

CONFIDENCE
STARTS
HERE

BASF Nursery & Protected Cropping Solutions

Product Range Guide



 **BASF**

We create chemistry

BASF are dedicated to continued investment in the nursery and protected cropping industries

Our team strives to maintain a focus in our research and development on creating a rounded portfolio of weed, disease and insect management on and around nursery stock. For over 150 years BASF have developed innovations that focus on current and pressing challenges.

This BASF Nursery and Protected Cropping Product Range Guide is a culmination of research in this industry segment and showcases the unique technologies, unmatched in efficacy and performance, which lay the foundation for nursery management.

Nurseries are dynamic high throughput growing environments placing them at risk of a range of pests and diseases. BASF Nursery and Protected Cropping Solutions are developed to support good cultural practices to ensure you present the best quality stock to your customers.

BASF have invested and developed solutions to address key market needs and provide options that not only outperform current technologies but provide solutions which manage resistance, integrate with current IPM programs and meet customer needs.

We are excited to introduce these technologies to you in a comprehensive, solution focused guide, and look forward to bringing new technologies and innovations to complement this suite in the near future.

Kiana Barrie-Gresham

Technical Development Specialist

BASF Professional and Specialty Solutions

Contents

Sustainability 4 – 5

Weed Management

Nursery and surrounds

- Arsenal Super Herbicide 6 – 7
- Basta Non-Selective Herbicide 8 – 9
- Freehand Herbicide 10 – 11

Insect and Mite Management

- Danisaraba Miticide 12 – 13
- Efficon Insecticide 14 – 15
- Green Guard SC Premium Insecticide 16 – 17
- Velifer Biological Insecticide 18 – 19
- Versys Insecticide 20 – 21

Disease Management

- Lexicon Intrinsic Brand Fungicide 22 – 23
- Serifel Biological Fungicide 24 – 25

Rodent Management

- Selontra Soft Bait 26 – 27

Innovative packaging from BASF for a sustainable future

BASF Eco-packaging

At BASF Professional and Specialty Solutions, we are committed to sustainability and developing better solutions that will directly benefit our industry partners and their customers. The development and adoption of eco-packaging technology is an example of this commitment. This innovative packaging solution allows for at least a 20% reduction in plastics*, is more convenient, user friendly and decreases wastage**.



Who said sustainability had to come at a cost?

- The large central opening allows pouring without glugging which improves speed of use, as well as making the eco-packs easy to rinse and empty
- The flexible handle (5 & 10L packs) is ergonomically shaped and rotates smoothly
- The gripping surface allows slip free holding and pouring, decreasing the chance of spillage when using
- All materials are made from Polyethylene (PE) with a plastic lid, improving recycling capability
- The lightweight design reduces plastic by a minimum of 20% and makes the package easier to compact after use
- The integrated seal reduces hazardous waste, makes the package safer and easier to open, and eliminates induction sealing
- Grooves at defined millilitre intervals with the printed scale on the label make dosage of product convenient and simple



Eco-packaging is a positive choice for our customers by improving safety, efficiency and sustainability. Sustainability is a growing focus of the ornamentals industry. Environmentally friendly packaging is a key step in reaching sustainability goals as an industry, and within local facilities.

For more information visit turf-solutions.basf.com.au/sustainability-pss



Scan for more
information

*when compared to standard industry packaging.

**wastage left in bottles due to inefficient expulsion of product from standard packaging.

Complete knockdown and long-term pre-emergent weed control made easy

Arsenal® Super Herbicide, with its unique Transport Technology and formulation, provides superior long-term pre- and post-emergent weed control on a wide range grass and broadleaf weeds. Arsenal Super has been specifically designed for non-crop situations where long-term vegetation management is required, such as around nursery structures, fence lines, under seeding and planting tables. The unique formulation provides greater and more effective translocative uptake of the active ingredient and superior rainfastness when compared to other herbicides. Arsenal Super is effective as a stand-alone solution and is also highly compatible with a broad range of herbicides.

- Long-term pre- and post-emergent control for up to six months
- A unique Transport Technology that enables rapid uptake and translocation throughout target weeds, resulting in optimised efficiency
- Treatment flexibility with suitability for application through a small knapsack or large boomspray
- Suitable as a stand-alone solution or tank mix partner with BASF's Basta® Non-Selective Herbicide

Situational use pattern

A broad spectrum weed control solution for ornamental facilities, Arsenal Super offers a diverse use pattern around fixed nursery structures where long-term weed control is imperative. Applications can be made pre- or post-emergence via handgun or knapsack. Arsenal Super stops growth rapidly although symptoms may take over 30 days to develop. Affected plants are discoloured and growth is distorted. Arsenal Super is rapidly absorbed through foliage and roots and translocated throughout the plants.

Do not use where water will be collected for irrigation, or in areas where potted plants roots will be in contact with treated surfaces.

