriate record keeping of areas treated and the conditions which lead to the decision to spray can control the use.

5. The Committee *disagreed* with HSE's evaluation that:

- The data showed an unambiguous, acceptable risk to bees.
- An acceptable risk to earthworms had been demonstrated by the cited German field study.

6. The Committee *advised* that:

- Environmental and human health risks had been assessed appropriately. The risks which were identified could generally be mitigated and/or were at levels that did not outweigh the need to address this emergency situation.
- Standard risk mitigation wording to prevent spraying when bees are foraging (i.e. flowers are available) should be added to the conditions of use.
- Restriction of authorisation to field bean seed crops is sufficient to ensure use is limited.
- The biology and behaviour of the pest is such that seeing beetles in the crop is an acceptable spray threshold providing the other proposed conditions are met. Future applications should include data that demonstrates the accurate implementation of this threshold, noting that deciding not to spray is as important as justifying decisions to spray.
- The field study used to show an acceptable risk to earthworms is flawed. The experimental design takes no account of the behaviour and movement of earthworms. The size of treated plots facilitates a functional response to local earthworm depletions via dispersal to areas where there is less intra and inter-species competition. Such a response would not be available at larger scales (e.g. field). The alternative explanation based on numerical response of population recovery favoured by the authors and HSE depends upon local recovery through reproduction and the timescale for this is greater than the sampling interval used in the study. The data are entirely consistent with a functional response but not a numerical response and it is not possible to conclude an acceptable risk to earthworms from this study, so it remains a data gap. This is the third time the Committee has presented this view to HSE.

Conclusion

7. On the basis of the evidence presented to ECP, the Committee agreed that an authorisation under Article 53 of Regulation 1107/2009 could be supported subject to the advice presented above.

ECP ADVICE TO GOVERNMENT: USE OF 'CURATIO' ON ORGANIC APPLE AND PEAR

Issue

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Curatio' (380 g/l lime sulphur) intended for control of apple scab (*Venturia spp.*) on organic apple and pear.

Action required

2. The Committee was requested to advise:
 - if it is aware of any information that would negate the viability of the alternative method of scab control on these organic crops; and
 - on the appropriateness and proportionality of the risk assessments, and of the novel risk mitigation measures proposed should an authorisation be granted.

Discussion

3. The Committee *noted* that:
 - This was the first emergency application for this product under Article 53 of Regulation 1107/2009.
 - HSE had been provided with limited data on which to determine risks, but had, in the circumstances, conducted thorough and appropriate assessments.
 - The estimated treated area will be 100% of organic apple and pear orchards with an application period of 1 March to 30 June.
 - The proposed use is for 'Curatio' to be applied at 18l product/ha for a maximum of 17 treatments to a maximum dose of 306l product/ha.
 - No information was provided on the mechanism for triggering a decision to spray.
 - No GB MRLs are required for this active substance as lime sulphur is temporarily included in Annex IV of Regulation No 396/2005.
 - Novel mitigation measures would be required in order to demonstrate acceptable off-field risk to non-target arthropods, risk to bees and risk to aquatic organisms via spray-drift.
 - HSE could not complete a full assessment for risk to sediment-dwelling organisms from hydrogen sulphide and risk to soil macro-organisms other than earthworms due to failure by the applicant to provide suitable data.
 - Acceptable risks in the area of non-dietary human exposure have not been demonstrated. The risk assessment concluded for the main metabolite, hydrogen sulphide, that exposure is unacceptable for residents and bystanders.

4. The Committee *agreed* with HSE's evaluation that:

- Acceptable risks in the area of non-dietary human exposure have not been demonstrated.
- There was a need for novel mitigation measures to protect non-target organisms, bees and aquatic systems from spray drift and that those proposed were necessary and proportionate.
- There were insufficient data to complete risk assessments for sediment-dwelling organisms and soil macro-organisms.
- The case for need is not accepted due to the availability of an alternative product.

