

# Kontos Insecticide Compatibility with Biological Controls

**Kontos<sup>®</sup>** (*spirotetramat*) has shown great compatibility with most species of parasitoid and predators tested (see table below).

Kontos is a lipid synthesis inhibitor, affecting mostly the immature stages of insects and mites after they feed on treated plant tissues, and has little contact activity. Kontos drench or foliar applications have little or no negative impact on parasitic wasps and predatory beetles, predatory bugs and predatory mites commonly used in biological control.

Use Kontos to reduce initial pest populations before natural enemy releases, to preserve naturally occurring or released predators and parasitoids in greenhouses and nurseries or at the end of the season to clean up plants before shipment and delivery.

When using Kontos with predatory mites, allow 7 days after foliar application before releasing predators, to ensure success.

| Beneficial Group  | Species                              | Target Pest                    | Compatibility                                 |
|-------------------|--------------------------------------|--------------------------------|---|
| Parasitic wasps   | <i>Eretmocerus mundus</i>            | Bemisia whitefly               | Slightly toxic                                |
|                   | <i>Eretmocerus eremicus</i>          | Bemisia whitefly               | Slightly toxic                                |
|                   | <i>Encarsia Formosa</i>              | Greenhouse whitefly            | Slightly toxic                                |
|                   | <i>Diglyphus isaea</i>               | Liriomyza leafminer            | Slightly toxic to larvae; non toxic to adults |
|                   | <i>Aphidius colemani</i>             | Aphids                         | Non toxic                                     |
|                   | <i>Aphitis melinus</i>               | California red scale           | Non toxic to larvae; slightly toxic to adults |
|                   | <i>Tamarixia radiata</i>             | Asican citrus psyllid          | Moderately toxic                              |
|                   | <i>Anagyrus sp. near pseudococci</i> | Vine mealybugs                 | Non toxic                                     |
|                   | <i>Microplitis mediator</i>          | Noctuid caterpillars           | Non toxic                                     |
| Predatory beetles | <i>Cryptolaemus montrouzieri</i>     | Mealybugs, whitefly            | Non toxic                                     |
|                   | <i>Adalia bipunctata</i>             | Aphids                         | Non toxic                                     |
|                   | <i>Atheta coriaria</i>               | Fungus gnats, thrips           | Non toxic                                     |
| Predatory bugs    | <i>Orius insidiosus</i>              | Thrips, whitefly               | Non toxic                                     |
|                   | <i>Orius laevigatus</i>              | Thrips, whitefly               | Slightly toxic to nymphs; non toxic to adults |
| Predatory mites   | <i>Phytoseiulus persimilis</i>       | Spider mites                   | Moderately toxic                              |
|                   | <i>Neoseiulus fallacis</i>           | Spider mites                   | Moderately toxic                              |
|                   | <i>Amblyseius cucumeris</i>          | Thrips                         | Slightly toxic                                |
|                   | <i>Amblyseius californicus</i>       | Spider mites                   | Moderately toxic                              |
|                   | <i>Amblyseius swirskii</i>           | Thrips, spider mites, whitefly | Moderately toxic                              |
|                   | <i>Hipoaspis miles</i>               | Fungus gnats, thrips           | Slightly toxic                                |
| Predatory fly     | <i>Episyrphus balteatus</i>          | Aphids                         | Non toxic                                     |

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