Situation	Weed	States	Rate	Critical Comments
Around agricultural buildings and other farm non-crop situations, commercial, industrial, and public service areas, rights of way and waste land, away from desirable vegetation.	Arsenal [®] Super controls a broad range of pre and post emergent grass and broadleaf weeds.	All states	Boom: 4 L/ha Hand gun* : 400ml/ 100L Knapsack* : 40ml/10L	Applications can be made pre or post-emergence. Post-emergence applications also provide pre-emergence control. (refer to label for full application instructions)
	Please refer to the product label for full weed species listings and directions for use.	All states	Boom: 6 L/ha Hand gun* : 4600ml/ 100L Knapsack* : 60ml/10L	Applications can be made pre or post-emergence. Post-emergence applications also provide pre-emergence control. (refer to label for full application instructions)
Irrigation channels – supply channels and tail drains leading to recirculation dams only.	Residual activity is maximised when applied to bare or low weed cover situations.	All states	Boom: 3 L/ha Hand gun* : 300ml/ 100L Knapsack* : 430ml/10L	Apply during the non-crop season and when the channel is not in use. Drain channels to be treated prior to use. Apply only to irrigation delivery and recirculation channels which may be flushed to a recirculation dam or settling pond. Do NOT apply where flushing water cannot be disposed of safely on-farm. Water from the initial flushing of treated channels must be retained on-farm. Applications can be made pre or post-emergence. Post-emergence applications also provide pre-emergence control. (refer to label for full application instructions)

* 100L & 10L Hand Gun and Knapsack rates provided in the table above are calculated on 1000L spray volume per hectare. Any deviation in spray volumes above or below 1000L/ha will require recalibration.

Refer to the product label for full directions for use table.

Packaging

Available in 10L bottles



The strongest knockdown alternative

Basta® Herbicide is a non-selective knockdown with a well-deserved reputation for versatility, effectiveness and a high level of non-target plant safety. Basta is a partially systemic herbicide which is labelled for the control of over 80 of the toughest weeds. Basta also provides users with faster weed control and improved levels of non-target safety when compared to glyphosate alternatives.

- A powerful broad-spectrum alternative to glyphosate which controls over 80 troublesome weeds
- Superior non-target safety and target weed control of the toughest weeds whilst minimising damage to desired non-target plants
- Effective control for glyphosate resistant weeds with an alternative mode of action - Group N
- Broad use pattern across a range of non-crop situations
- Compatible with BASF's Arsenal® Super for up to 6 months of broad-spectrum pre-emergent weed control

Situational use pattern

A broad-spectrum herbicide for use in nursery stock (seedlings, plugs, potted colour, trees, shrubs, foliage plants, palms, grasses, fruit trees, cut flowers), Basta can be applied through a boom spray or handgun. Basta herbicide can be applied as necessary to actively growing weeds up to a maximum of three applications per season. Despite its versatility, nurseryman should avoid spraying Basta when crops are in flower or fruiting.

B. COMMERCIAL, INDUSTRIAL, NON-AGRICULTURAL AREAS, FENCELINES IN AGRICULTURAL AREAS and FORESTRY PLANTATIONS

Crop/Situation	Weeds	Rate	WHP	Critical Comments
Commercial & industrial areas, forest plantations, rights-of-way and other non-agricultural areas	Please refer to the product label for full list of weeds controlled.	1.0 to 5.0 L/ha	-	Determine the recommended rate of use by considering the criteria WEED SPECIES, WEED STAGE OF GROWTH, WEED DENSITY and CLIMATIC CONDITIONS as described above in Part A of the Directions for Use table, under Critical Comments. Warnings: Do not allow spray or spray drift to contact desirable plants. To avoid potential crop damage, refer to the label sections on Application and PROTECTION OF CROPS, NATIVE AND OTHER NON-TARGET PLANTS .
Fencelines in agricultural areas			- (8 weeks if grazing)	
Commercial & industrial areas, forest plantations, rights-of-way and other non-agricultural areas	Volunteer or wildling <i>Pinus</i> spp.	Handgun and knapsack application 500 mL/ 100 L water	-	Basta is a non-selective herbicide and will affect most weeds. Its forestry use is designed to improve the control of <i>Pinus</i> spp. wildlings when pre-plant weed control is carried out. To broaden the weed spectrum, mixing with other herbicides such as glyphosate and metsulfuron-methyl at labelled rates may be necessary. APPLICATION Apply with an adjuvant. The addition of an adjuvant e.g. Nu-Film® P or Exit® may assist in improving performance. High water volumes or nozzle systems should be used to achieve complete coverage of weeds, which is essential for good control. Handgun and knapsack rates are based on the application of 1000 L of spray mixture per sprayed hectare. This is usually adequate to thoroughly wet dense stands of weeds. Less dense stands will require lower water rates. Basta does not provide residual weed control. Refer also to comments in the General Instructions which relate to application. WEED GROWTH STAGE AND CONDITION Use on <i>Pinus</i> spp. ≤ 15 cm is recommended to maximise efficacy. Apply when weeds are actively growing. Results will be reduced if treated plant is under stress due to very dry, very wet, frosty or diseased conditions. COVERAGE Complete coverage of target is essential for good control. Poor coverage may result in re-growth. CLIMATIC CONDITIONS Best results are achieved when applied under warm, humid conditions (temperatures below 33 °C with a relative humidity above 50 %). Good results will be achieved under most other conditions, however poor results may occur under hot, dry conditions. Trials have shown better results from autumn and winter applications than from spring and summer applications. SYMPTOMS Visible symptoms will appear within 3 weeks; tree death may take several months depending on initial coverage and size of tree. Follow up treatments may be necessary to control re-growth in some cases.
Forestry plantations (pre-plant plantation establishment)		5 L /ha		

