

COMMANDO 220SC

Active Ingredient: Methoxyfenozide 150 g/Lt + Flonicamid 70 g/Lt

Methoxyfenozide

- IGR - moulting acceleration compound
- N-tert-butyl-N'-(3-methoxy-o-toluoyl)-3,5-xylohydrazide (IUPAC)

Methoxyfenozide, is a moulting acceleration compound, that mimics the action of the moulting hormone of Lepidoptera larvae (L1 to L2 stages). It differs from other insect growth regulators like chitin-biosynthesis-inhibitors or juvenile-hormone mimic products.

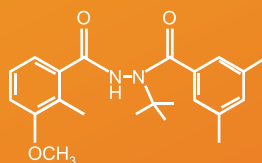
Upon ingestion, larvae of Lepidoptera cease feeding within 4 to 8 hours and thereafter undergo an incomplete and developmentally lethal premature moult.

The larvae die on account of their inability to feed and complete the moulting process.

Methoxyfenozide also shows good ovicidal effect.

IRAC Group: 18

(Ecdysone receptor agonists - Growth regulation)



Chemical Formula:

$C_{22}H_{28}N_2O_3$

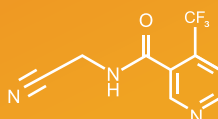
Flonicamid

- Pyridincarboxamide insecticide
- N-(cyanomethyl)-4-(trifluoromethyl)pyridine-3-carboxamide

Flonicamid is a systemic insecticide with a novel mode of action, different from any other insecticide such as neonicotinoids, pymetrozine, pyrethroids and pyri aquinazon.

IRAC Group 29

Only insecticide in this class.



Chemical Formula:

$C_9H_6F_3N_3O$

Commando 220SC is a highly effective, novel, insecticide for the control of soft bodied insects and Lepidoptera on a wide range of crops

- It is a unique mixture for the combined control of soft bodied insects and Lepidoptera.
- IGR action against Lepidoptera larvae.
- Systemic action against soft bodied insects.
- Alternative insecticide against difficult-to-control insects.
- Suitable for use in integrated insecticide resistant management strategies (IRM).

Commando 220SC Characteristics

- Combined control of soft bodied insects and Lepidoptera
- Highly effective against difficult-to-control insects, including scales and mealybugs
- Easily absorbed in plant tissues and digested by the target pest
- Not phytotoxic when used as directed
- No-cross resistance with other conventional insecticides.
- Excellent residual control.
- IPM compatible.

IGR action against the larval stages on Lepidoptera pests

- Commando 220SC contains Methoxyfenozide; a moulting acceleration compound, that mimics the action of the moulting hormone of Lepidoptera larvae (L1 to L2 stages).
- Methoxyfenozide has additional complementary ovicidal action, hence application breaks the biological life cycle of pests, before they reach adulthood and reproduce for the next generation.
- Commando 220SC has relatively low impact on most of the beneficial organisms following application.
- It is also IPM Compatible
- Preferably apply late in the evening when bees are not foraging.
- Commando 220SC has a good toxicological, environmental, and eco-toxicological profile.

DIRECTIONS FOR USE:

Commando 220SC should be mixed with water to be ready for use. It may be applied with any type of spraying equipment.

Rate of Application

| CROPS | PEST | RATE |
|---|--|-----------------|
| Ornamentals | Aphids, Thrips, Whiteflies, Mealybugs, Leafhoppers, Spidermites, Leafminers, Lepidoptera pests | 0.8 - 1.0 Lt/Ha |
| Vegetables (Peppers, Tomato, Cruciferae, Carrots, Paprika, Peppers, Eggplant) | | |
| Potatoes, Beans, Soybean | | |
| Maize, Wheat | | |

Application timing

Commando 220SC is recommended to be applied upon appearance of pests.

Ensure thorough coverage of the canopy with the spraying mixture.

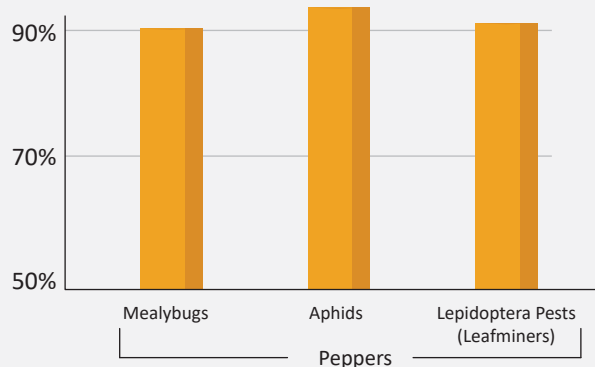
Always alternate with insecticides with different mode of action through the season to prevent the development of resistant pests.

Application note: To obtain the maximum efficacy against Lepidoptera larvae, apply as preventative sprays with a recommended positioning at the beginning of moth flight peak, or before egg hatch where degree day models are followed (e.g. Codling Moth), or before egg hatch of peak moth flights. Thus, the majority of eggs will be laid on treated surfaces and emerging larvae are exposed to the active ingredient before any damage is caused.

Field Trials

Extensive field research has proven the efficacy of Commando 220SC.

In Italy (2019) the following results were obtained:



% Efficacy of Commando 220SC:
2 applications at 800 ml/ha @10 day interval

Pepper plants with Commando application

