Laymen's summary JPE

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Escaped oilseed rape in the south Swedish agricultural landscape may both be a resource for animal pollinators and affect geneflow

In agricultural landscapes, pollinators perform important pollination services to crops. Oilseed rape is one of the world's most frequently grown crops, and it often produces higher yields when insect pollinated. The crop plants do however not always stay in the fields – sometimes they escape and become feral plants. Escaped oilseed rape plants are common in field margins, on roadsides and waste grounds, where they grow as individual plants or in small groups. They end up there because seeds are spilled from farm machinery or trucks, or spread directly from neighboring fields. Feral plants may contribute to geneflow from crops, but also be a flower resource for pollinating insects. Such flowers might contribute resources in intensively farmed landscapes, where flowers are scarce or occur in mass-flowering crops. Therefore, we investigated how common the feral plants are along large and small roads, to get an idea of how widespread this feral flower resource is. We also studied if it was found in more intensively farmed landscapes with larger roads, or in small-scaled landscapes. We found feral plants in 14 out of the 16 areas we visited. The feral plants were more commonly found along large roads than along small roads. We also investigated if pollinators in a mass-flowering oilseed rape field would leave the field to visit single feral plants, thus contributing to geneflow. To investigate this, we placed feral plants a short distance from an oilseed rape field and applied fluorescent dye to oilseed rape flowers in the rape field. After two days we collected the feral plants and found that there were specks of the dye on them. This suggests that feral plants could both be a resource for pollinators in an intensively farmed agricultural landscape and affect geneflow from crops.