D. OIL TEA TREE, NURSERY STOCK (NON FOOD), FOLIAGE, CUT FLOWERS, WILDFLOWERS

Crop/ Situation	Weeds	Rate	WHP	Critical Comments
Oil tea tree	Please refer to the product label for full list of weeds controlled and directions for use.	Boom spray: 1 to 5 L/ha	- (8 weeks if grazing)	Apply spray treatment along the sides of crops and between rows of crops. Avoid overspray or incidental spray drift onto crop, as damage or death of plants may occur. Apply as necessary to actively growing weeds up to a maximum three applications per season. Use suitable ground application equipment. Ensure equipment is correctly calibrated. Use higher rates for perennial grass weeds. Increase the application rate as the size of target weeds increases. Only apply spray to actively growing grass weeds free from environmental stresses. Avoid spraying when crops are in flower or fruiting.
Nursery stock [(non-food) – seedlings, plugs, potted colour, trees, shrubs, foliage plants, palms, grasses, fruit trees (non- bearing)], cut flowers including wildflowers and foliage. Wildflower crops.		Hand-gun: 300 to 500 mL/100 L		

Refer to the product label for full directions for use table.

Packaging

Available in 20L bottles



Powerful pre-emergent control for the toughest weeds

Freehand® Herbicide offers the ornamental grower a new tool for pre-emergent weed control of broadleaf and grassy weeds. Its two unique active ingredients, pendimethalin and dimethenamid-P, prevent weeds from growing and multiplying by inhibiting cell growth in seedling shoots and impeding plant cell microtubule assembly in roots. This powerful herbicide is labelled for the control and suppression of more than 60 of the toughest, most troublesome weeds, promoting higher quality and more marketable plants.

- Unique combination of two modes of action (Groups D and K) for broader spectrum weed control and resistance management
- Safe on a broad range of ornamental crops providing up to three months of control and suppression of weeds
- Easy-to-use granular formulation and particle distribution allows for easy spreading and flexible application rates
- Extended residual control for up to three months

Situational use pattern

Apply evenly over the area or pots to be treated preferably using a properly calibrated mechanical granule spreader. Apply to the surface of weed free soil preferably after cultivation or just after potting up. Freehand will not control established weeds. Apply to dry foliage only and then sprinkler irrigate or hose (10-15 mm) to wash granules from foliage and incorporate the herbicide into the soil. One application will last for 2-3 months depending upon rainfall, irrigation, soil type (potting mix), temperature and weed seed burden. Retreat when the first signs of weed growth are seen but no sooner than 2 months and no later than 3 months after the first application.

Do not apply Freehand 2 weeks prior to or 2 weeks after leaf bud break or during periods of flush growth. Newly formed leaves are sensitive to this product. Spotting or leaf drop may result from such applications. Do not apply directly on to bare roots of woody ornamentals as injury may occur.

Situation	Weeds	Rate	Critical Comments
Container & in-ground Ornamental plants Recreational Turf: Including but not limited to: fairways, golf tees, municipal sports fields, industrial commercial and domestic lawns. Warm Season Turf species only: Hybrid Couch (<i>Cynodon dactylon x cynodon transvaalensis</i>) Common Couch (<i>Cynodon dactylon</i>) QLD Blue Couch (<i>Digitaria didactyla</i>) Carpet Grass (<i>Axonopus compressus</i>) Kikuyu (<i>Pennisetum clandestinum</i>) Buffalo (<i>Stenotaphrum secundatum</i>) Zoysia (<i>Zoysia japonica</i> and <i>Zoysia matrella</i>)	Freehand Herbicide controls and suppresses a wide range of broadleaf and grassy weeds. Please refer to the product label for full weed species listings and directions for use.	100 kg/ha or 1 kg/100 square metres	Apply evenly over the area or pots to be treated preferably using a properly calibrated mechanical granule spreader. Apply to the surface of weed free soil preferably after cultivation or just after potting up. Freehand will not control established weeds. Apply to dry foliage only and then sprinkler irrigate or hose (10 - 15mm) to wash granules from foliage and incorporate the herbicide into the soil. Do not apply Freehand to wet foliage – should this happen irrigate or hose immediately to remove granules from the leaf surface. Follow the precautions listed below to avoid unnecessary plant damage and to obtain optimum weed control. One application will last for 2 - 3 months depending upon rainfall, irrigation, soil type (potting mix), temperature and weed seed burden. Retreat when the first signs of weed growth are seen but no sooner than 2 months and no later than 3 months after the first application.
		200 kg/ha or 2.0 kg/100 square metres or 20 g/ square metres	Ornamentals Do not apply Freehand 2 weeks prior to or 2 weeks after leaf bud break or during periods of flush growth. Newly formed leaves are sensitive to this product. Spotting or leaf drop may result from such applications. Do not apply directly on to bare roots of woody ornamentals as injury may occur. Turf Apply prior to germination of weeds (typically from early spring through to late summer early Autumn). Delay overseeding of treated turfgrass for at least 3 months after last application. Application of Freehand to newly sodded areas must be delayed until turfgrass root system has been well established and turfgrass mowed at least 2 times.

