



D-C-Maxx[®]

nC₂₄ HORTICULTURAL PARAFFINIC OIL

Horticultural Paraffinic oil

D-C-Maxx[®] is a horticultural paraffinic oil (HPO) that takes spray oil technology to new heights. With a neverbefore matched combination of paraffinic loading, molecular weight efficacy and hydrocarbon super-spreading, D-C-Maxx[®] works in partnership with beneficial insects to control or suppress pests such as San José scale, Californian red scale, and Silverleaf whitefly on tree, vine and vegetable crops.

Features and Benefits

- Registered for sucking pest control in many tree and horticultural crops including citrus, apples, cucurbits and roses
- Registered for Silverleaf whitefly suppression in vegetables
- Extraordinary leaf coverage from a single droplet maximises physical modes-of-action
- Works in partnership with beneficials to suppress insect pests without secondary pest flaring and so is an ideal IPM option
- Very highly paraffinic, efficacious nC₂₄ paraffinic oil which provides extra efficacy over summer weight paraffinic oils and longer on-leaf persistence
- Formulated with food-grade, biodegradable, phyto-safe emulsifiers
- Emulsifies readily in water, even in complex tank mixtures
- No MRL restrictions
- Blocks pest respiratory systems and acts as an ovipositional (egg laying) deterrent
- Ideal rotation option for insecticides under pressure from resistance development
- Acts as an adjuvant for other insecticides by improving the targeting, spreading and wetting action
- 1 day WHP
- No export residue issues

Recommended Applications

D-C-Maxx[®] has a strong fit in Silverleaf whitefly control programs in vegetables and for control of scale pests in citrus, tropical fruit, nuts and vines, but can be used in a much wider variety of fruits to control a range of pests as detailed on registered label.



D-C-Maxx[®] sets a new benchmark for paraffinic formulations. It combines very high paraffinic loading with high median molecular weight. It also has hyper-coverage properties that distribute the paraffinic molecules widely and evenly over the leaf surface from their original droplet point source.

FMC

An Agricultural
Sciences Company



FMC Australasia Pty Ltd
Phone: 1800 066 355
www.fmccrop.com.au

03/2020



Hyper-coverage

Figure 1 shows how effectively D-C-Maxx® droplets spread and cover the surface of a leaf. This ability is very important as the physical mode-of-action of paraffinic formulations demands extensive coverage for effectiveness. Also, this property ensures even coverage so that all areas get a similar dose of paraffins, thereby avoiding phytotoxicity issues that can arise in leaf areas that receive concentrated droplets at the expense of other areas that receive no coverage.



Figure 1 left

The area covered by two droplets of conventional paraffinic oil formulation (LH leaf) 30 seconds after placement and D-C-Maxx® (RH leaf) droplets placed at the same time.



Figure 1 right

The droplet coverage after 20 mins. The D-C-Maxx® droplets have spread to many times their original size while the conventional paraffinic oil droplets have only spread a little.

Paraffinic Loading

The higher the loading of straight and branched carbon structures (paraffins and iso-paraffins, Figure 2), the more effective an oil type is as an insecticide.

Paraffins are more effective than other oils against a range of pests. This is because paraffins have greater persistence on the leaf surface.



Figure 2

An example of an nC26 molecule containing four different carbon types.

D-C-Maxx® has a paraffinic loading of 75%. Currently there are no economical refining processes that can produce percentages higher than this.

Molecular Weight

The typical HPO molecule should be as large as possible without increasing risk to the plant's metabolism. The median sized molecule in a HPO is described by its carbon number (e.g. nC21). Typical summer oils have a carbon number between 21 and 23.

Higher carbon number oils cover pests more effectively and persist longer on the leaf surface. However, if too heavy, plant growth processes like transpiration and respiration can be affected.

D-C-Maxx® has been optimised at nC24 to give superior pest control while not compromising plant safety.

Refinement

A HPO should have as many unsaturated molecules removed during refining as possible. The level of refinement is measured by a %UR test. The higher this number, the better. Aromatic groups can absorb UV light which may start chemical reactions within the oil that eventually form acids. These acids can cause cellular damage to some plants. Spray oils with a high %UR do not cause this form of phytotoxicity.

D-C-Maxx® has a %UR of >98.

For further information please visit www.fmccrop.com.au or contact your local representative.

ALWAYS READ AND FOLLOW LABEL DIRECTIONS.

FMC is a registered trademark of FMC Corporation or its affiliates. (C) 2020 FMC Corporation. All rights reserved 03/20. D-C-Maxx® is a registered trademark of ATaMS Pty Ltd.



An Agricultural
Sciences Company



FMC Australasia Pty Ltd
Phone: 1800 066 355
www.fmccrop.com.au