



ORIOUS P – delivering comprehensive ear disease protection with foliar rust top-up at T3

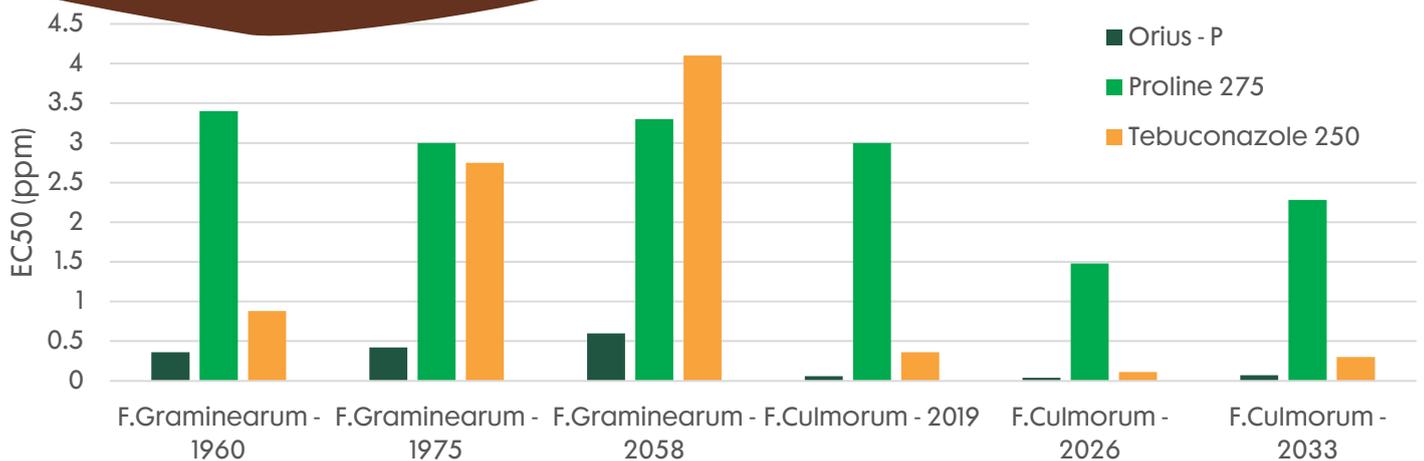
ORIOUS P at T3 provides outstanding efficacy against *Fusarium graminearum*, *Fusarium culmorum* and *Microdochium spp*, as well as foliar disease top ups to ensure yield and grain quality through to harvest.

Control of fusarium species will maintain grain quality and **reduce risk of exceeding DON and ZON** (deoxynivalenol and zearalenone) levels at mills/ports.

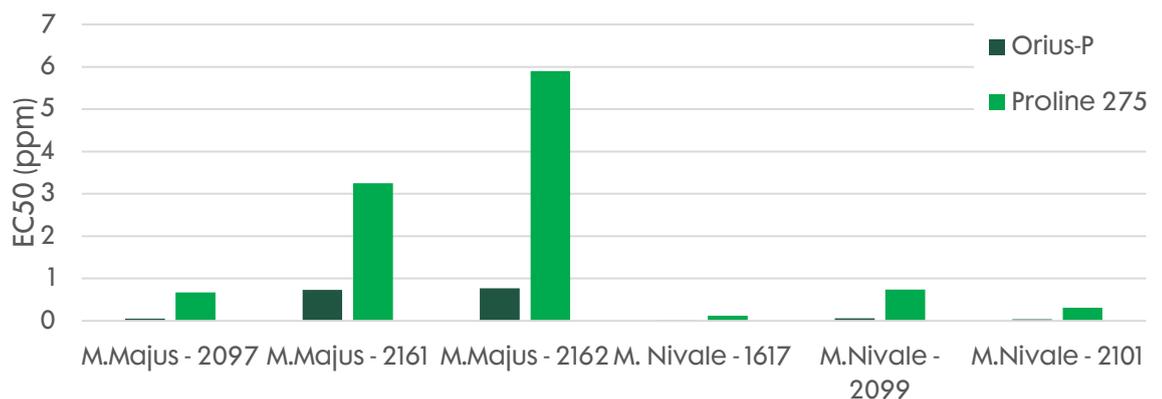
ORIOUS P shows good activity on common wheat ear diseases *Fusarium spp.* and *Microdochium spp.*
(in-vitro amended agar tests)

Nufarm’s Agronomy Solution for reduction of the ear disease complex and foliar rust top-up:

ORIOUS P 1.0-1.5 l/ha



EC₅₀
The concentration that inhibited pathogen growth by 50%.
The lower the number, the more effective the product!



Control of fusarium comes from **protectant treatments, ideally applied before rain falls on wheat crops at early-mid flowering** (BBCH 61-65).

ORIOUS P also delivers excellent late-season yellow and brown rust control.





Ear disease ID parade – what are the concerns?

F. culmorum is spread by rain splash while *F. graminearum* is spread through wind dispersal. Favours wet and humid conditions, 18-20°C. Mycotoxin producers (DON and ZON). *Fusarium spp.* infections show as bleached ears with shrivelled grains white or pinkish in colour. Rachis also bleached where infection has advanced and all grains above infection site will be affected.

Microdochium nivale and *Microdochium majus* are spread by wind dispersal. Can develop in cooler conditions than *Fusarium spp.*, from c.15°C, but does not produce mycotoxins.

- Low level infection = odd grains affected per ear.
- Higher level infection can be confused with *Fusarium spp.*

Microdochium spp.

Rachis not bleached, only infected spiklets/ grains affected. High levels of infection can be confused with *Fusarium spp.*

Fusarium spp.

Rachis bleached, all grains above infection site affected

Eyespot

White heads appear scattered throughout crop, lesions penetrate into stem base, may become detached



FURTHER INFORMATION

2 credits have been allocated to these technical bulletins. Subscribers can claim their IASIS Credits by emailing: ann@iasis.ie reference IAS-21-nuf

Orius P contains tebuconazole and prochloraz.
Proline 275 contains prothioconazole.

Orius is a trademark of Nufarm.
Proline is a trademark of Bayer.

Details of application rates and timings are given in Nufarm labels and product literature, both of which can be accessed from our website www.nufarm.com/ie. Alternatively, ring the Nufarm helpline on 01274 694714, Monday to Friday 9.00 - 17.00

Use plant protection products safely. Always read the label and product information before use. For label and safety information, refer to the Nufarm website www.nufarm.com/ie. Nufarm UK Ltd, Wyke Lane, Wyke, Bradford, BD12 9EJ.

