

EFSA'S COMMODITY RISK ASSESSMENT - SULFURYL FLUORIDE TREATMENT OF ASH LOGS AGAINST *AGRILUS PLANIPENNIS*

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INTRODUCTION

The emerald ash borer (*Agrilus planipennis*) is a Union Quarantine Pest listed in the Implementing Regulation (EU) 2019/2072. To prevent its introduction into the European Union (EU), strict phytosanitary requirements apply to ash wood imported from affected regions.

The United States (US) requested approval to use sulfuryl fluoride (SF) fumigation as a treatment for ash logs destined for export to the EU.

The European Food Safety Authority (EFSA) assessed the likelihood of pest freedom for the ash logs with or without bark treated with SF as proposed by the US¹.

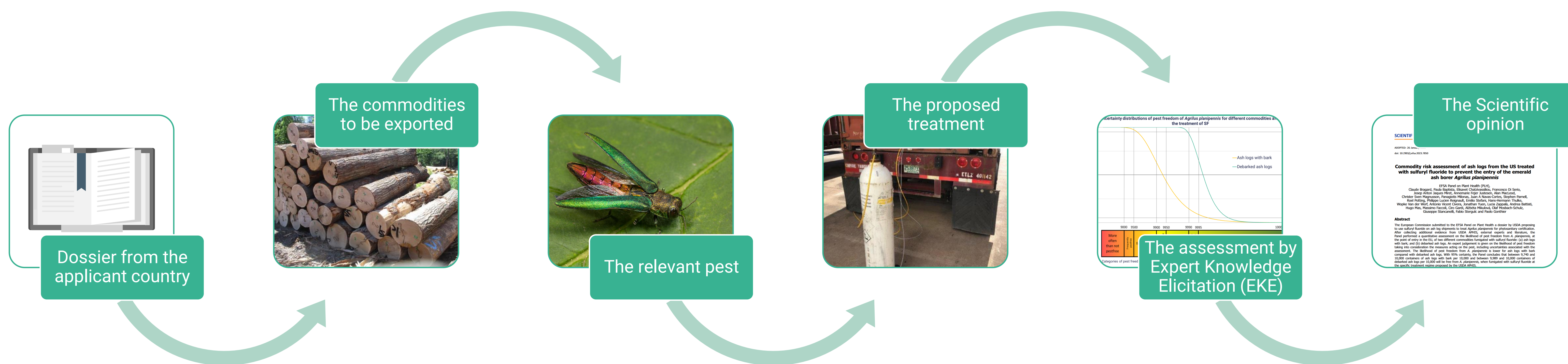


FIG 1 – Workflow of the commodity risk assessment

METHODOLOGY

Commodity risk assessments evaluate the proposed risk mitigation measures based on information provided by the applicant, systematic literature reviews and consultation of wood industry experts².

The pest freedom of the ash logs was estimated based on available evidence by using **Expert Knowledge Elicitation (EKE)** following EFSA Guidance^{3,4,5} which allows transparently and systematically integrating all evidence and expert knowledge.

Question:

“How many containers out of 10,000 are free of *A. planipennis* when treated with sulfuryl fluoride?”

Consideration of different scenarios:

- natural enemies;
- identification and exclusion of symptomatic trees;
- debarking/no debarking;
- fumigation conditions;
- uncertainties in the available information.

The uncertainty distribution is calculated based on values elicited in the EKE (distribution fitted with @Risk).

