

TECHNICAL NOTE



Intrinsic® brand fungicides are the future of disease control today.

Achieving disease free, healthy turf is at the forefront of grower 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 ground coverage and faster recovery from both environmental and mechanical stressors.

BASF's unique **Intrinsic** technology harnesses maximum CO₂ levels to increase net photosynthesis, ensuring efficiency is optimised to prioritise energy production unlike other Strobilurins in market. (Figure 1).



Night Respiration

When treated with Intrinsic, lower levels of CO₂ are produced, enabling energy and growth to be redirected to the root system

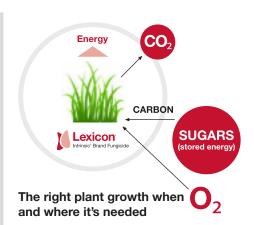
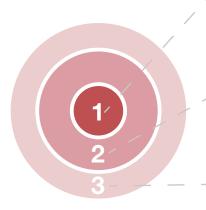


Figure 1: BASF's unique Intrinsic technology reduces night respiration redirecting carbon to root growth and turf establishment.

Power of Intrinsic



1 Powerful Disease Control

Intrinsic brand fungicides inhibit mitochondrial respiration in fungi, preventing disease from spreading so your turf can preserve energy and thrive while controlling the toughest turfgrass diseases with up to 28-day residual.

2 Increased Growth Efficiency

Intrinsic brand fungicides maximize the photosynthetic process of turfgrass, helping your turf grow stronger and more resilient from the inside out compared to turf treated with competitive products.

3 Enhanced Stress Tolerance

Turfgrasses treated with Intrinsic brand fungicides grow dramatically longer, denser root systems than the competition, improving the resilience of your course in the face of environmental stress, such as heat, cold and drought and mechanical stress, such as aerification.



Lexicon® Intrinsic® Brand Fungicide

With its two unique technologies, Xemium® and Intrinsic, Lexicon Intrinsic Brand Fungicide provides optimal protection from key turf diseases, in addition to delivering plant health benefits and faster recovery from stressors.

BASF's Xemium technology, disrupts the energy supply and biosynthesis of fungal building blocks via the respiratory chain. This highly systemic SDHI technology ensures the active ingredient is redistributed from the waxy layer of the leaf to other areas of the turf, enabling long lasting curative and preventative control (Figure 2).

Unlike other Azole, Strobilurin or other Carboxamide based technologies, Xemium actively disrupts the biosynthesis of fungi in almost all stages of the life and infection cycles, including spore germination, germ tubes, penetration hyphae, and mycelium growth (Figure 3).

Figure 2: Highly systemic distribution of Xemium in the turf leaf

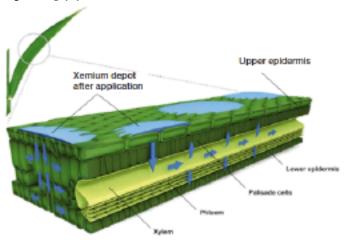
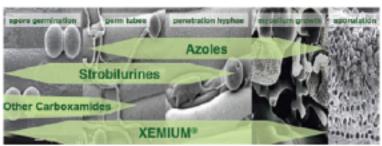


Figure 3: Extended Xemium® activity unlike any other technology

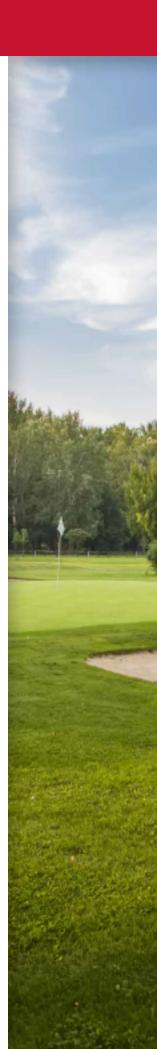




Plant Health Benefits and Turf Establishment

As a high-cost, labor-intensive crop, the importance of optimal turf establishment is increasingly recognized, especially in renovation, seeding, and sprigging programs. These programs are often compromised by disease pressure, which can spread and kill large areas of turf. Lexicon Intrinsic Brand Fungicide offers superior control of opportunistic pathogens with it's broad-spectrum label, outperforming competitor fungicides and ensuring disease-free turf establishment and growth.

Intrinsic Brand Fungicides also provide advanced plant health benefits, optimizing the accelerated establishment of new seed and treated sprigs. They control tough diseases both preventatively and curatively, allowing turf to establish more efficiently and remain in peak health. The images and data below demonstrate the benefits of Lexicon Intrinsic Brand Fungicide during programs that inherently cause turf stress or vulnerability.





Faster establishing root systems is integral to healthy looking turf. Data and images below illustrate the benefit of Intrinsic technology in achieveing accelerated root development and resilient turf cover.

Figure 4: Intrinsic technology improves root development, turf vigour and establishment compared to competitor products.







Figure 5: Pre-treating couch grass springs with Intrinsic technology accelerates grow in rates.

% Cover TifEagle Green Grow In

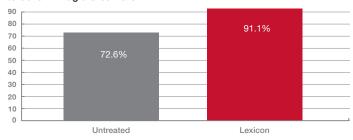


Figure 6: Intrinsic technology achieves rapid establishment and advanced cover in sprigging







Lexicon Intrinsic Brand Fungicide provides turf managers with the confidence of disease control and advanced plant health combined. These technologies are essential to accelerated establishment, optimised development of roots and foliage, and improved stress tolerance.

When renovating, establishing new plantings, over-seeding or sprigging - Lexicon Intrinsic Brand Fungicide is the only choice for disease free healthy turf.

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

This fact sheet is intended as general advice. The information submitted in this publication is based on current BASF knowledge and experience. In view of the many factors that may affect its application, this data does not relieve the user from carrying out their own tests. The data does not imply assurance of certain properties or of suitability for a specific purpose. It is the responsibility of the user to ensure that any proprietary rights and existing laws and legislation are observed.