SDHI - technology for Seedcare use

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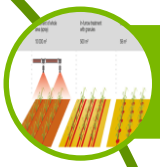
Seedcare™

syngenta®

What we are going to talk about today?

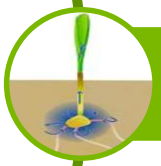
- Why SDHI-technology in Seedcare?
- FRAC-guidelines regarding seed treatment
- Pyrenophora teres
- Movement of different SDHI’s
- Conclusion

Why SDHI-technology in Seedcare?

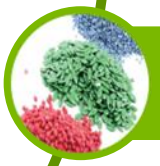


Very strong intrinsic potency
(much lower use rates than other applications)

Good soil stability
(Ensure early season protection of young seedlings against diseases and pests)



Seed release
(Optimal release off the seed coat, distribution in the soil rhizosphere)



Good crop safety
(Chemistry optimization not only with regards to biological potentcy but also seed safety)

Favorable environmental and human safety profile
(Improved tox profile and can be modified easier to become cleaner)

SDHI FRAC Guidelines - Cereals

Foliar applications

- Apply a maximum of 2 SDHI fungicide containing sprays per cereal crop.

- Strongly reduced rate programs including multiple applications must not be used. Refer to manufacturers' recommendations for rates.

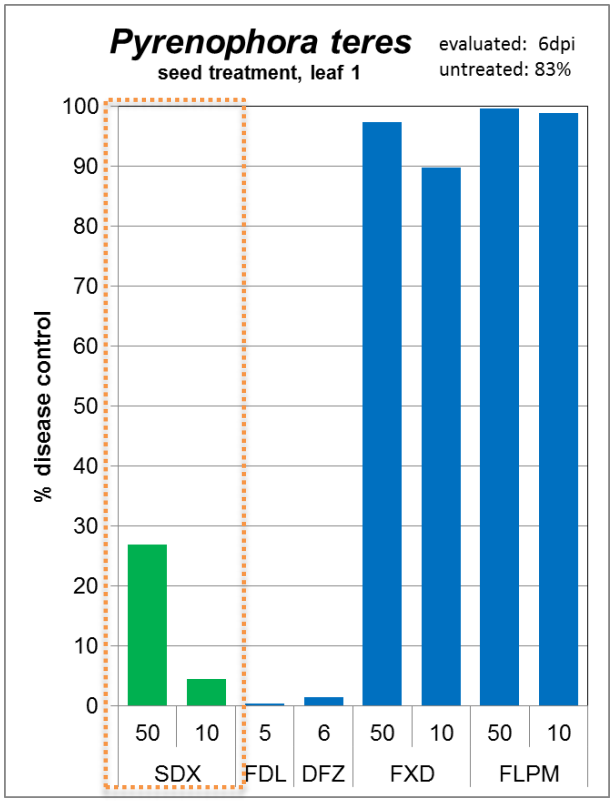
Seed treatment applications

- When an SDHI fungicide is used as a seed treatment on cereals, there should be **no implications** regarding SDHI FRAC guidelines on the use of foliar SDHI fungicides on the same crop as long as the **SDHI seed treatment is directed by rate and efficacy against seed and soil borne diseases** or 'low risk' foliar pathogens as defined in the FRAC Pathogen Risk List.

- SDHIs used as a seed treatment in cereals providing foliar efficacy against pathogens with moderate/ high resistance risk count against the total number of SDHI applications.

PYRENOPHORA TERES IS MAINLY A AIR BORNE PATHOGEN
= THERE IS NO CONTROL OF SDX
(UNLESS THE INFECTION IS ON THE OUTER LAYER OF THE KERNEL)

