



Redefining disease management with BASF Xemium® and Intrinsic® technologies in ornamentals and nursery stock



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We create chemistry

TECHNICAL NOTE



Intrinsic® brand fungicides are the future of disease control today

Maintaining disease free, healthy ornamental and nursery stock is at the forefront of grower's intentions and Intrinsic products are integral in their provision of both advanced, long-lasting disease control, and plant health benefits.

Intrinsic brand fungicides offer plant health benefits beyond disease control as they promote stronger, denser roots, advanced foliage growth and faster recovery from both environmental and mechanical stressors. The unique Intrinsic technology harnesses maximum CO2 levels to increase net photosynthesis, ensuring efficiency is optimised to prioritise energy production (Figure 1).



Night Respiration

When treated with Intrinsic brand fungicides, lower levels of CO₂ are produced, energy and growth are redirected to the root system – resulting in an efficient and healthier plant

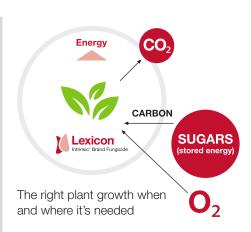


Figure 1: The unique Intrinsic technology reduces night respiration redirecting carbon to root growth, optimising ornamental and nursery stock establishment.

Lexicon Intrinsic Brand Fungicide

With its two unique technologies, Xemium® and Intrinsic®, Lexicon Intrinsic brand fungicide provides optimal protection from key ornamental and nursery stock diseases, in addition to delivering plant health benefits and faster recovery from stressors. While Xemium technology effectively disrupts the energy supply of essential building blocks stopping the growth of fungal cells, Intrinsic technology maximises green resilience advancing rooting and cover. Preventative and curative activity are provided by systemic movement through the waxy leaf surface resulting in the highly sought-after combination of quick knockdown and long residual action (Figure 2).

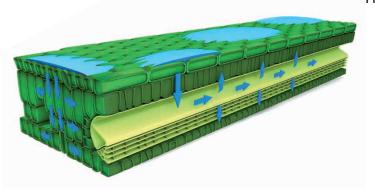


Figure 2: Xemium technology provides unmatched systemic movement absorbed to waxy layer and evenly transported in leaves.





Plant health benefits and market potential

As the cost and labour demands of ornamental and nursery crops continue to rise, there is a growing recognition of the critical importance of achieving optimal establishment and maintaining plant health.

This is especially evident in the face of rising input costs and unpredictable climatic conditions that can lead to unseasonal weather patterns. Nursery and ornamental stock frequently face the threat of disease pressure, which, under favorable conditions, can rapidly spread or even decimate a significant number of plants. Lexicon Intrinsic Brand Fungicide offers broad-spectrum, superior control of disease, surpassing competing fungicides to inspire confidence in establishing disease free plants and ensuring their ongoing vitality.





Figure 3: Field trials comparing plants treated with Intrinsic and Azoxystrobin.

The inclusion of Lexicon Intrinsic Brand Fungicide in plant establishment programs offers an additional advantage attributed to the **advanced health benefits** provided by the Intrinsic brand. Ornamental and nursery stock field trials (Figure 3) demonstrate **accelerated growth of foliage and more advanced rooting** compared to both the untreated and competitor chemistries.



Accelerated growth rate for new seedlings and treated plants



Effectively controlling challenging diseases



Promoting faster plant establishment



Achieving healthier appearance and reaching market potential with fewer inputs



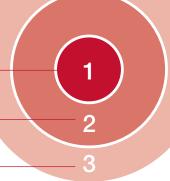


BASF's Intrinsic Technology

The changes to the plant respiration cycle attributed to BASF's Intrinsic technology, Figure 1, results in 3 main plant benefits that directly affect

market potential and input conversion.







Stress Tolerance -

- Broad spectrum preventative and curative control of disease
- Increased residual control with extended re-application windows
- Key diseases control of: Rhizoctonia spp, Sclerotinia spp, Basidiomycetes spp, Fusarium spp, Pythium spp., Ophiosphaerella spp., Gaeumannomyces spp.

2. Increased growth efficiency

- Root and foliage growth is optimised due to the redistribution of CO2 and N
- Plants move through growth milestones faster reducing the need for additional inputs
- Stock reaches market potential faster, with a healthier and disease free appearance

3. Enhanced stress tolerance

- Healthier plants bounce back faster from stressors
- Potential stress from disease is mitigated with broad spectrum protection
- Plants that efficiently metabolise inputs are less vulnerable to the impacts of unseasonal weather events and favorable conditions for disease



For more advice on **Lexicon Intrinsic Brand Fungicide**, visit turf-solutions.basf.com.au or contact BASF on 1800 558 399

ALWAYS READ AND FOLLOW LABEL DIRECTIONS BEFORE USING ANY PRODUCT IN THIS TECHNICAL NOTE.

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