

FLEA BEETLES: PLANT LATE BRASSICAS FAR FROM SPRING CROPS.

Mid July is often a time of year when adult FB numbers decline, because a large part of the population is underground, in larval and pupal stages. After larvae feed on roots, they pupate in the soil, then emerge again “into the light” as adults—ready to feed on foliage. The time when you will first see these new adults depends on when eggs were first laid on spring Brassica crops, and on soil temperatures since then. Dissections of flea beetles collected from the field in the Connecticut Valley in April and May detected eggs present in early May this year; hence new adults are likely to be emerging now.

In fields where Brassica crops are always present, because succession crops are planted close together, it may appear that flea beetles never go away all summer. In fact, they are likely to increase dramatically and feed heavily in early August because of the new summer adults. If you plant fall brassicas close to your spring crops, you make it easy for these beetles to find food. Fall broccoli, cabbage, kale as well as greens such as arugula, bok choy, nappa and salad mix can get heavily damaged or even killed by flea beetle feeding. However if you manage your plantings so that fall brassicas are in a different, separated field than spring crops, you can significantly reduce your problems in fall crops. How far? As far as possible - any distance helps. Barriers such as forest, streams, roads, houses, are helpful. Shorter distances delay the arrival, longer distances delay and reduce the population enough to reduce or eliminate the need for row covers or sprays.

At the UMass Research Farm in South Deerfield, flea beetles in brassica crops are still very active and new emergence has been detected. We have succession plantings of brassica crops close together – but in our case, it is on purpose!

In conjunction with researchers and farmers in NY and VT, we are testing the use of komatsuna as a trap crop around the waxy type of brassicas (broccoli, kale, collard, cabbage, etc). The whole perimeter is planted to one or two rows of komatsuna (a *Brassica rapa*), which is highly attractive to flea beetle. On an organic farm, the border can be sprayed with Entrust. The organic farm that is testing this (in combination with field rotation to reduce the pressure) has avoided the need for sprays on the main crop. However, greenhouse transplants required a non-heating row cover to keep flea beetles off the seedlings before they reached the field because the greenhouse had a hefty population of flea beetles.

--R. Hazzard

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