JAPANESE BEETLE ERADICATION & POLLINATOR PROTECTION

The Utah Department of Agriculture and Food will be taking extraordinary measures to ensure that Japanese beetle eradication activities have minimal impact on bees and other pollinators.



Background

Japanese beetle (JB) is a destructive, invasive pest that is not established in Utah. It feeds on over 300 different plants and annually causes approximately \$460 million in damage in infested states.¹ In 2023, the Utah Department of Agriculture and Food (UDAF) Insect Program detected JB in Davis, Salt Lake and Weber counties. To ensure that this pest does not become established in the state, UDAF has declared a Plant Pest Emergency and has prepared an eradication plan.

Pesticide selected for project

UDAF has selected Acelepryn[®] SC, a non-restricted use pesticide for the project. The pesticide is proven effective in controlling JB and it has low toxicity for bees, as well as humans, pets, birds and earthworms.^{2,3,4} It is classified by the U.S. Environmental Protection Agency as a Reduced Risk Pesticide. <u>Applications will take place on properties within two miles of your apiary beginning mid-May</u>.

Precautions taken

Though the selected pesticide has low toxicity to bees, UDAF will nonetheless take extra measures to ensure safety to bees.

- The UDAF Apiary Program will be educating the selected pest control company on best practices for pollinator protection prior to applications.
- State pesticide enforcement officials will supervise pesticide applications to ensure all federal and state environmental protection rules are followed.
- The eradication effort will target JB underground, when the pest is in its larval stage. Therefore, pesticide will only be applied to irrigated turf. No applications will be made to ornamental, fruit or vegetable plants that bees visit.

If I am a beekeeper, what should I do?

No action is required on your part. Due to the pesticide's low toxicity to bees and additional measures taken by UDAF to ensure pollinator protection, the risk to bees is considered exceptionally low. However, if you would like to take additional precautionary actions, you can keep bees inside the hives during spraying. Contact UDAF to request prenotifications and free screening materials to keep honey bees in the hives.



Utah Department of Agriculture and Food—Invasive Insect & Quarantine Program

To request prior notification of applications, call 801-972-1669 or email UDAF-Insects@utah.gov

For more information about JB eradication visit: ag.utah.gov/jberadication



CITATIONS & PHOTO CREDITS: 1) USDA-APHIS (2000). Managing the Japanese Beetle. A Home Owner's Handbook. US Department of Agriculture https://www.aphis.usda.gov/plant_health/plant_pest_info/jb/downloads/JBhandbook.pdf 2) U.S. Environmental Protection Agency (2008). Pesticide Fact Sheet: Chlorantramiliprole. 3) Dinter, A., Brugger, K., Frost, N., and Woodward, M.D. (2010). Chlorantramiliprole (Rynaxypyr): A novel DuPont* insecticide with low toxicity and low risk for honey bees (*Apis mellifera*) and bumble bees (*Bambus terrestris*) providing excellent tools for uses in integrated pest management. 10th International Symposium of the ICP-Bee Protection Group. 4) Larson, J.L., Redmond, C.T. and Potter, D.A. (2011). Comparative impact of an anthramilic diamide and other insecticida chemistries on beneficial invertebrates and ecosystem services in turgrass. Pest Management Science, 68: 740-748 Photo 1: Emmy Engasser, Hawaiian Scarab ID Photo 2 & 3: Whitney Cranshaw, Colorado State University

JB Eradication Benefits Bees!

JB eradication is in the long-term interest of honey and native bee health. Many of the plants this pest attacks are also visited by bees for nectar and pollen.



A honey bee (center) gathers forage as a JB (upper right) attacks the flower. If JB establishes in Utah, many plants beneficial to bees will be destroyed by the pest.



Also, pollinators like this bumble bee (center) may come into contact with more pesticides, as residents and property managers attempt to protect their plants from JB (below flower) with insecticides and inadvertently expose bees.