5. The Committee *disagreed* with HSE that use would be limited and controlled.

6. The Committee *advised* in response to the request for independent scientific advice that:

- It was not aware of any information that would negate the viability of the alternative method of scab control on these organic crops.
- There was no evidence of a threshold being set to indicate when the product should be used and therefore the use is not controlled.
- As 100% of the crop would be sprayed, the use was not limited.
- 17 sprays within the use period could be viewed as prophylactic. The product would be applied in orchards, which are used for 20+ years. Use could, therefore, result in a relatively high, localised environmental risk that is not evaluated under current regulations.
- Greater product availability for conventional crops is not a justification to authorise additional products for organic producers via Article 53 of Regulation 1107/2009.

Conclusion

7. Having assessed the evidence placed before it, the Committee provided a view that, on balance, they do not support that the emergency authorisation under Article 53 of Regulation 1107/2009 could be granted because: i) the availability of an authorised alternative control method equates to no case for need; ii) the lack of evidence for an effective spray threshold fails the qualifying criteria for use being limited and controlled; iii) there are unacceptable risks to residents and bystanders; iv) there are unquantified and unassessed risks to the environment.

ECP ADVICE TO GOVERNMENT: USE OF 'BENEVIA 10OD' ON LEEK**Issue**

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 10OD', an oil dispersion formulation containing 100 g/l cyantraniliprole, for use as an insecticide on leek to control onion thrips (*Thrips tabaci*).

Action required

2. The Committee was asked, whether:
 - The non-standard risk mitigation measure of a 10m non-target arthropod buffer zone is sufficiently protective to support authorisation.
 - It is aware of any information that HSE has not accounted for in the evaluation that may alter the proposed recommendation.

Discussion

3. The Committee *noted* that:
 - This was the fifth consecutive application for this use.
 - '*Thrips tabaci*' is a recognised pest of leek. Feeding damage caused by thrips can reduce the marketable quality of affected produce, with produce containing obvious visible damage often considered unacceptable for sale, depending on the market.
 - 'Benevia 10OD' is not currently authorised in the UK but the active substance is approved and there are two products containing this active that are authorised for use in different crops.
 - There is known resistance to pyrethroid insecticides in thrip populations.
4. The Committee *agreed* with HSE's evaluation that:
 - There is a case for need.
 - Non-dietary exposures can be mitigated provided operators wear suitable protective clothing and suitable protective gloves when handling the concentrate.
 - Dietary exposures were acceptable provided suitable maximum total dose restrictions were set.
 - The quantitative groundwater assessment produced PEC_{gw} values within those already assessed for other cyantraniliprole products.
 - There is a data gap for aerobic soil degradation in the pH range 4.8 to 5.9 and no clear conclusion could be drawn on the risk for leeks grown in soils in this pH range.

- Risks to aquatic life from spray drift are acceptable providing that a 5m buffer zone is applied.
- Risks to non-target arthropods could be mitigated by the imposition of a non-standard risk mitigation measure of a 10m buffer zone plus 50% drift reduction technology to ensure an acceptable off-field risk.
- Risks to honeybees could be mitigated by the inclusion of a standard risk mitigation phrase preventing applications when the crop and flowering weeds are present.

5. The Committee *advised* that:

- The non-standard risk mitigation proposed was sufficiently protective to support authorisation.
- That it was not aware of any information not accounted for in the evaluation that may alter the proposed recommendation.

Conclusion

6. On the basis of the evidence presented to ECP, the Committee agreed they support the granting of emergency authorisation under Article 53 of Regulation 1107/2009.

ECP ADVICE TO GOVERNMENT: USE OF 'BENEVIA 100D' ON KALE AND COLLARD AND OUTDOOR ORIENTAL BRASSICAS

Issue

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 100D' for use on outdoor kale and collard and oriental brassicas to control Diamond-back moth (DBM, *Plutella xylostella*).

Action required

2. The Committee was asked whether the HSE conclusion, that the use is not sufficiently controlled and the resulting proposal to refuse the use on that basis, is justified.

