

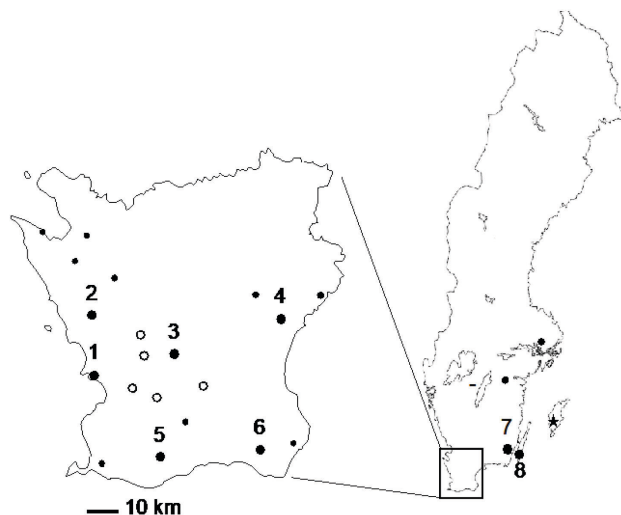
## Field trapping experiments of *Ostrinia nubilalis*

Delta traps with sticky inserts were used (RAG, CSalomon, Plant Protection Institute, Hungarian Academy of Science, Budapest, Hungary). Pheromone lures were prepared by adding a 100  $\mu$ L heptane solution of the two pheromone components *E*11-14:OAc and *Z*11-14:OAc (>99% isomeric purity; Pherobank, Wijk bij Duurstede, The Netherlands) to red rubber septa (11  $\times$  5 mm; #224100–020, Wheaton Science Products, Millville, NJ, USA), acting as dispensers, in the proportions 99:1 (*E* lure), 3:97 (*Z* lure) or 65:35 (hybrid lure). The total amount of compounds per septum was 100  $\mu$ g.

In 2013, six maize fields in Scania (sites 1-6), the southernmost county of Sweden, were selected for monitoring with pheromone traps. The fields were more than 10 km apart and can be regarded as representatives of six arbitrary agricultural areas. Each field was monitored yearly until 2022. Whereas in some of the areas, the same maize field was monitored, in other areas different, but nearby, fields were monitored because maize cropping was interrupted in the original field. In 2015, two fields in county Kalmar, southeasternmost part of Sweden, were added and monitored until 2021 (sites 7-8).

Along the edges of each field two traps of each of the *Z*, *E*, and hybrid lures were placed on plastic poles at approximately the height of the maize plants, and at least 30 m apart. During the trapping period, the trap height was increased to follow the growth of the crop. From 2019 only two traps with the *Z* lure were used per field. Traps were placed in the field around June 10 ( $\pm$  5 days, depending on weather) and checked once a week until the middle/end of August. Lures were renewed every three weeks.

In 2018, five agricultural areas in Scania, at least 5 km away from fields where maize was grown that year, or the year before, were selected to monitor the presence of the two strains in the absence of maize. Two traps of each lure type were applied per site.



**Fig. 1.** Location of the *Ostrinia nubilalis* trapping sites in Sweden. Traps within maize fields (large, filled circles; 1-6 in Scania, 7-8 in Kalmar) and distant from maize fields (open circles) are shown. Small dots indicate sites where occasional trapping indicated the presence of the *Z*-strain or where larvae have been found in maize stems. Star: First record of ECB in maize in Sweden on the island of Gotland in 2010. The - indicates the field in Västergötland, where no males were caught during 2019-2021.