



## SEED CROP PEST ALERT

**Situation:** During the past week there have been numerous reports from growers and field reps who have noticed large quantities of worm pests in combine tanks and in some late maturing grass seed crops (i.e. bentgrass) that have not yet been swathed (see photos below). I have made similar observations while harvesting large scale on-farm trials in tall fescue and annual ryegrass across the Willamette Valley. There appears to be at least three or more species of armyworms and cutworms present in the larval stage. The number of species and quantity of larvae varies between fields.



**Cause:** This event is most likely occurring as a result of an extremely wet winter and spring. There are several biocontrol organisms (tachinid flies, parasitic wasps, nematodes, etc.) present in western Oregon and they generally do a good job of suppressing naturally occurring populations of cutworms/armyworms in spring and early summer. Unfortunately, these biocontrol organisms are especially sensitive to harsh spring weather conditions, including high rainfall amounts. Low biocontrol numbers have likely allowed cutworm/armyworms to flourish this year.

In our current summer conditions, the larvae have emerged out of shallow cracks in the soil and crawled into windrows to shelter themselves from heat. They typically do not feed much in these conditions and there is no historical evidence that they cause damage to seed in windrows. However, they will most likely become more active when day length shortens and “green up” begins to occur post-harvest. We do not believe that many of the larvae will travel far or transform to moths this summer, and so fields with large populations now are likely to be at the highest risk of suffering early feeding damage. However, when nightly temperatures begin to decrease and soil moisture increases they will begin to move quickly over large distances.

**Management:** Growers should observe presence of larvae in their combine tanks through the remainder of harvest and take notes on which fields have high numbers of cutworms/armyworms. Fieldmen should be prepared to scout fields by **mid-August** and continue watching for feeding on green plant tissue into fall. Look for larvae in and around crowns, under residue, and where birds are feeding. Cutworms/armyworms also leave behind frass that looks like tiny grass pellets. Treatment is suggested when 3-4 larvae/ft<sup>2</sup> are observed in established fields and 1-2 larvae/ft<sup>2</sup> are observed in seedling fields. Fields that receive post-harvest irrigation may show signs of damage earlier than those that are not irrigated. Post-harvest tillage should eliminate the issue in a new crop rotation. There are several effective chemical control options available for cutworms and armyworms in grass and clover seed crops. Please consult the PNW Insect Management Handbook for a list of registered insecticides: <https://pnwhandbooks.org/insect>. It is important to remember that these pest species come to the surface to feed at night and so any insecticide applications should also be made at night.