Refer to the product label for full directions for use table.

Packaging

Available in 22.7kg bags



An innovative miticide that's hard on spider mites and soft on beneficials

Danisaraba® Miticide introduces a highly effective new mode of action that's ideal for first-line control of **Two-spotted mite, European red mite and Bryobia mite** across all life stages. Danisaraba not only provides growers with unmatched mite control, but also optimal compatibility with beneficial predators.

- Gives growers the stopping power to gain immediate control of infestations
- Rapid, targeted control of Two-spotted, European Red and Bryobia mites at all life stages
- Compatible with Integrated Pest Management and beneficial release programs
- A novel mode of action to reduce resistance pressure on other miticides
- Up to 21 days residual control and rainfast after 1 hour

Situational use pattern

Danisaraba Miticide is not systemic and does not have translaminar activity. Apply in sufficient water to ensure thorough coverage to the point of runoff and penetration of the target plants. Monitor crops and commence applications before local threshold levels are reached. Continue to monitor crops and make subsequent applications after 14 days where necessary. Apply a maximum of 2 sprays per growing season.

Crop	Pest	Rate	WHP	Critical Comments
Ornamentals, including Chrysanthemum, Cyclamen, Fuchsia, Gerbera daisy, Rose and African violets (<i>Saintpaulia spp.</i>) (field and protected)	Two spotted mite (<i>Tetranychus urticae</i>) European red mite (<i>Panonychus ulmi</i>) Bryobia mite (<i>Bryobia spp.</i>)	100mL/ 100L	-	Monitor crops and commence applications before local threshold levels are reached. Continue to monitor crops and make subsequent applications after 14 days where necessary. Apply a maximum of 2 sprays per growing season. Alternate the applications of DANISARABA MITICIDE with a miticide from a different Mode of Action. Refer to the Crop Life Australia Guidelines for resistance management. DANISARABA MITICIDE is not systemic and does not have translaminar activity. Apply in sufficient water to ensure thorough coverage to the point of runoff and penetration of the target plants. The addition of an appropriate adjuvant may aid in speed of knockdown and the overall control. Test the safety and compatibility of all adjuvants before use. Always read and follow the specific adjuvant label using the correct concentration of adjuvant to avoid plant injury. For ornamentals not listed on the label, a small test application to assess for phytotoxicity should be made before spraying the whole crop.

Refer to the product label for full directions for use table.

Packaging

Available in 5L and 1L bottles



The powerful new option for control of piercing and sucking pests

Efficon Insecticide makes a valuable addition to any IPM program. It will deliver rapid, reliable control at flexible timings, both early in a crop and after crop canopy closure – complementing other chemistries and beneficial insect activity.

- A new mode of action providing rapid and reliable control of target pests
- Compatible with beneficials in IPM programs
- Controls pests with reduced sensitivity to other insecticides
- Rapid feeding cessation reduces virus transmission
- Strong protection after crop closure due to systemic, oral and contact activity

Situational use pattern

Efficon Insecticide can be applied up to four times per crop in two pairs of consecutive sprays with at least one other mode of action used in between. Monitor crops and begin applications as local threshold levels are reached. Continue to monitor the crop and make a second application after 14 days if necessary.

One of the pairs of two consecutive applications is best used late in the season because Efficon Insecticide's systemic activity makes it particularly effective after crop closure or whenever complete spray coverage is hard to achieve. To be effective, thorough crop coverage is required. Apply in a minimum of 200L water/ha. Adjust water volumes according to the crop growth stage to ensure thorough coverage up to the point of runoff.

