

Yucca schidigera plant extract shows great potential as bio fungicide

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A natural alternative - **Norponin® 200 Liquid** - to synthetic fungicides has shown significantly positive results in a recent study from University of Copenhagen. This is excellent news for the agriculture, where fungi are causing great quality and quantity losses every year.

A recent study by Ednar G. Wulff et al. now shows that an extract from *Yucca schidigera* - a saponin containing desert plant - has significant potential as a bio fungicide against seed borne pathogens of sorghum. This is great news as other solutions to traditional synthetic fungicides have been requested for years.

In the study, treatment of seeds with an aqueous extract of *Yucca schidigera* was evaluated for antifungal activity against seed borne pathogens. Furthermore the effect on seed germination and seedling growth of sorghum (*Sorghum bicolor*) was assessed. Validation assays were carried out by comparing the *Yucca* results to pure saponin and synthetic fungicide (fludioxonil) tests.

The antifungal effect was observed against *Leptosphaeria sacchari* - a plant pathogen – which was significantly reduced by a 10 % concentration of *Yucca* extract. Furthermore the *Yucca* reduced the content of other pathogens like *Fusarium* spp., *Cochliobolus lunatus*, and *Cladosporium* spp. Seed germination and seedling growth were also affected positively.

Compared to the saponin and fungicide tests, the *Yucca* showed similar results in regards to the reduction of seed borne pathogens, but showed a more extensive antifungal effect.

Saponins are known to contain detergent properties, and the saponin content is regarded to play a vital role in the antifungal activity of the *Yucca* extract. However, a test of antifungal activity of pure saponin did not show the same results. This suggests that the unique combination of saponin and phenolic compounds in the *Yucca* extract makes the best results.

Even though having an antifungal effect, the synthetic fungicides have also demonstrated to be possessing very undesirable properties. Fungi have often developed resistance towards the products, and the consequences for the environment are furthermore harmful.

The study mentions the use of a liquid extract - 'Norponin 2000'. The attention should, however, be drawn to the fact that the said extract is marketed under the name of **Norponin® 200 Liquid**.

Norponin® 200 Liquid is a concentrated environmentally friendly natural product with a variety of applications. It consists of concentrated extracts from the plant *Yucca schidigera*. The product contains preservatives. The product is marketed by Nor-Natur ApS.

For more information on 'Norponin® 200 Liquid', please contact Nor-Natur ApS.

References

[E. G. Wulff, E. Zida, J. Torp, O. S. Lund \(2011\), Yucca Schidigera extract: a potential biofungicide against seedborne pathogens of sorghum, Plant Pathology. doi: 10.1111/j.1365-3059.2011.02517.x](#)