RESULTS

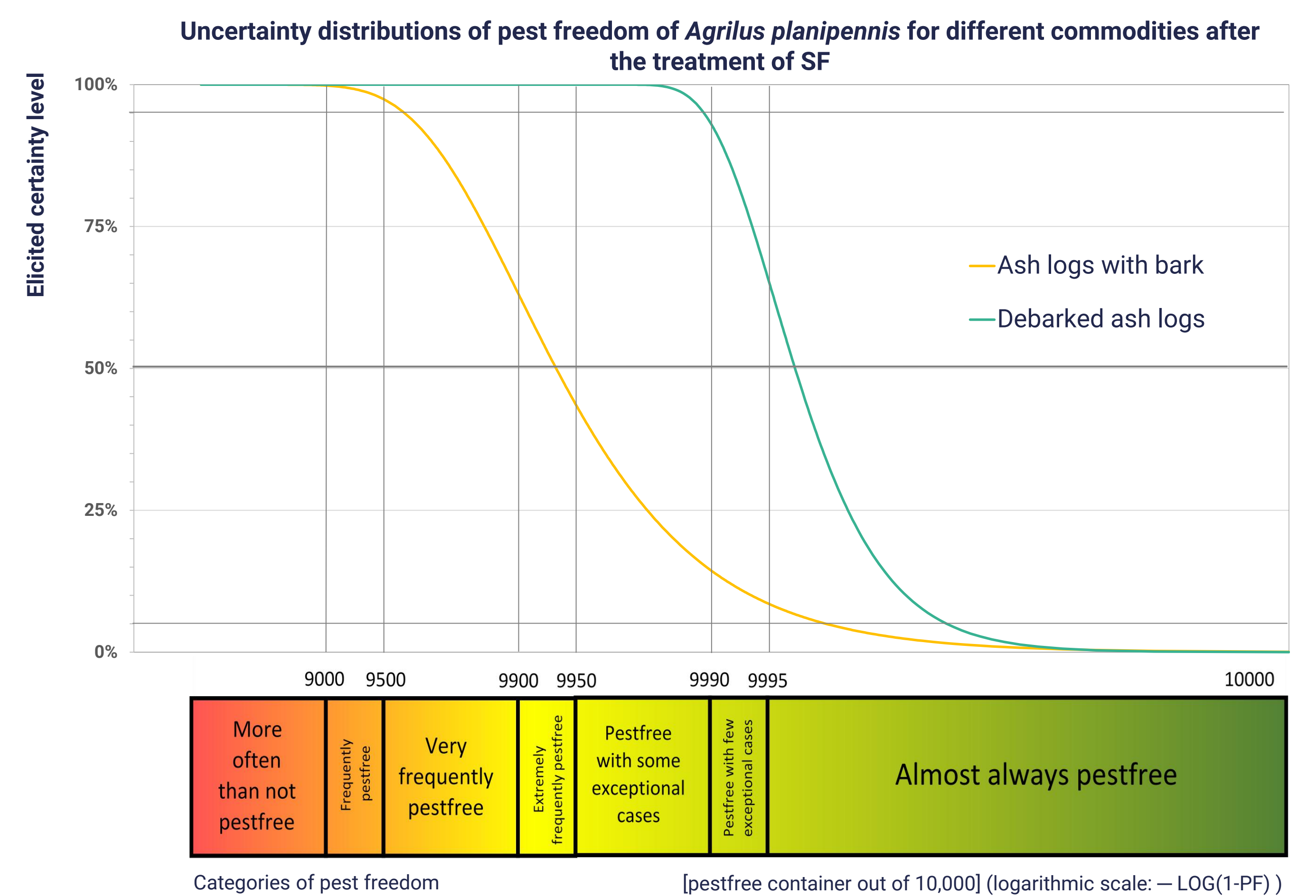


FIG 2 - Elicited certainty (y-axis) of the number of pest-free containers of ash logs (x-axis; log-scaled) out of 10,000 containers designated for export to the EU from the US for *Agrilus planipennis* after the treatment with SF visualised as descending distribution function. Horizontal lines indicate the percentiles (starting from the bottom 5%, 25%, 50%, 75%, 95%)

CONCLUSIONS

The likelihood of pest freedom from *Agrilus planipennis* (95% certainty) is between 9,740 and 10,000 containers of ash logs with bark per 10,000 containers and between 9,989 and 10,000 containers of debarked ash logs per 10,000 containers, when fumigated with sulfuryl fluoride.

Literature:

- ¹ EFSA PLH Panel (EFSA Panel on Plant Health). (2023). Scientific Opinion on the commodity risk assessment of ash logs from the US treated with sulfuryl fluoride to prevent the entry of the emerald ash borer *Agrilus planipennis*. *EFSA Journal*, 21(2), 7850, 44 pp. <https://doi.org/10.2903/j.efsa.2023.7850>
- ² EFSA PLH Panel (EFSA Panel on Plant Health). (2019). Guidance on commodity risk assessment for the evaluation of high risk plants dossiers. *EFSA Journal*, 17(4), 5668, 20 pp. <https://doi.org/10.2903/j.efsa.2019.5668>
- ³ EFSA Scientific Committee. (2018). Scientific Opinion on the principles and methods behind EFSA's Guidance on Uncertainty Analysis in Scientific Assessment. *EFSA Journal*, 16(1), 5122, 235 pp. <https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2018.5122>
- ⁴ EFSA (European Food Safety Authority). (2014). Guidance on expert knowledge elicitation in food and feed safety risk assessment. *EFSA Journal*, 12(6), 3734, 278 pp. <https://efsa.onlinelibrary.wiley.com/doi/10.2903/j.efsa.2014.3734>
- ⁵ EFSA PLH Panel (EFSA Panel on Plant Health). (2018). Guidance on quantitative pest risk assessment. *EFSA Journal*, 16(8), 5350, 86 pp. <https://doi.org/10.2903/j.efsa.2018.5350>