





EFSA Stakeholders event on non-dietary exposure to plant protection products – March 28th, 2022

CLE OBE TSG – Projects summary Stephanie Nadzialek

Introduction



- **EFSA guidance** is seen as a **critical element** for risk evaluation.
- NEW/relevant data provide greater confidence in decision-making process.



CropLife Europe Operator Bystander Exposure Technical Subgroup (OBE TSG) is highly committed in providing high quality data communicated in a transparent way.



Projects identified as relevant for EFSA guidance (1/2):

Projects fully completed:

Project	Topic	Submitted during EFSA data-call	Comment
Re-entry in grapes (BROV) + new type of PPE/Gloves for workers	Worker	Placeholder	Studies evaluated by CRD and submitted to EFSA. Additional supporting data available for reentry gloves efficiency (2015 study)
Drift during airblast application (BROV)	Resident/ Bystander	Placeholder	Studies evaluated by CRD and submitted to EFSA.
Drift during groundboom application (BREAM 2&3)	Resident/ Bystander	Yes	BREAM 2 submitted to EFSA. BREAM 3 - Efficacy of drift reduction nozzles proven. All data publicly available.
Dermal absorption to dry residues	Worker	No	Link to online paper: <u>HERE</u>





Projects ongoing:

Project	Topic	Submitted during EFSA data-call	Comment
Closed transfer system	Operator	No	Public outreach to get regulator input took place end Q1 2021; field part completed.
DFR meta-analysis	Re-entry	No	Data from 180 EU and approx. 200 US DFR trials on vine and orchard crops being extracted. <i>Data evaluation to start Q2/2022</i> .
Adjustment for light clothing for residents and bystanders	Resident/ Bystander	No	Paper submitted to a journal.
Inventory air concentration	Resident/ Bystander	No	Paper (first part) submitted to a journal.
Air concentration of vapour - BROWSE model validation	Resident/ Bystander	No	BROWSE model validation with field measurement data.



Other OBE TSG projects...

Project	Topic	Project status	Comment
Compounded conservatism in European re-entry worker risk assessment of pesticides	Worker	completed	Link to online paper: HERE
Pesticides in air	Resident	ongoing	Draft report under review.

In conclusion



CropLife Europe encourages the Commission and EFSA to provide:

- A clear overview of mid-term and long-term updates and data needs/gaps to this key document.
- A clear and transparent workflow to optimize the inclusion of new and relevant data, e.g.:
 - ✓ GLP/OECD compliant study?
 - ✓ Requirement for close collaboration with EFSA before study initiation? Study call-in from EFSA to all stakeholders?
 - ✓ Procedures for relevant (exposure) information. Are study reports enough?
 - ✓ Common platform for data upload? Collaboration with data owners?

Clarity and transparency on coming guidance updates and new data would certainly help to improve efficiency, budget and human resource allocations to support adequate risk assessment.



On behalf of the entire OBE TSG, thank you for your attention!

Member	Company	Email
Edgars Felkers (Chair)	ADAMA	edgars.felkers@adama.com
Sarah Adham	Corteva Agriscience	sarah.adham@corteva.com
Udo Blaschke	BASF	udo.blaschke@basf.com
Kathrin Buerling	Bayer Crop Science	kathrin.buerling@bayer.com
Julien Durand-Reville	Phyteis (France)	jdreville@uipp.net
Emilia Gonzalez	Gowan Crop Protection Ltd	egonzalez@gowanco.com
Christian Kuester	Bayer	christian.kuester@bayer.com
Steven McEuen	FMC	steven.mceuen@fmc.com
Luciano Merolla	Corteva Agriscience	luciano.merolla@corteva.com
Neil Morgan	Syngenta	neil.morgan@syngenta.com
Andre Sarti	Syngenta	Andre.Sarti@syngenta.com
Franz Stauber	BASF	franz.stauber@basf.com
Michel Urtizberea	BASF	michel.urtizberea@basf.com
Anne-Kim Vinck	Bayer Crop Science	kim.vinck@bayer.com
Stephanie Nadzialek	CropLife Europe	stephanie.nadzialek@croplifeeurope.eu





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Update on the BROV project

Neil Morgan (Syngenta) on behalf of CLE

Background

- Bystander Resident Orchard Vineyard (BROV) project
 - Initiated to address perceived data gaps in the EFSA guidance
 - Transfer coefficients relevant to European grape cultivation
 - Newer drift measurements for high crops and more scenarios
 - Working group comprising regulatory bodies and Industry
 - Joint development of reports led by UK HSE
 - Similar approach to AOEM

Re-entry exposure in vineyards

- Current EFSA default TCs based in US data
 - PDE from Krieger at al. (1992) \rightarrow 30,000 cm²/h
 - ADE (no gloves) from ExpoSAC Policy 3 \rightarrow 10,100 cm²/h
- BROV project

