

Western Bean Cutworm Pheromone Network

Compiled by: PHREC Entomology Lab

Pheromone Trap Network ¹ Report for 2021-07-04

This is a weekly summary and field risk-level prediction for western bean cutworm (WBC) infestation in dry bean. Western bean cutworms are difficult to scout effectively in dry beans. Therefore, we use pheromone traps to give us an estimate of risk of infestation. The average cumulative number of moths/field/day should be calculated from moth emergence to peak. The data in Table 1 below show the cumulative number of moths captured to date, averaged over 4 Smart Traps per field. The map on the second page will provide you a snapshot of what the WBC risk looks like on a regional basis. You can zoom in on the map on a computer to see more detail.

- If the cumulative catch at the peak of the moth flight is < 700 per trap, risk of significant damage is **low**
- If 700-1,000 moths per trap, the risk is **moderate** and additional sampling information will be needed to reach a decision
- If > 1,000 per trap, damage risk is **high**.

If an insecticide application is required, it should be applied 10-21 days after peak moth flight. Current average cumulative catch across the sample region is 0.53 total moths per trap. Moth emergence dates for the 2021 growing season can be found on Crop-Watch, “Degree-days for Prediction of Western Bean Cutworm Flight”.

¹This weekly report is the result of trapping network that is a collaboration with the Panhandle Entomology Lab at the Panhandle Research, Extension, and Education Center, Jack’s Beans, Trinidad-Benham, Kelley Bean, and New Alliance and has been partially funded from 2019-2021 by the Nebraska Department of Agriculture and the Nebraska Specialty Crop Block Grant Program and the Institute of Agriculture and Natural Resources at the University of Nebraska – Lincoln. Additional funding has been provided by the Nebraska Dry Bean Commission, the Colorado Dry Bean commission, and Wyoming Bean Commission.

Table 1: Average Cumulative Counts of Western Bean Cutworm Per Field

| Grower | Field | Catch | Risk |
|------------------------------|--------------------|-------|------|
| Colker (Jack's) | Holyoke 2 SE | 2.00 | low |
| Cook (Kelley) | Lingle 5 W | 0.67 | low |
| Erik Peterson (New Alliance) | Gering 2.5 SE | 1.00 | low |
| Erik Peterson (New Alliance) | Gering 5 SE | 1.67 | low |
| JD (Kelley) | Mitchell 3NE | 0.00 | low |
| Justin Relka (Trinidad) | Scottsbluff 6 W | 0.50 | low |
| Krueger (Jack's) | Lamar 3.5 W | 0.00 | low |
| Meisner (New Alliance) | Scottsbluff 1.5 NE | 0.25 | low |
| Patrick Ensz (Jack's) | Paxton 9.5 SW | 0.25 | low |
| Tom Bauer (Trinidad) | Bayard North | 0.00 | low |
| Turner (Jack's) | Grant 5N | 0.25 | low |
| Wallin (Jack's) | Imperial 6.5 W | 0.00 | low |
| Wurderman (Kelley) | Morrill 3 E | 0.25 | low |

WBC Dry Bean Survey