Discussion

3. The Committee *noted* that:
 - This is the sixth consecutive application for this use.
 - The risk from drainflow has not been shown to be acceptable to aquatic invertebrates and sediment dwelling invertebrates for use in July and August.
 - Two applications of 0.75l product/ha once the numbers of DBM exceeds 25 moths per trap per week in any one of seven traps around England and Scotland had been requested by the applicant.
 - A number of effective insecticides are available as alternatives to control DBM on these crops unless there is a surge in DBM populations later in the growing season after other insecticides have already been used.
 - *Bacillus thuringiensis* products are likely to be less efficacious later in the season.
 - No evidence had been presented to help define the risk of a population surge later in the season or its geographic extent.
 - Available evidence (premature request for release of the authorisation in 2020 and widespread applications irrespective of agreed conditions of use) indicate that the proposed trigger of 25 moths/trap/week at any of seven regional monitoring sites does not work and does not deliver any effective limitation and control.
 - There is recent research (2020) from the group that developed the trigger threshold, that describes a more robust approach to determining the scale and extent of seasonal moth migration.
 - The applicant has submitted partial, and sometimes contradictory, responses to the data requirements set in the 2020 authorisation and within these data is evidence that applications were made outside the agreed framework.

- Limited, or no, data describing where the product was used, how much was applied and what were the operational spray thresholds were provided.
- There are substantial discrepancies between usage/sales data provided by the applicant and marketing company.
- There was unauthorised use of the product on 26ha of oriental cabbage in 2020.

4. The Committee *agreed* with HSE's evaluation that:

- The case for need has not been demonstrated at this time.
- Non-dietary exposures can be mitigated provided operators wear suitable protective clothing and suitable protective gloves when handling the concentrate.
- Although MRL exceedances may be anticipated for kale, Chinese cabbage and cattle milk, dietary exposures were acceptable provided suitable maximum total dose restrictions were set.
- The risk from drainflow has not been shown to be acceptable to aquatic invertebrates and sediment dwelling invertebrates beyond one application at the end of June.
- Risks to honeybees could be mitigated by the inclusion of a standard risk mitigation phrase preventing applications when the crop and flowering weeds are present.

5. The Committee *advised* that:

- No appropriate mitigation measures can be applied to ameliorate the risks to aquatic invertebrates arising from July and August applications.
- The applicant has failed the requirement set by the Secretary of State to produce robust data on need and use which was a condition of authorisation in 2020.
- The case for need has not been adequately established.
- There is no evidence that previous use has fulfilled the requirement to be limited and controlled.
- There is evidence that use has exceeded that authorised.

Conclusion

6. On the basis of the evidence presented to ECP, the Committee agreed that it could not support authorisation for this use under Article 53 of Regulation 1107/2009 because of: i) the risk to aquatic invertebrates; ii) an inadequate case for need; iii) evidence that use has been neither limited or controlled.

ECP ADVICE TO GOVERNMENT: USE OF 'BENEVIA 100D' ON PROTECTED ORIENTAL CABBAGE

Issue

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of Benevia 100D' on Oriental cabbages, grown under temporary and permanent protection, to control flea beetle and cabbage stem flea beetle (*Psylliodes chrysocephala*).

Action required

2. The Committee was asked to offer advice on:
 - How the nature and degree of risk identified to aquatic invertebrates and sediment dwelling invertebrates from drainflow could be viewed when set against an emergency situation in a proposed treatment area of 54ha. Would the soil pH which the stated crops are typically grown in negate the risk via drainflow arising from the EU data gap?
 - Would setting a restriction to treat crops in polytunnels with sides down to meet the necessary mitigation of risk to non-target arthropods be more appropriate than a restriction to avoid spraying within 10m of the field boundary to reduce the effects on non-target insects or other arthropods.

Discussion

3. The Committee *noted* that:
 - This was the second consecutive application for this use
 - Two applications would be made at a rate of 0.75 L product/ha to control flea beetle and cabbage stem flea beetle (*Psylliodes chrysocephala*) on protected oriental cabbage (pak choi, Chinese cabbage, mizuna and other minor oriental cabbages such as kai choi and tatsoi).
 - The risk to surface water via drainflow would usually be mitigated by timing restrictions, but that is inappropriate for these crops. There is an acceptable risk found for one application before the end of June but no clear acceptable risk for any other timing, or for any timing with two applications. As Oriental cabbages are typically grown in soils of pH 6.5 the EU data gap driving the risk may not be relevant.
 - The total growing area of these crops is extremely limited. Efforts are made to exclude flea beetles by physical means. However, shot holing can occur and this is highly damaging to the value of the harvested crop given the very high-quality standards demanded for this produce. Chemical control options are limited to pyrethroids and there is evidence of resistance in UK populations.
 - Deficiencies have been identified in the responses to the monitoring and threshold requirements, compromising the adequacy of the 'control' demonstrated.

