



Scouting for Key Insect and Mite Pests on Key Plants in the Greenhouse

Introduction

Key plants are those specific plant species or cultivars that may be infested with key insect or mite pests' problems every year. This can vary from location to location and from year to year. Often, certain cultivars may be more susceptible than others. Here is a list that I gathered from references listed at the end of this article plus personal observations when visiting commercial greenhouses. It is helpful to develop your own list based upon your own experience and observations. The target audience of this factsheet is commercial greenhouse and herbaceous perennial growers.

Key insect and mite pests include aphids, broad mites, citrus mealybugs, cyclamen mites, fungus gnats, two-spotted spider mites, whiteflies, and western flower thrips.

Aphids

Key bedding plants affected: Ageratum, alyssum, basil, begonia, calibrachoa, Cole crops, celosia, chrysanthemum, dahlia, dianthus, eggplant, geraniums (ivy and zonal), gerbera daisy, herbs (many), fuchsia, garden impatiens, *Ipomoea*, leafy greens, marigolds, nasturtium, pansy, pepper, portulaca, primula, salvia, snapdragon, tomato, verbena, zinnia, etc.

Key herbaceous perennials affected: *Acanthus*, *Achillea*, *Alcea*, *Asclepias*, *Aster*, *Bellis*, *Dianthus*, *Digitalis*, *Heuchera*, *Helianthus*, *Helleborus*, *Hibiscus*, *Monarda*, *Papaver*, *Oleander*, *Phlox*, *Primula*, *Rudbeckia*, *Salvia*, *Sedum*, *Sempervivum*, *Veronica*, and *Viola*.

Root Aphids: *Aster*, *Coreopsis*, *Lysimachia*, *Sedum*, *Semperviven*, *Veronica*.

Broad Mites

Key bedding plants affected: Ageratum, begonia, chrysanthemum, dahlia, fuchsia, gerbera daisy, English ivy, New Guinea impatiens, salvia, scaevola, snapdragon, verbena, vegetative petunia, peppers, Thunbergia, torenia and zinnia.

Citrus Mealybugs

Key bedding plants affected: Begonia, chrysanthemum, coleus, English ivy, English primrose, gerbera daisy, fuchsia, gardenia, and hibiscus. (Many tropical foliage plants and house plants are susceptible to long tailed mealybugs).

Cyclamen Mites

Key bedding plants affected: Ageratum, begonia, celosia, chrysanthemum, dahlia, fuchsia, gerbera daisy, rosemary, petunia, impatiens, English ivy, geranium, *Ipomoea*, snapdragon, verbena, *Viola*, and zinnia.

Key herbaceous perennials affected: *Aconitum, Clematis, and Delphinium.*

Fungus Gnats

Wide host range, most common in damp areas. Young plant more susceptible than mature plants.

Key plants affected: Plants with succulent stems including geranium, coleus, poinsettia, and sedum.

Two-spotted spider mites

Key bedding plants affected: Ageratum, beans, celosia, dahlia, dracaena (spike), eggplant, English ivy, fuchsia, gerbera daisy, geraniums (especially ivy), gomphrena, herbs (many especially lemon balm, lemon verbena, etc.), hibiscus, *Ipomoea*, impatiens, lantana, lobelia, marigolds, New Guinea impatiens, portulaca, primrose, salvia, scaevola, Thunbergia, tomatoes, verbena, and vinca vine.

Key herbaceous perennials affected: *Alcea, Aquilegia, Baptisia, Buddleia, Campanula, Delphinium, Filipendula, Gaillardia, Hemerocallis, Hydrangea, Iris, Lamium, Lavatera, Monarda, Nepeta, Papaver, Phlox, Potentilla, Primula, Rudbeckia, Scabiosa, Thalictrum, Verbena, and Viola.*

Whiteflies - Greenhouse Whiteflies

Key bedding plants affected: Ageratum, alyssum, begonia, bacopa, calendula, chrysanthemum, fuchsia, gerbera daisy, herbs (many such as scented geraniums, and lemon verbena), lantana, primula, salvia, tomato, verbena, and zinnia.

Key herbaceous perennials affected: *Acanthus, Aster, Alcea, Hibiscus, Helenium, Leonotis, Lavatera, Malva, Primula and Solidago.* Whiteflies are generally more of an issue if plants have been overwintered from season to season.

Whiteflies - Sweetpotato Whiteflies Primarily on poinsettia crops, also gerbera daisy, hibiscus.

Key herbaceous perennials affected: *Asters, Gaillardia, Eupatorium, Helianthus, Lavandula, and Salvia.*

Western Flower Thrips

Key Bedding Plants Affected: Ageratum, alyssum, basil, bacopa, begonia, calibrachoa, calendula, celosia, chrysanthemum, dahlia, dianthus, dracaena spikes, eggplant, fuchsia, herbs (many especially tarragon), gazania, geraniums (ivy), gerbera daisy, *Ipomoea*, marigolds, New Guinea Impatiens, petunia, pepper, portulaca, primula, salvia, snapdragon, tomato, verbena, and zinnia.

Key herbaceous perennials affected: *Alcea, Asclepias, Aster, Campanula, Centurea, Chrysanthemum, Coreopsis, Crocosmia, Digitalis, Echinacea, Eupatorium, Lamium,*

Lupinus, Malva, Monarda, Penstemon, Platycodon, Polemonium, Phlox, Rudbeckia, and Tanacetum.

Echinothrips americanus (poinsettia thrips) – many different tropical plants

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