Crop	Pest	Rate
Nursery stock (non-food) - seedlings & plugs, potted colour, trees & shrubs, foliage plants, palms, grasses, fruit plants (non-bearing), cut flowers and ornamentals (field and protected)	Silverleaf whitefly (Bemisia tabaci)	1L/ha
	Greenhouse whitefly (Trialeurodes vaporariorum)	
	Cotton/Melon aphid (Aphis gossypii) Green peach aphid (Myzus persicae) Cabbage aphid (Brevicoryne brassicae)	500mL/ha

Refer to the product label for full directions for use table.

Packaging

Available in 10L bottles



Biological control of plague locust nymphs, wingless grasshoppers and other pest grasshoppers

Green Guard® SC Premium Biological Insecticide is an exciting non-chemical solution to manage a range of hopper pests, adding more versatility to spray programs. Suitable for agricultural situations, Green Guard offers a solution for environmentally sensitive situations and Integrated Pest Management (IPM) programs.

- Biological control of plague locust nymphs, wingless grasshoppers and other pest grasshoppers
- An all in one oil suspension formulation for easy application with no mixing required
- No withholding period for most agricultural cropping situations
- Has no effect on other insect species

Green Guard[®] SC Premium

Biological Insecticide

CONFIDENCE
STARTS
HERE

Green Guard[®] SC offers biological control of locusts and grasshoppers. Formulated with the naturally occurring fungus *Metarhizium*, Green Guard SC offers a pest control solution for environmentally sensitive areas. Infection occurs when locust and grasshoppers are in direct contact with spores during application or as they move through the treated vegetation.

Situation	Pest	Rate	Critical Comments
Agricultural areas Pastures Crops including Table and Wine Grapes. Forage crops and Non-crop areas	Nymphs of Australian plague locust (<i>Chorloicetes tenninifera</i>), Wingless grasshopper (<i>Phaulacridium vittatum</i>), and pest grasshoppers	500 mL in 75-225 L water per hectare	For best results apply when locusts and grasshoppers are at early nymph stage. Do NOT apply in gusty conditions greater than 8 metres per second or if rain is imminent in the next 6 hours.

Refer to the product label for full directions for use table.

Tips for maximising control

- Understand the lifecycle, movement and feeding habits of target pests
- Ensure all grasshoppers have hatched prior to treatment
- Use as a preventative control
- Minimise crop damage by applying to the nymph growth stage
- If infestation is dense, treat 10-15m band of vegetation in front of moving pests, followed by treatment of the pest band itself



Biological control with metarhizium infection[^]

Spore viability and infection

- Infection occurs when pests are in direct contact with spores during application or as they move through treated vegetation
- Locust and grasshoppers are less mobile in earlier growth stages and can forage for longer periods in treated vegetation maximising spore infection
- The rate of spore infection is optimised at 25-35°C
- At temperatures above 33°C locusts can resist spore colonisation
- Spores can remain viable for up to 14 days, however, persistence on vegetation and control provided declines to 50% within 4 days, and 10% by 14 days
- Symptoms can take up to 8-12 days to provide full control of infected pests
- No withholding period for most agricultural situations

Packaging

Available in 4L bottles



Adding versatility with biologicals

Velifer® Biological Insecticide is an exciting new non-chemical solution to manage a wide range of key pests, adding more versatility to spray programs. Complimentary to Integrated Pest Management (IPM) programs, Velifer effectively targets all insect life stages combatting resistance to conventional insecticides. Safe to most beneficial species, Velifer can be applied multiple times throughout all growing stages of the crop and is non-phytotoxic to ornamentals. With sustainability goals becoming front of mind for customers and consumers it has never been more imperative to diversify your defence with biologicals.

- Compatible with IPM programs, Velifer offers versatility in spray programs and combats the resistance to conventional insecticides
- Offering versatility of application, Velifer can be applied multiple times throughout all growing stages of the crop
- Effective against all insect life stages, including eggs, larvae/nymph and adults
- Non-phytotoxic to ornamentals and safe to most beneficial pest species including pollinator insects

Situational use pattern

Velifer Biological Insecticide is best used on low pest populations to maintain pressure below economic damage threshold. Spray sufficient Velifer/water mixture, to obtain full crop coverage, but not to the point of run off. Velifer Biological Insecticide is a contact insecticide and it is essential that the spores make contact with all the insects, to be treated. Apply, as a full cover film spray, using conventional spray equipment. Good coverage is essential, but not to the point of run off. Due to UV sensitivity, it is recommended that Velifer is applied during the **afternoon, or evenings**.