Discussions will be held with the applicant to stress the importance of providing appropriate monitoring and stewardship data for any repeat application should an authorisation be granted.

4. The Committee *agreed* with HSE's evaluation that:

- The case for need has been demonstrated at this time.
- Non-dietary exposures can be mitigated provided operators wear suitable protective clothing and suitable protective gloves when handling the concentrate and use of appropriate machinery.
- Although MRL exceedances may be anticipated for Oriental cabbage, dietary exposures were acceptable provided suitable maximum total dose restrictions were set. The Committee supported HSE's flexibility in using a non-standard extrapolation to determine the risk here.
- The quantitative groundwater assessment produced PEC_{gw} values within those already assessed for other cyantraniliprole products.
- There is a data gap for aerobic soil degradation in the pH range 4.8 to 5.9 and no clear conclusion could be drawn on the risk for crops grown in soils in this pH range.
- The risk from drainflow has not been shown to be acceptable to aquatic invertebrates and sediment dwelling invertebrates beyond one application at the end of June. No appropriate mitigation measures can be applied to ameliorate the risks.
- Risks to honeybees could be mitigated by the inclusion of a standard risk mitigation phrase preventing applications when the crop and flowering weeds are present.
- An acceptable risk to birds, mammals, soil macro-organisms, soil micro-organisms and non-target plants has been demonstrated without the need for any risk mitigation.
- An acceptable risk to aquatic life from spray drift has been demonstrated, providing that a 5m buffer zone is applied.
- For non-target arthropods, a non-standard risk mitigation measure of a 10m buffer zone plus 50% drift reduction technology is required to ensure an acceptable off-field risk and providing this is applied the in-field risk is acceptable.
- The risk from uses under permanent protection with full enclosure is acceptable.

5. The Committee *advised* that:

- the soil pH data gap was not a barrier to the granting of an authorisation given that: the pH values of the soils in which the crops tended to be grown; the DT50 value was 48 days; and the conservative nature of the risk assessment (which did not account for the fact that crops are grown under protection).

- That better drainflow models and scenarios should be developed for crops grown under cover.
- Including a requirement to keep the sides down on polytunnels might be an alternative to a 10m buffer zone, depending on orientation of the tunnels relative to the protected feature.
- That rational pesticide use would be hampered in situations where both pests are present, given that thresholds exist for each pest separately but not in combination.

Conclusion

6. On the basis of the evidence presented to ECP, the Committee agreed that they did support an emergency authorisation under Article 53 of Regulation 1107/2009 .

ECP ADVICE TO GOVERNMENT: USE OF 'BENEVIA 10OD' ON STRAWBERRY**Issue**

1. The Government has received an application for emergency authorisation under Article 53 of Regulation 1107/2009 for the use of 'Benevia 10OD' (an oil dispersion containing 100 g/l cyantraniliprole) on outdoor and protected strawberries to control spotted wing drosophila (SWD) (*Drosophila suzukii*).

Action required

2. The Committee was invited to provide advice on:
 - whether the risk to surface water via drainflow is impacted by the EU data gap on cyantraniliprole degradation in soils of pH 4.7 - 5.9.
 - to what extent do the standard growing practices mitigate this predicted risk (given that commercially produced strawberries are typically grown in soils of 5.5 - 6.9 pH).