LEAF 1



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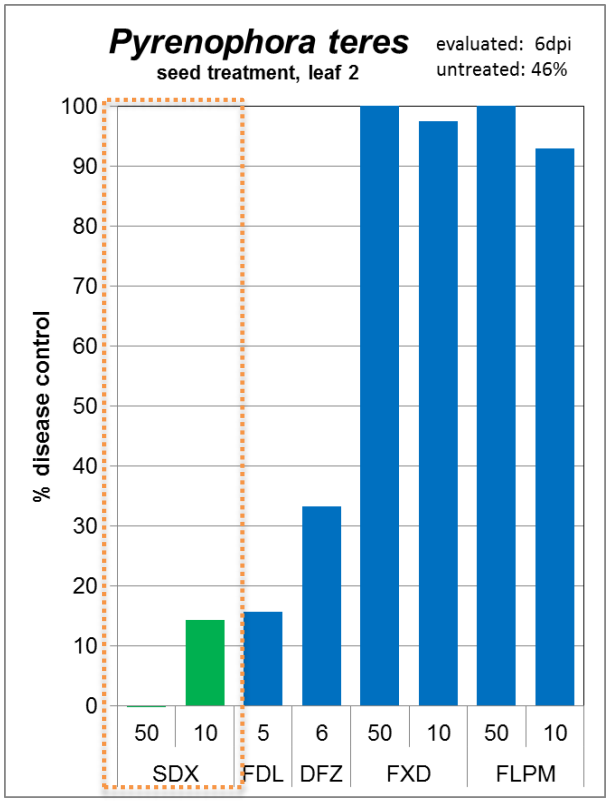
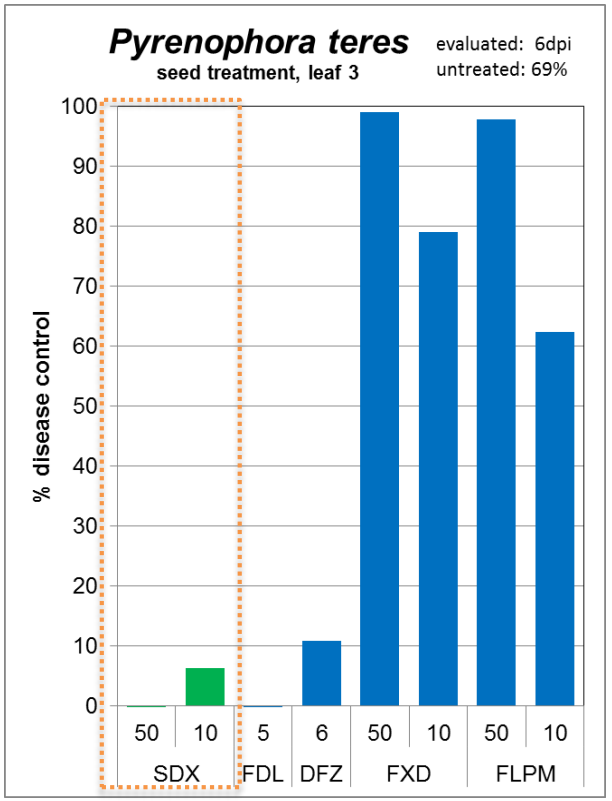


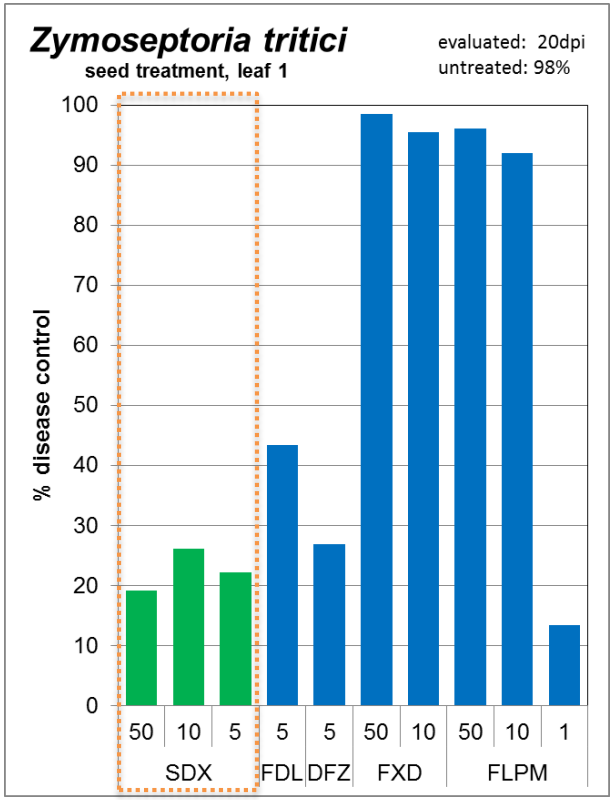
LEAF 3



Source: Syngenta Crop Protection Münchwilen AG, Research Biology, CH-4332 Stein, stephane.bieri@syngenta.com