Study ID	Location	Activity
1	CZ, DE, FR	Harvest, DFR
2	DE,IT	Pruning
3		DFR
4	DE, FR	Pruning
5		DFR
6	FR	Pruning
7		DFR
8		Pruning, shoot lifting, DFR



Total of 73 workers across 3 activities Included "partial nitrile" gloves

Re-entry exposure in vineyards

Clothing/PPE	Percentile	Proposed overall TC value (cm²/h)
No/light clothing	75 th (longer term)	6600
	95 th (acute)	9800
No/light clothing and gloves	75 th (longer term)	3700
	95 th (acute)	6300
Long clothing	75 th (longer term)	4500
	95 th (acute)	4600
Long clothing and gloves	75 th (longer term)	660
	95 th (acute)	1100

Significant potential improvement for EU grape re-entry risk assessment with more relevant, robust data

Not included in the revision to the EFSA guidance

With raw data for independent review

modular update possible?

Bystander/resident exposure to spray drift in vineyards and orchards

- Current EFSA approach based on Lloyd et al., 1987
 - "these data are relatively old and that data for different distances are not available. The WoG recommends that further data are produced to refine the proposed assessment."

BROV drift studies

- 16 studies → 8 orchard, 8 vineyard
- Early and late growth stages
- 4 countries (FR, PO, IT, ES)
- 2 fungicides
- Adult and child mannequins
- PDE, ADE and PIE measured



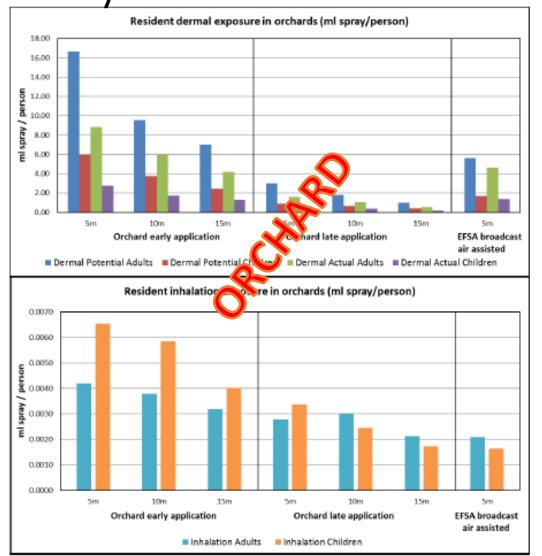
Bystander/resident exposure to spray drift in vineyards and orchards

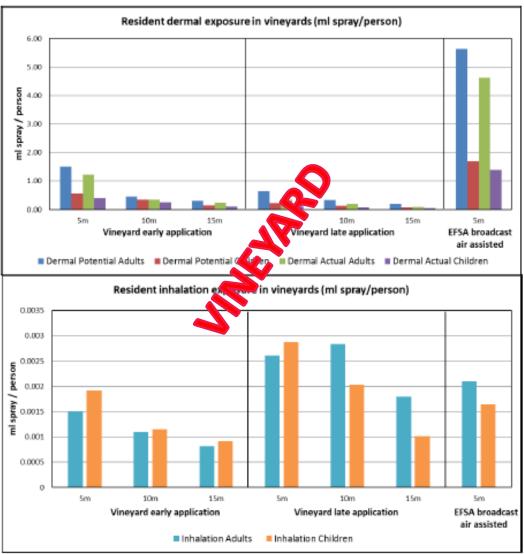
Scenario	Growth Stage (BBCH)	HSE proposal for definition of "late season"
Vineyard early	12 to 15	BBCH71 to BBCH93 (fruit size
Vineyard late	81	10mm to leaf fall)
Orchard early	53 to 57	(Also suggested Day of Year)
Orchard late	81 to 91	

Observations

- Important factors adult/child, orchard v vineyard, leaf cover, distance
- Exposure lower in vineyards than orchards
- No robust model related to wind speed and direction, sprayer, spray quality and concentration or amount applied

Bystander/resident exposure to spray drift in vineyards and orchards (HSE graphs)





Bystander/resident exposure to spray drift in vineyards and orchards

HSE comments

- Good range of equipment and real world scenarios
- Lack of calibration leads to uncertainty in applied volume
 - However this is not significant when comparing ml spray v μg a.s.
- Observed exposures should be restricted to applications represented by trials lower rates covered, higher rates *pro rata*

CLE comments

- Final report received 09/21, comments returned 12/21
- Reservations about calculated spray volumes v actual reported values
- Precautionary approach for values between LOQ and LOD
- Spiking levels defended
- Confusion regarding use of exposure percentiles v volume of exposure

Overall conclusion

BROV drift work provides a large database which will improve on the existing EFSA approach