Situation	Pest	Rate	WHP	Critical Comments
Protected vegetables and ornamentals	Suppression of Western Flower Thrips (<i>Frankliniella occidentalis</i>) Onion Thrips (<i>Thrips tabaci</i>) Greenhouse Whitefly (<i>Trialeurodes vaporarum</i>) Silverleaf Whitefly (<i>Bemisia argentifolii</i>) Sweet Potato Whitefly (<i>Bemisia tabaci</i>)	50 ml / 100 L	0 days	<p>Apply when pests are first detected in the crop or above economic thresholds. Repeat applications are to be made as necessary at an interval of 3-14 days.</p> <p>Use shorter application intervals when insect pressure is higher. Generally, 3 consecutive weekly applications are required for adequate pest suppression.</p> <p>Velifer biological insecticide should be applied in a water volume ranging from 500 to 2500 L/ha.</p> <p>It is important to ensure coverage on the bottom side of the leaves where pests might be located.</p> <p>In higher pest situations, Velifer biological insecticide is best used within an Integrated Pest Management program in conjunction with a chemical insecticide.</p>
	Suppression of Green Peach Aphid (<i>Myzus persicae</i>) Rose Aphid (<i>Macrosiphum rosae</i>) Chrysanthemum Aphid (<i>Macrosiphoniella sanborni</i>) Two Spotted Spider Mite (<i>Tetranychus urticae</i>)	90 ml / 100 L		

Refer to the product label for full directions for use table.

Packaging

Available in 5L bottles



For rapid and targeted control of aphids, whitefly and mealybug in ornamentals & nursery stock

Versys® Insecticide is a pioneering solution from BASF that provides effective control of aphids, whitefly and mealybug in ornamentals and nursery stock plants. Versys offers a unique mode of action subgroup (9D) with no known cross-resistance to other insecticides. Versys Insecticide provides growers with class leading control of key pests, including various aphids, whitefly and mealybug with the added benefit of long-term resistance management. Versys affects all life stages from eggs to adults. It exhibits a favourable environmental profile with low acute toxicity to mammals, fish, birds, beneficial insects and pollinators. Versys delivers long lasting control of problem pests, resulting in clean plants of exceptional quality, whilst also providing the convenience of no withholding periods when used in ornamentals and nursery stock.

- Fast acting with long residual control disrupting the sensory response of target pests
- Low impact to beneficials including colony health and development
- Compatible in IPM programs with a unique MOA subgroup
- Affected aphids stop feeding within a few minutes preventing the transmission of viruses and diseases spread by these insects

Situational use pattern

Versys Insecticide disrupts insect behaviour and feeding and will provide slow knockdown. Versys Insecticide will provide residual control of aphids out to 21 days. Apply a maximum of 2 sprays before rotating to an alternative insecticide for aphid control. Do not apply more than 4 applications per crop. Apply in sufficient water to ensure thorough coverage of the target crop.

Crop	Pest	Rate	WHP	Critical Comments
Ornamentals & Nursery Stock including: (NON-FOOD) seedlings, tubes and plugs, potted colour, trees and shrubs, foliage plants, cut flowers, palms and grasses and fruiting plants (NON-BEARING) (field and protected)	Green peach aphid (<i>Myzus persicae</i>) Cabbage aphid (<i>Brevicoryne brassicae</i>) Currant lettuce aphid (<i>Nasonovia ribis-nigri</i>) Cotton aphid / Melon aphid (<i>Aphis gossypii</i>) Rose aphid (<i>Macrosiphum rosae</i>)	10mL/100L	-	Versys Insecticide disrupts insect behaviour and feeding and will provide slow knockdown. Monitor crops and commence applications as local threshold levels are reached. Versys Insecticide will provide residual control of aphids out to 21 days. Continue to monitor crops and make subsequent applications after 14 days where necessary. Apply a maximum of 2 sprays before rotating to an alternative insecticide for aphid control.
	Greenhouse whitefly (<i>Trialeurodes spp.</i>) Silverleaf whitefly (<i>Bemisia tabaci</i> Biotype B) Citrus mealybug (<i>Planococcus spp.</i>) Long-tailed mealybug (<i>Pseudococcus spp.</i>)	35-50ml/100L		Do not apply more than 4 applications per crop. Apply in sufficient water to ensure thorough coverage of the target crop. Addition of an adjuvant may aid in speed of knockdown and the overall control. For suitable adjuvants refer to the Adjuvant section in Compatibility on the label.

Refer to the product label for full directions for use table.

Packaging

Available in 1L bottles



Broad spectrum fungal protection and plant health benefits combined

Lexicon® Intrinsic® Brand Fungicide is a highly effective fungicide providing fast, long-lasting control of key diseases during the production cycle, resulting in healthier plants that exhibit the highest quality and consistency. Lexicon delivers research-proven plant health benefits, including healthy, dense root growth and greater tolerance to stressors, keys to the production of healthy, quality plants.

- Early curative and preventive plant protection
- Translaminar and systemic activity maximizes distribution within treated plants
- Lasting protection, even under the wettest conditions
- Extends the plant health benefits of Intrinsic brand fungicides throughout the plant production cycle

Situational use pattern

Crown and basal rot

Use preventatively. Begin applications when conditions are favourable for fungal infection, prior to disease symptom development. The crown and base of the plant and the soil or growing media surrounding the crown must be thoroughly covered. Apply at application intervals of between 7-14 days.