SEDAXANE HAS BEEN DIRECTED ONLY TO SEED- AND SOIL BORNE DISEASES

LEAF 1



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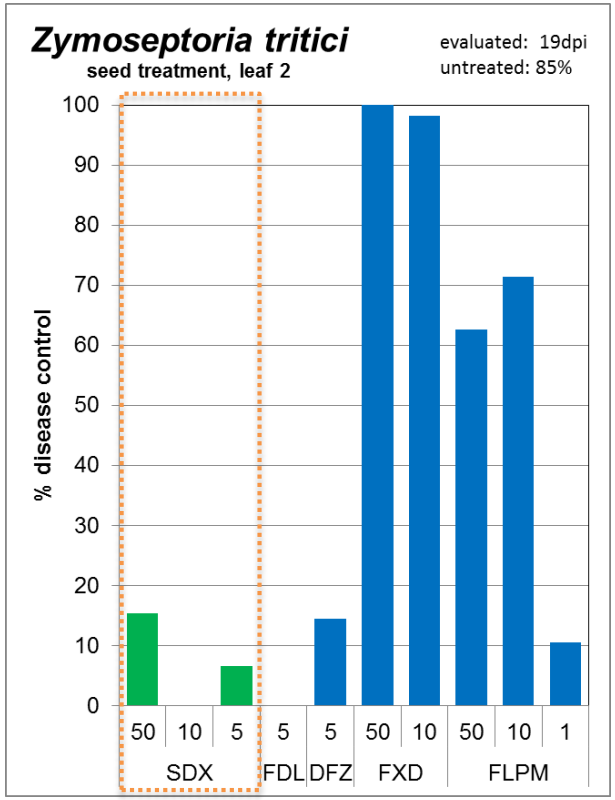

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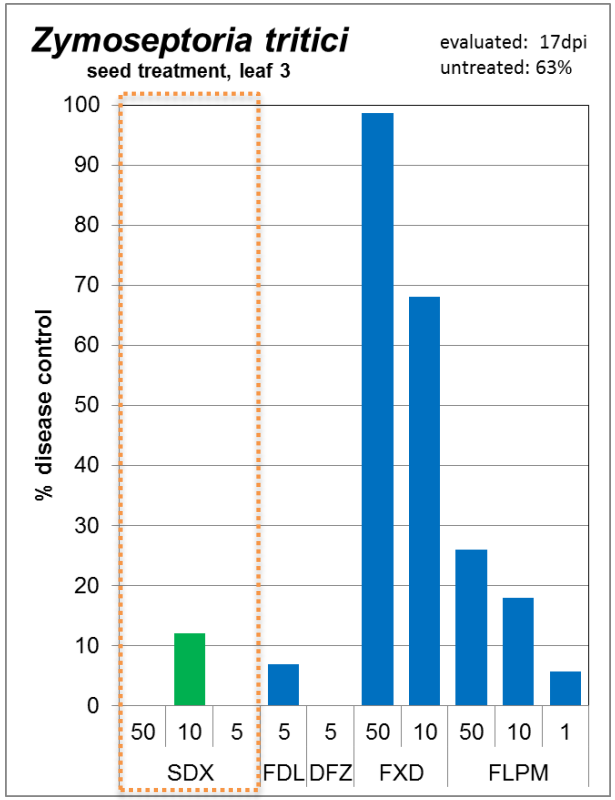

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Conclusion

- Not all SDHI's act the same in terms of movement in the plant
- Syngenta with different approach: Seedcare solutions are screened and developed by a dedicated research team, in order to avoid overlap with Crop Protection targets
- Sedaxane is the outcome of an SDHI chemistry optimisation project targetting control of seed- and soilborne diseases specifically for Seedcare use.
- In addition, its physico-chemical properties make Sedaxane an ideal seed treatment, enabling excellent distribution in the rhizosphere and minimal uptake into the plant thus securing long-lasting control of seed and soilborne diseases.

Thank you for your attention