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Basil Banker Plants To Help Control Thrips

Banker plants can be used to breed predators or parasites within a crop. They often utilise a pest that will not infest the crop, but allow beneficials to establish before the target pests arrive. Bankers can also be used where the crop itself is not favourable for certain beneficials to establish. In crops such as cucumbers and roses, the flowers do not supply suitable pollen for Orius to establish. Basil banker plants help Orius establish within the crop. The Orius can then move from the banker plants into the crop in search of thrips

Trap plants are usually non-production plants (that are grown in conjunction with a crop) that are more attractive to the target pests than the production crop. When trap plants are planted around the edges of a crop, pests migrating into the crop from outside are more attracted to the trap plants, and this may prevent them from moving further into the crop. Pests already within the crop can also be preferentially drawn from the crop to the trap plants. The grower can then treat the pests on the trap plants without having to treat the whole crop.

Basil plants can act as both a banker plant for the thrips predator Orius and a trap plant for thrips (the white scented flowers attract thrips).



Flowering basil



Basil in cucumbers



Basil in gerbera



Thrips damage in rose



Thrips damage in cucumber



Thrips in capsicum flower



Stages in a thrips life cycle



Orius juvenile feeding on a thrips



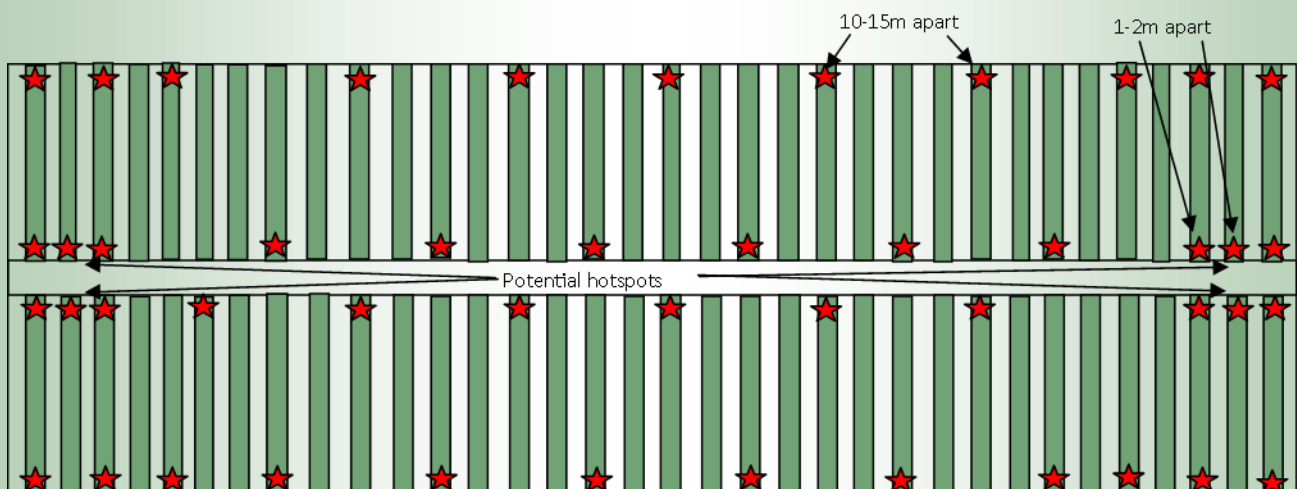
Adult Orius



Production of Banker Plants

- ◆ Plant Basil well in advance so they are flowering before the main crop is planted
- ◆ Use around 100 bankers/ha
- ◆ Inoculate banker plants with Orius as soon as basil is flowering
- ◆ Basil will supply Orius predators with a good source of pollen and nectar
- ◆ Place bankers through the crop at planting—make sure they are supplied with water and nutrients
- ◆ If growing a short crop such as cucumbers, grow the basil in pots so they can be moved from crop to crop
- ◆ If growing a long crop such as roses, grow the basil in the same soil or substrate as the main crop
- ◆ Be careful not to use any chemicals that may harm the beneficials living on your banker plants or in your crop
- ◆ Basil may be a host for other pests (eg whitefly). If these pests are problematical to your crop, introduce beneficials for them prior to establishment to ensure pests do not build up on the banker plants
- ◆ Basil will need pruning from time to time. Do not cut back too hard, and only prune about 20% of plants at any one time, so that a majority of plants still have flowers present. Greek basil is more compact than sweet Italian basil

Suggested layout of banker plants in a greenhouse



★ Bankers are placed along the fronts and ends of rows with more in potential hotspots.