Soilborne disease

Use preventatively. Drench the soil through coverage and wetting of root zone, crown and base of the plant, and surrounding soil and growing media is necessary for best control.

Provide a well-drained substrate at the time of application. Avoid watering the plants for several hours before application in order to improve plant uptake of the product. Repeat applications as needed within 7-28 days.

Situation	Pest	Rate	Critical Comments
Nursery Stock (non-food) seedlings, tubes, plugs, potted colour, trees, shrubs, foliage plants, palms, grasses, fruiting plants (non-bearing), cut flowers and ornamentals	Rhizoctonia, Sclerotinia, Basidiomycete fungi, Fusarium, Pythium, and Ectotrophic root infecting fungi (<i>Rhizoctonia</i> spp, <i>Sclerotinia</i> spp, <i>Basidiomycetes</i> spp, <i>Fusarium</i> spp, <i>Pythium</i> spp. and <i>Ophiostoma</i> spp. & <i>Gaeumannomyces</i> spp.)	80-100 mL /100 L	<p>Apply as a preventative treatment. Begin application when conditions are favourable for fungal infection, prior to disease symptoms developing. Repeat application 14-28 days later.</p> <p>Apply as a soil drench or foliar spray via overhead track sprayer, boom sprayer, backpack sprayer, hand wand sprayer or equivalent.</p> <p>Apply Lexicon in sufficient spray volume to provide complete soil coverage without runoff. Thorough soil coverage is required to maximize the effectiveness of Lexicon. Use a maximum spray volume of 1500 L/ha.</p> <p>DO NOT apply more than 2 applications per crop. Alternate to another registered or permitted non-group 11 or 7 fungicide with a different mode of action.</p> <p>DO NOT apply less than 14 days after the initial treatment.</p> <p>Not compatible with integrated pest management (IPM) programs utilising beneficial arthropods. Minimise spray drift to reduce harmful effects on beneficial arthropods in non-crop areas.</p>

Refer to the product permit for full directions for use table.

Packaging

Available in 500ml bottles



Battling resistance with biologicals

With sustainability at the forefront of grower and nurseryman's minds, Serifel® offers growers a ground-breaking biological alternative to traditional chemical modes of action. Its high loading of pure spores, *Bacillus amyloliquifaciens* strain MBI600, allows low application rates while guaranteeing low environmental impact and toxicity.

- Unique mode of action
- Low environmental impact and toxicity
- Lower spray rate compared to other biologicals
- No cross-resistance between Serifel and conventional chemical fungicides
- Compatible with Velifer® Biological Insecticide

Situational use pattern

Apply preventatively, prior to an infection period and development of disease only. Use higher rate when high disease pressure is expected. Continue applications on a 3–14-day interval as required. DO NOT apply more than 10 applications per crop. Serifel is best applied as part of an integrated disease management program.

FOLIAR APPLICATION

Apply using ground-based spray equipment in an adequate spray volume to ensure thorough coverage of all plant surfaces.

SOIL DRENCH

Apply soil drench using calibrated drenching equipment to thoroughly soak.

Crop	Pest / Disease	Rate
NURSERY STOCK (NON-FOOD): Seedlings, tubes and plugs, potted colour, trees and shrubs, foliage plants, palms, grasses, fruiting plants (non-bearing), cut flowers, ornamentals.	SUPPRESSION ONLY FOLIAR DISEASES Alternaria leaf spot (<i>Alternaria spp.</i>) Anthracnose (<i>Colletotrichum spp.</i>) Cercospora leaf spot (<i>Cercospora spp.</i>) Downy Mildew (<i>Peronospora spp.</i>) Grey Mould (<i>Botrytis cinerea</i>) Powdery Mildew (<i>Erysiphe/Leveillula</i> <i>Podosphaera/Sphaerotheca spp.</i>) White Mould/Watery soft rot (<i>Sclerotinia spp.</i>) SOIL DISEASES Fusarium Wilt (<i>Fusarium spp.</i>) Leaf Drop (<i>Sclerotinia spp.</i>) Verticillium Wilt (<i>Verticillium spp.</i>)	50-75g / 100L

Refer to the product permit for full directions for use table.

Packaging

Available in 2kg buckets.



Game Changing Rodent Control

Selontra® Soft Bait Rodenticide is a highly effective, innovative rodent bait that rapidly controls rodent infestations and offers several unique advantages including shorter baiting regimes and higher palatability. Selontra is powered by a non-anticoagulant (non-AVK) active ingredient, and formulated into a stable, highly palatable soft block formulation. The active ingredient in Selontra is neither persistent nor bio-accumulative. Selontra controls rodents up to three times faster than anticoagulant rodenticides and has a stop-feeding effect, which results in reduced bait wastage and significant cost savings.

