



# BT NOW® & Trichogramma

## Caterpillar Control in Fall Ornamentals

### BIOSAFE SYSTEMS BIOLOGICAL INSECTICIDE:

BT NOW (*Bacillus thuringiensis* ssp. *kurstaki* strain EVB-113-19)

### BIOLOGICAL CONTROL:

*Trichogramma minutum*, *Trichogramma platneri*,  
*Trichogramma brassicae*

### PESTS TARGETED:

Corn earworm, *Helicoverpa zea*  
Beet armyworm, *Spodoptera exigua*  
Cabbage looper, *Trichoplusia ni*  
Salt marsh caterpillar, *Estigmene acria*  
European corn borer, *Ostrinia nubilalis*  
European pepper moth, *Duponchelia fovealis*  
Omnivorous leaf roller, *Platynota stultana*  
and other lepidoptera

### PROBLEM

There are multiple species of lepidoptera that feed on ornamentals. Caterpillars can damage all parts of the plant and numbers can build up quickly. They can become a pest in greenhouses as well as in outdoor production and in the landscape.

### SOLUTION

BT NOW and *Trichogramma* are two naturally occurring biological organisms that specifically target lepidoptera species and when used together create an effective caterpillar management program.

*Trichogramma* are a minute wasp (1/50th of an inch) that parasitizes eggs of over 200 species of moths and caterpillars, breaking the life cycle of the pest.

BT NOW, a water-based product containing a novel strain of *Bacillus thuringiensis*, effectively targets

hatched caterpillars *Trichogramma* may have missed, giving growers the best chance of a successful harvest. This combination achieves excellent control of caterpillars without harmful residue and without disrupting beneficial insect populations.

### APPLICATION RATES

Product	Rate	Notes
BT NOW	0.5–3 pints/acre in a minimum of 31.25 gallons of water/acre	Use as a foliar spray or aerial application every 3-14 days, as needed.
<i>Trichogramma</i> sp.	1 card/acre	A second release may be done to target a second generation approx. 3–4 weeks later.

### APPLICATION TIMING

- Timing of *Trichogramma* release is critical for good efficacy. *Trichogramma* prefer fresh eggs and cannot parasitize already hatched larvae. Release when moths first begin laying eggs and before they hatch. Best done slightly prior to time of sprays usually done for caterpillars.
- BT NOW should be applied 3–7 days after moths first lay eggs to target newly emerging larvae.
- There are special traps and lures for various species of lepidoptera that can be used to determine when moths are flying and laying eggs.

[Contact your local representative for details.](#)