

that in more northern states, stored product insect pests emerge just as early as more southern states but there is only a single peak of large numbers of insects. In southern states, there can be two peaks during these warm months. We find significant variation in insect species found at our different locations, which could be attributed to the type of facility or structure where traps were placed. For example, traps near a location that shipped and received large amounts of corn captured high numbers of Indian meal moths, *Plodia interpunctella* Hübner, while traps near bin storage of wheat captured low numbers of *P. interpunctella*, but higher numbers of lesser grain borers, *Rhyzopertha dominica* Fabricius. These data are the beginning of a long-term dataset that can be used for predictive modeling and tracking of these insects throughout the Great Plains states. Knowing when and where to expect these insects can help pest managers best prepare for remediation to reduce the damage of these pests.

Keywords: stored products, funnel traps, grain, seasonal variation, field trapping

OC457. Mating disruption technique for the European grain moth infestations

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Nemapogon granellus (L.) (Lepidoptera: Tineidae) is a stored-product moth, found to infest stored animal products such as meat, sausages and cheese. Damages are caused by larvae digging tunnels for feeding on cured meat and cheese. Control method based on the use of sexual pheromone to prevent or limit mating between *N. granellus* males and females was evaluated. The trials were conducted in two ham factories where the European grain moth was infesting cured meat during storage in warehouse. A treated area and a control area were selected in each ham factory: in the treated ones, dispensers loaded with 10 mg of *N. granellus* pheromone were positioned at a density equal to 1 unit/22.5 m³ (factory A) and 1 unit/25 m³ (factory B). The efficacy of mating disruption was evaluated on the reduction in the number of mated females, captured in a plastic container filled with water and placed in the control and test warehouses. The results showed a significant reduction of mated females in the test warehouses compared to the control warehouses, in both ham factories. The total number of mated females was greater than 90% in untreated warehouses, less than 50% in warehouses with mating disruption. These results indicate that the use of pheromones to reduce the couplings is a technique that can be successfully applied in the integrated management of *N. granellus* in ham factories.

Keywords: Integrated Pest Management, water trap, *Nemapogon granellus*, stored-product pests, ham factory

OC458. Lessons learned for phosphine distribution in “real world” fumigations

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