

BENEFICIAL INSECTS



An IPM program requires a significant increase in time spent monitoring and evaluating pest and beneficial populations. Intensive monitoring and information exchange between the grower, distributor and insectary is essential as changes in a crop's pest management program often result in the development of a new pest complex. Technical information will include IPM program design, personnel training, monitoring guidelines, and weekly support visits for the duration of the initial project. Growers should be prepared to devote at least ten hours per week per acre to the program.

Syngenta Bioline Natural Enemies for Use in Greenhouse Ornamentals

Pest: Spider Mites	Product Code
<i>Phytoseiulus persimilis</i> (predatory mite)	81-53650
<i>Neoseiulus californicus</i> (predatory mite)	81-12780
<i>Feltiella acarisuga</i> (predatory midge)	81-21970
Crops: Roses, gerberas and most ornamentals; also shadehouse foliage crops	
Environment: Ideal temperature range 70-85°F, relative humidity greater than 50%	
Pest: Western Flower Thrips	
<i>Amblyseius cucumeris</i> (predatory mite)	81-05950
<i>Orius insidiosus</i> (predatory bug)	81-50841
<i>Hypoaspis miles</i> (predatory mite)	81-34860
Crops: Gerberas, chrysanthemums and other ornamentals; peppers and cucumbers	
Environment: Ideal temperature range 65-85°F; relative humidity of 50-90%	
Pest: Aphids	
<i>Aphidius colemani</i> & <i>Aphidius ervi</i> (parasitic wasp)	81-06420 & 81-06440
<i>Aphidoletes aphidimyza</i> (predatory midge)	81-06430
<i>Aphelinus abdominalis</i> (parasitic wasp)	81-06390
<i>Aphidius/Aphel Mix</i>	81-06380
Crops: Where aphids inhabit the foliage of ornamentals; cucumbers and peppers	
Environment: Ideal temperature range 65-80°F; reduced performance over 86°F	
Pest: Leafminers	
<i>Diglyphus isaea</i> (parasitic wasp)	81-17250
Crops: Chrysanthemums, gerberas and other ornamentals; tomatoes	
Environment: Performs well under normal greenhouse conditions	
Pest: Greenhouse and Silverleaf Whitefly	
<i>Eretmocerus eremicus</i> (parasitic wasp)	81-20160
<i>Encarsia formosa</i> (parasitic wasp)	81-19400
<i>Dicyphus hesperus</i> (predatory bug)	81-17230
Crops: Ornamentals, tomato, cucumber, pepper and eggplant	
Environment: Ideal temperature range 65-90°F, relative humidity of 60-80%	
Pest: Fungus Gnats	
<i>Hypoaspis miles</i> (predatory mite)	81-34860
<i>Beneficial nematodes</i> (<i>Steinernema feltiae</i> , <i>S. carpocapsae</i>)	81-69550
Crops: Bedding & pot plants, propagation houses; anywhere fungus gnats are a problem	
Environment: Performs well under normal greenhouse conditions	



From left to right:
P. persimilis young adult
P. persimilis egg-laying female
 Two-spotted spider mite
 Black spot is spider mite feces
 Spider mite egg; small, clear and round
P. persimilis egg; larger and football shaped