Discussion

3. The Committee *noted* that:
 - This was the fifth consecutive application for this purpose.
 - The data reviewed in the application are identical to the last submission but the recommendation differed.
 - 'Benevia 10OD' is not currently authorised for use in the UK. A previous application for commercial authorisation was refused due to the ecotoxicology risk assessment concluding an unacceptable risk to non-target arthropods (NTA). An acceptable risk could be demonstrated provided a 10m no spray perimeter was observed, and two-star drift reduction technology used, which is permissible for emergency use but not in a full authorisation.
 - Use is required to control SWD which is now established in the UK. The presence of larvae and the damage to the fruit contaminates the crop and can lead to substantial losses for growers.
 - The nature of the pest dictates use will be needed in the higher risk regions of Southeast England earlier and this is also where most use is expected. As SWD populations build up later in the year for more northerly growers, the latest timing restrictions determined by the risk assessment will limit options for use in these regions.
 - The applicants have argued that restriction of use to the end of June or July will be detrimental to control of the pest in the North of England, Scotland and Northern Ireland, but, concurrently, have stated that SWD populations in these regions are smaller and more easily controlled. There are no data to support this aspect of the case for need.

- There is a substantial discrepancy between reported product sales and recorded use of the product in 2020.
- The applicants have not delivered the data required of them under previous authorisation. ECP does not accept that it is not possible to do so. This lack of data undermines confidence that users comply with the conditions of authorisation. The only evidence that use will be limited and controlled is the maximum requested area for treatment.
- This product is required in combination with lambda-cyhalothrin and spinosad to offer season-long control. Due to the lack of available chemistry this programme includes other products also being applied for under the emergency procedure.
- HSE is minded to recommend the granting of the emergency use as proposed by the applicant, two treatments for protected crops and one outdoor, from 1 June to 30 September 2021.
- The existence of Article 53 authorisations in EU Member States does not provide any scientific evidence of a case for need or appropriateness to use a product.

4. The Committee *agreed* with HSE's evaluation that:

- A case for need, based on impacts in southern England, has been demonstrated, but the evidence quality diminishes further north; the later timing of attack is established but the evidence also indicates substantially lower SWD population pressure and hence need for control.
- Non-dietary exposures can be mitigated provided operators wear suitable protective clothing and suitable protective gloves when handling the concentrate and use of appropriate machinery. Members noted that in the absence of enclosed cabs, operator protection of equivalent PPE was required.
- The assessment acknowledged a data gap for aerobic soil degradation in the pH range 4.8 to 5.7, as well as a failure at the first tier for the drainflow assessment. A second-tier assessment was required for both applications.

5. There was an unacceptable drainflow risk to aquatic species and sediment dwelling invertebrates at the proposed GAP of two applications between June and September, with no measures currently available to mitigate this risk. However, an acceptable risk was demonstrated for a single application before the end of June for field-grown crops.

- For protected uses, risks were acceptable for two applications to protected crops before the end of July with the following risk mitigation: Users must not allow direct spray from horizontal boom sprayers to fall within 5m of the top of the bank of any static or flowing waterbody or within 1m of a ditch which is dry at the time of application.
- Use of an untreated buffer zone of 10m to non-crop land to protect non-target insects/arthropods.
- Horizontal boom sprayers must be fitted with a minimum of two-star drift reduction technology for all uses.

- Risks to honeybees could be mitigated by the inclusion of a standard risk mitigation phrase preventing applications when the crop and any weeds are flowering, including plants within any untreated buffer zones.

6. The Committee *disagreed* with HSE that:

- The low level of reported product sales was evidence that use was controlled.
- Seeking full authorisation of Benevia 10D for this use was a viable strategy to obviate the need for future applications under Directive 1107/2009.

7. The Committee *advised* that:

- The degradation data gap was not a barrier to the granting of an authorisation, and the Committee supported the risk assessment being revised to take account of the fact that crops tended to be grown on tables. Assumptions on interception seemed reasonable and irrigation scheduling practices were expected to limit losses to the environment.
- There was a need to develop drainflow models that accommodated crops grown under protection
- Including a requirement to keep the sides of tunnels closed during/following application could help protect NTAs.
- Any future applications need to be fully supported by data to provide the evidence of the case for need in different regions of the UK and that use has been limited and controlled. ECP sees this as a minimum requirement to support the new reporting format recently agreed between HSE, DEFRA and the Devolved Administrations.

Conclusion

8. On the basis of the evidence presented to ECP, the Committee agreed that it supports the emergency authorisation under Article 53 of Regulation 1107/2009; in its opinion this would give the applicants a final chance to provide the requisite evidence for their case.