

# Watch out for a new pest in Montana - pea weevil

A new pea pest in Montana, pea weevil, has been confirmed by researchers at WTARC in Conrad from samples submitted from the Highline area. Damage was first noticed in 2014 and follow-up samples were sent to the lab at the Western Triangle Agricultural Research Center for analysis. The peas were gently crushed and the extracted adults were positively identified as pea weevils. This insect is not to be confused with the wide spread pest in peas with a similar name, the pea leaf weevil.

The pea weevil is one of the most damaging insects on peas in the Pacific Northwest of US. This pest damage comprises the direct loss of seed contents consumed by the insect, decreased germination capacity and diminished market value. The seed damage in that region ranges from 42-82%. However, pea weevil is a very new pest in Montana. Pea weevil feeds only on green peas in which the larva devours the inner content of the seed. The adult is gray or brownish gray, marked with black and white spots, and is about 1/5 inch long. Females attach their eggs to the outsides of green pea pods. They lay about 100 eggs, either singly, or in batches of up to 12 eggs. Inside the pods, the larvae develop in the growing seeds and pupate inside the pea seeds. Feeding results in large, stout exit holes with a diameter of 2.5 mm. Pupation typically occurs as much as one month after harvest. Pupae develop while the grain is being stored. After pupation, adults chew an exit hole through the seed coat. Adults emerge starting in mid-December and overwinter with the stored peas and in the field. Adults fly to hibernation sites at the end of summer or at beginning of fall (e.g. under loose shingles, cracks in buildings, under loose bark, debris under trees, alfalfa/other perennial legumes crops). They remain in hibernation throughout winter until late spring or early summer emerging and migrating to pea fields to mate and lay eggs. The typical lifecycle of the pea weevil takes 4-5 months to complete. There is only one generation per year.

The economic impact from this pest includes damage to seed and loss of seed contents along with loss of germination rates. The damage is reflected through discounts at the elevator which is passed on to the grower.

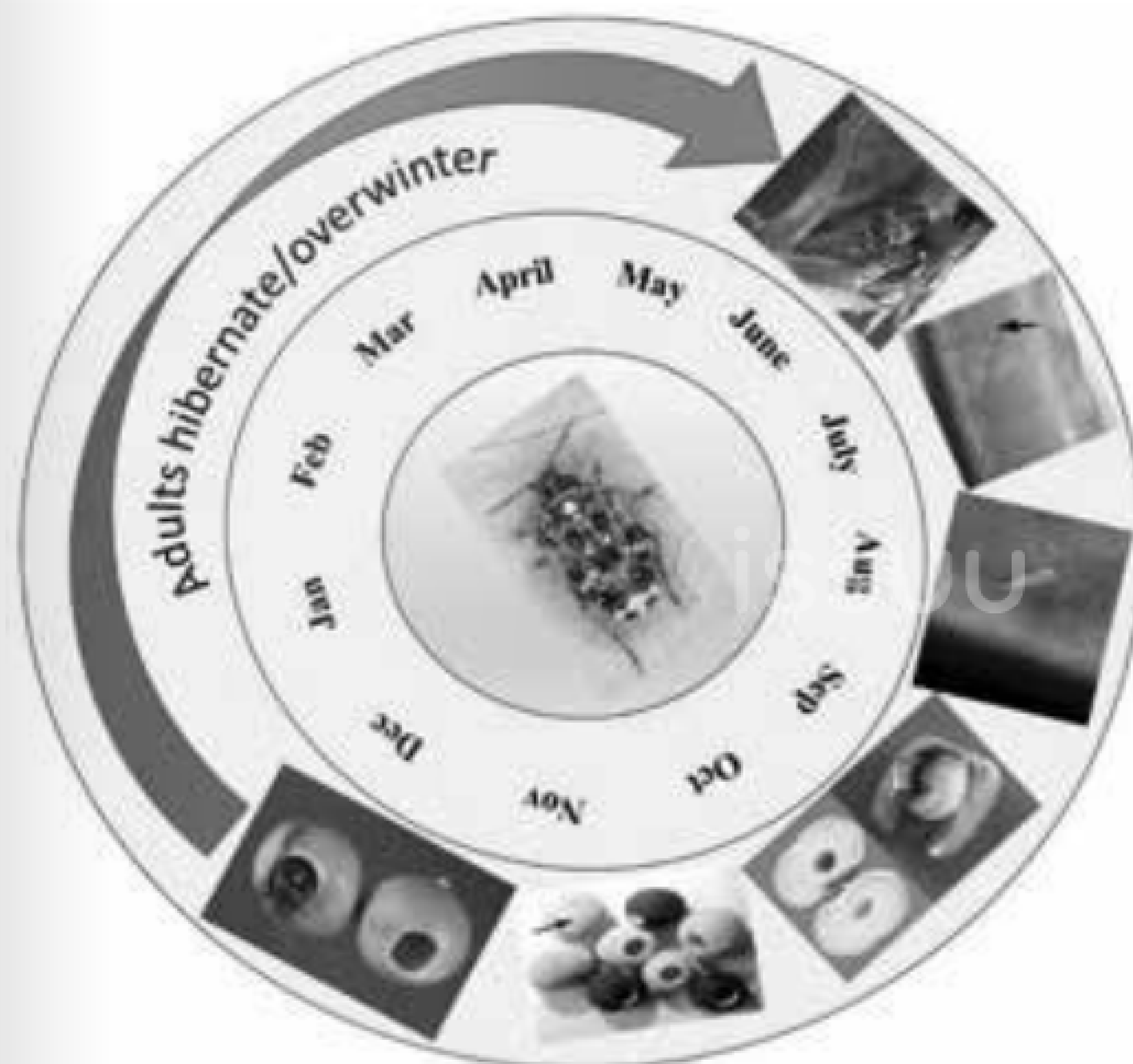
Thresholds and management recommendations have been developed for this pest at other areas and that information is available at, <http://agresearch.montana.edu/wtarc/producerinfo/index.html>

Now that pea weevils have been reported in Montana, the next step is to identify the areas infested and assess the extent of the damage in order to implement the necessary control methods. Management strategies can then be optimized to prevent further spread to other areas.

The USA Dry Pea & Lentil Council and American Pulse Association has funded a survey to determine the weevil population distribution, abundance and pea damage assessment for Montana. The MSU WTARC is conducting a survey this fall and are asking help from Montana pea growers and pea handlers. Please assist by submitting one to two pounds of suspected pea weevil damaged seeds to Gadi VPreddy, Western Triangle Ag Research Center, 9546 Old



Shelby Rd., P. O. Box 656, Conrad, MT 59425. For more information or assistance with sample pickup contact Gadi V.P. Reddy at 278-7707; 406-450-0375, [reddy@montana.edu](mailto:reddy@montana.edu) or Govinda Shrestha, [govinda.shrestha@montana.edu](mailto:govinda.shrestha@montana.edu), 406-450-3052.



Pea Weevil life cycle