



United States Department of Agriculture

Bob McNally, Director,
Office of Pesticide Programs,
Biopesticides and Pollution Prevention Division (7511P)
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460-0001

February 4, 2019

RE: USDA Comments on the Proposed Interim Decision for Methyl Anthranilate; EPA-HQ-OPP-2011-0678

Dear Mr. McNally:

The United States Department of Agriculture (USDA) appreciates the opportunity to comment on the proposed interim decision for methyl anthranilate announced in the December 4, 2018 Federal Register Notice. USDA supports the EPA's proposed decision to continue the existing registrations without the need for additional data and without label changes in view of this chemical's benefits to U.S. agriculture, aquaculture, and public safety from nuisance birds.

Recent research has been conducted on the efficacy of this avian repellent. Schroeder and Lee (2015) investigated methyl anthranilate use in enclosed agricultural spaces. Ahmed et al. (2018) found protection for maize seedlings against sparrows.

EPA concluded that a reasonable certainty that no harm would result to the U.S. population from aggregate exposure to residues of methyl anthranilate. Any lingering residues are below levels naturally occurring in foods such as grapes. It is a flavoring agent with GRAS (Generally Recognized as Safe) status by FDA (21 CFR 182.60). Strongly supported is EPA's determination that use of methyl anthranilate as a bird repellent will not result in significant residues and any residues are considered to be virtually non-toxic.

Based on the ecological effects data, the Agency has no concerns regarding non-target effects to bees and other insects. Even in the event of exposure, toxicity data on nontarget organisms confirm that methyl anthranilate is virtually non-toxic to non-target plants, insects (including pollinators), mammals, and birds. We support EPA's determination that its use as labeled would present negligible risk to aquatic resources.

USDA supports EPA's sound review and point out that our colleagues in Canada have proposed retention of all registered uses of methyl anthranilate.

The continued availability of methyl anthranilate as part of an Integrated Pest Management system is supported due to the limited availability of cost-effective tools. The USDA's Wildlife Services at APHIS has undertaken extensive research on methyl anthranilate and is available as a resource.

As always, USDA is glad to work in advance with EPA on all issues that potentially impact U.S. agriculture.

Sincerely,

A handwritten signature in cursive script that reads "Sheryl H. Kunickis".

Sheryl H. Kunickis, Ph.D.
Director

References and Additional Information

Ahmad, S. et al. 2018. Potential of natural repellents methyl anthranilate and anthraquinone applied on maize seeds and seedlings against house sparrow (*Passer domesticus*) in captivity. *Braz. J. Biol.* [online]. Vol.78 (4) Pp. 667-672. <http://dx.doi.org/10.1590/1519-6984.171686>. http://www.scielo.br/scielo.php?script=sci_abstract&pid=S1519-69842018000400667&lng=en&nrm=iso&tlng=en

Abstract from Ahmed, S. et al. (2018)

‘Various bird pests caused severe economic losses to valuable crops and fruit orchards all over the world. Among the birds, house sparrow is also considered to cause heavy plunder, not only to seeds of crops but also seedlings especially in organic farming. In present study two bird repellents, methyl anthranilate and anthraquinone tested against house sparrows on maize seeds and seedlings in aviary conditions. Trial group in aviary-I, the treated maize seeds and seedlings with different doses of both bird repellents, control group in aviary-II, untreated seeds and seedlings were provided for three hours in the early morning. In each aviary, two closed circuit cameras were also installed to monitor the behavioral responses against different concentrations of both chemical repellents. Statistical analysis showed that there existed highly significant ($P < 0.01$) variations among the trial and control groups for seeds and seedlings. By comparing both repellents, significant ($P < 0.05$) differences were detected and anthraquinone showed better efficacy when compared to methyl anthranilate, but in maize seedlings both repellents equal repellent properties. Non-significant ($P > 0.05$) differences were observed in different grading of both natural chemical repellents for maize seeds while significant ($P < 0.05$) variations were noticed for maize seedlings when provided to sparrows. By videotaped behavior sparrows presented manifest head juddering and feather upsetting activities by consumption of treated seeds and seedlings with higher concentrations of both natural bird repellents.’

Schroeder, J. W. and Lee, C. D. 2015. Managing Common Bird Challenges on Dairy and Livestock Operations. Bulletin AS1758. North Dakota state University. <https://www.ag.ndsu.edu/pubs/ansci/dairy/as1758.pdf>

Abstract from Schroeder, J. W. and Lee, C. D. (2015)

"Methylanthranilate reportedly can be effective in enclosed buildings with high concentrations (8 percent by volume) used in aerosol form. But marginal results have been reported when used as a coating on buildings. If applied at high concentrations, these products might be effective for a short period time, but results published in peer-reviewed literature have shown these products to be problematic, with short term efficacy at best'