



# **Extended Diagnostic Expert System (XDES) Sub-Group Report**

CORESTA AP Conference 2019

Victoria Falls - Zimbabwe

16 October 2019



# Objectives of XDES

1. Collect international data on plant diseases, photos, descriptions, diagnostics, available treatments, etc.
2. Format this information for uploads on the e-phytia/tobacco website and related portable applications.

## Purpose

- to add new information to already accessible data
- to get other countries or institutions to participate



# Achievements

## ❖ Information from U.S. situation was provided by NCSU :

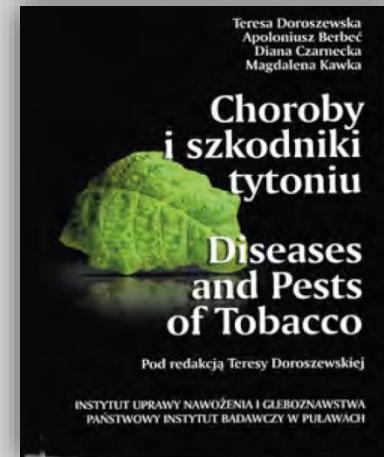
- Blue Mould
- Fusarium Wilt
- Bacterial Wilt of Tobacco
- Tomato Spotted Wilt Virus (TSWV)
- Damping-off (Sore Shin, Target Spot)
- Black Shank, Stem Rot (Athelia Stem Rot, Southern Stem Blight)
- A section on seedlings was added to the “Diagnosis by Image”





# Achievements

- ❖ In 2015 the Polish Institute of Soil Science and Plant Cultivation sent photos
- ❖ 2016 contents were added in herbicide injuries, drought injuries, infectious diseases, nutritional deficiencies and excesses, and pests



Information from Tobacco Research Institute, Chinese Agricultural Academy Science on:

- **Pectobacterium**
- **Tobacco cyst nematode**
- **Sore shin, target spot**
- **A new alternaria species called Alternaria zhangjiajieense sp.nov. causing brown spot disease in Hunan province in 2016**





## On-going work

### ❖ Translation of Di@gnoplant into Portuguese

- CORESTA started a cooperation project with UNISC (University of Santa Cruz) in 2017
- Translation is done!
- Proof reading is underway





# Achievements

**2018 Information from Tobacco  
Research Board, Zimbabwe, was added  
on the website**





# How you can participate?

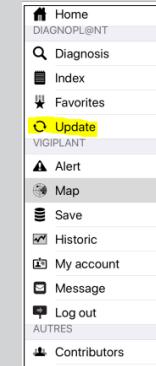
**You**  
may have local observations on diseases and pests  
(pictures, descriptions, diagnostic, available treatments)  
which could complete the already existing fact sheets

**Send us your information in English**  
**Evaluation of all information is submitted to INRA experts**  
**for approval before publication**



# Di@gnoplant Downloads

- ❖ 3200 downloads on Applestore 2018
- ❖ 1520 on Google Play
- ❖ Asia-Pacific, Europe, United States, Africa, Middle East and India, Latin America and the Caribbean
- ❖ Do not forget to update your application!





# Acknowledgements

## Many thanks to:

- Susan Dimbi, TRB, Zimbabwe
- Andreas Köhler and his team from UNISC, Brazil
- Marcos Lusso and Marilia.G.Della Vecchia, Altria, USA
- Vilson Arend, Profigen, Brazil
  
- Dominique Blancard (INRA)
- And all the other contributors