- Highly palatable and stable formulation
- Non-anticoagulant active which does not bioaccumulate
- Superior performance providing up to three times faster control than anticoagulants
- Stop-feeding effect preventing bait wastage and maximising cost savings
- Flexible and diverse use pattern with approval for use on and off buildings including perimeter fence lines
- Limited likelihood of adverse exposure to non-target animals via secondary poisoning

Selontra® Soft Bait

Rodenticide

CONFIDENCE
STARTS
HERE

Situational use pattern

Secure SELONTRA Soft Baits within tamper resistant bait stations per the label particulars for application. Bait locations should be in areas where activity is obvious, particularly where droppings are seen. Inspect bait locations and replace SELONTRA Soft Baits until all signs of mouse activity have disappeared. Baiting programs should be part of a comprehensive IPM program. Headlands and adjacent non-crop habitats should be kept weed free and slashed (where applicable) to expose rodent to natural predators.

Buildings

Situation	Pest	Rate	Critical Comments
In and around domestic homes, industrial, commercial and agricultural buildings, animal houses, farms, wharves, public service buildings, hospitals, food processing facilities, abattoirs, transport vehicles (including ships), around grain terminals, storage areas and fence lines (including perimeter fence lines).	Rats-Rattus rattus also known as Black rat, Roof, rat, Ship rat or, Fruit rat and Rattus norvegicus also known as the Brown rat or Norway rat	3-9 Selontra Soft baits per bait station	<p>Eliminate as far as practicable all alternative food sources. Select suitable bait locations, such as along rat runs or areas exhibiting signs of infestation. Try to establish a barrier of bait locations between living and feeding areas. Secure 3-9 Selontra Soft Baits at each bait location. Selontra Soft Baits must be secured within lockable tamper resistant bait stations.</p> <p>On initial application, an inspection of bait locations after 3 days may be undertaken to determine activity in bait locations and new locations may be selected if necessary. A subsequent inspection may also be undertaken again after 4 days to replace any soft baits which have been eaten.</p> <p>For severe infestations it is recommended that repeat inspections of all bait locations is conducted at 7 day intervals, replacing fresh Soft Baits only when Soft Baits have been eaten and until all signs of rat activity have disappeared.</p>
	Mice-Mus musculus also known as the House mouse	1-2 Selontra Soft Baits per bait station	<p>Mice have very limited home ranges and do not need to drink. They are more difficult to control than rats because their feeding patterns are more erratic. Selection of bait locations is therefore even more important than for rats.</p> <p>Secure 1-2 Selontra Soft Baits within tamper resistant bait stations 2-3 metres apart. Bait locations should be in areas where activity is obvious, particularly where droppings are seen. Inspect bait locations and replace Selontra Soft Baits as for rats until all signs of mouse activity have disappeared.</p>

Berries

Situation	Pest	Rate	Critical Comments
Strawberries, Rubus, Rubus hybrid and Blueberry blocks, and along block rows in field and protected situations	<p>Rats</p> <p>-Rattus rattus (Black rat, Roof, and rat, Ship rat or, Fruit rat), Rattus norvegicus (Brown rat or Norway rat) and</p> <p>Mice</p> <p>-Mus musculus (House mouse)</p> <p>Population suppression only</p>	1-9 Selontra Soft baits per bait station	<p>Baiting programs should be part of a comprehensive IPM program. Headlands and adjacent non-crop habitats should be kept weed free and slashed (where applicable) to expose rodent to natural predators.</p> <p>Rats</p> <p>Secure 3-9 soft baits at each bait location. Soft baits must be secured within lockable tamper resistant bait stations. In areas of high infestation, place bait stations at intervals of 6-9 m. Try and establish a barrier of bait locations between living and feeding areas.</p> <p>Mice</p> <p>Secure 1-2 soft baits within tamper resistant bait stations 2-3 m apart.</p> <p>Bait locations should be in areas where activity is obvious, particularly where droppings are observed.</p> <p>Ensure bait stations are placed to minimise the ingress of water such that baits remain dry. Check baits every 7-14 days and once feeding has stopped baits may be removed. Remove baits if there is evidence of native wildlife visiting bait stations.</p>



Refer to the product label for full directions for use table.

Packaging

Available in 5kg buckets



Weed Management



Arsenal Super

Herbicide



Basta®

Herbicide



Freehand®

Herbicide

Insect & Mite Management



Danisaraba®

Miticide



Efficon®

Insecticide – Powered by Axalion® Active



Green Guard® SC Premium

Biological Insecticide



Velifer®

Biological Insecticide



Versys®

Insecticide

Disease Management



Lexicon®

Intrinsic® Brand Fungicide



Serifel®

Biological Fungicide

Rodent Management



Selontra® Soft Bait

Rodenticide

For more information
visit **turf-solutions.basf.com.au**
or call **1800 558 399**

ALWAYS READ AND FOLLOW LABEL DIRECTIONS BEFORE USING ANY PRODUCT IN THIS FACT SHEET.
© Copyright BASF 2025. ® Registered trademarks of BASF. AU55-P00000510 0125

