



ANATIS
BIOPROTECTION

Banker plants

Recommended crops

- Greenhouse vegetables (tomatoes, cucumbers, peppers, strawberries)
- Ornamental crops
- Flowering crops
- Nursery crops

Because cereal aphids may survive on these crops, not recommended for

- Onions
- Garlic
- Leeks
- Corn
- Grasses
- Lilies
- Tulips

Banker plants are a preventive biological control tool used to establish and maintain active populations of parasitoids before aphid pressure becomes problematic.

Each banker plant contains cereal aphids (*Rhopalosiphum padi*) living on barley. These aphids do not attack most greenhouse crops, but they provide a continuous food source for *Aphidius colemani* and *Aphidius matricariae*, allowing parasitoids to remain active and disperse throughout the greenhouse in search of pest aphids.

This system helps maintain continuous parasitoid activity, strengthens early-season protection, improves control consistency during cooler spring conditions and fluctuating temperatures, and reduces the need for repeated corrective releases later in the season.

How to use

Ready-to-use preventive program

Ideal for growers looking for a simple turnkey solution.

Recommended introduction:

- 1 banker plant per greenhouse when greenhouses are separated
- For larger areas, start with at least 5 banker plants per acre
- Add banker plants every 4 weeks in systems without self-propagation (barley sowing). Replace earlier if aphid populations decline or plant vigor decreases. Banker plants do not require regular replacement in self-propagation systems where barley is continuously sown and maintained.
- Introduce *Aphidius colemani* every 4 weeks, or as needed depending on pest pressure, to maintain continuous parasitoid activity.

Application

1. Transplant the banker plant into a pot
2. Place the banker plant in the greenhouse
3. Apply light nitrogen fertilization to encourage development of grass aphids
4. Release parasitoids according to your biological control program

Storage

- Install banker plants upon receipt to ensure maximum efficacy and maintain healthy aphid and parasitoid populations.



[Learn more](#)

Self-maintained banker plant program

For growers who prefer to maintain their own banker plants.

Basic propagation method

1. Order a banker plant with cereal aphids
2. While waiting for delivery, sow barley in a pot using standard greenhouse substrate
3. Once the barley has grown a few inches and the banker plant with cereal aphids has been received, place the barley pot in close proximity to the banker plant
4. Allow cereal aphids to naturally transfer onto the new barley plants and establish themselves. A minimum density of 20–50 aphids per tiller is recommended prior to parasitoid release
5. Once the aphid colony is well established, introduce *Aphidius colemani* (purchased separately in bottle form).
6. Maintain continuous production by staggering barley sowing every 1–2 weeks, ensuring overlapping plant growth stages and a continuous supply of suitable banker plants for aphid and parasitoid cycling.

Fresh banker plants should be introduced regularly throughout the season to maintain strong parasitoid pressure.

At the end of the season, banker plants should be removed to prevent hyperparasite buildup, which can reduce system performance.

Avoid incompatible pesticide applications

Wheat may be used as an alternative host plant in place of barley if barley is not available.