



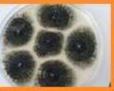
Understanding & diagnosis













Website on Potato Tuber Blemishes

Karima Bouchek & Stuart Wale

















Supporting of the website

 INRA- France: Provision of the tool "eZ publish" & its maintenance

- Webmaster was funded by French Potato Organisation
- The time spent by the experts:

```
GNIS/INRA (K. Bouchek); Potato Dynamics LTD (S. Wale); Germicopa (C. Chatot); FN3PT (Y. Le Hingrat); Arvalis (D. Gaucher)
```



The history of the website & the context

Why set up a website and who is the target audience?

Its organisation, its content

How could we interact with users?

Open discussion





Understanding & diagnosis













The history

- This story began at the 18th triennial conference in Oulu
- We held a workshop on the nomenclature and assessment of tuber blemishes
- A website was proposed and received general approval
- An outline was suggested of what might be included

Potato Tuber Symptom Website

Proposed symptom name

Silver scurf

Page 1

Latin name

Helminthosporium solani

Page 2

Click on Photo to enlarge

Other names

Index









Diagnostic characters for visual diagnosis

- Silvery lesions with well defined edge
- Edge of lesion brown colour and of different widths
- Lesions may coalesce to form larger area
- Conidiophores develop at edge of lesion

Notes on confirmatory diagnostics

- PDA is good isolation medium
- Pick tissue from edge of lesion after surface sterilisation

Key reference: Errampalli, D; Saunders, J M; Holley, J D (2001) Plant Pathology, **50**, 141-153

Possible confusing symptoms — click on photo to go to relevent symptom page







Bulletin Board

Click here to add comments



Why set up a web site?

Diagnosis

Complex

Several blemishes = uncertain causes

Nomenclature

Variable denominations

The same blemish = a range of names



Issues establishing the website

- objectives
- different sections and subsections
- content and the organisation
- What diseases/disorders to be include in "blemishes"?

These issues were discussed by our group of expert who provided texts and photos



Target audience?

Researchers

- Share knowledge and data
- Validate the content

Field specialists

- Agronomists, Crop Protection
- specialists, Fieldsmen

Technical staff

- Use the new validated data
- Info about new symptoms

Quality control labs

 Feedback to growers on quality issues for fresh or processing

Other users

• Students, Teachers, Growers



The objectives of the website are to:

1

- Classify blemishes by their appearance
- Relate them to their possible causes
- List other blemishes with which it may be confused

Establish a mechanism of exchange



Opening date

The website was launched on July 4 -2014

www/potato-tuber-blemishes.com



 Its content and its organisation <u>Website</u>

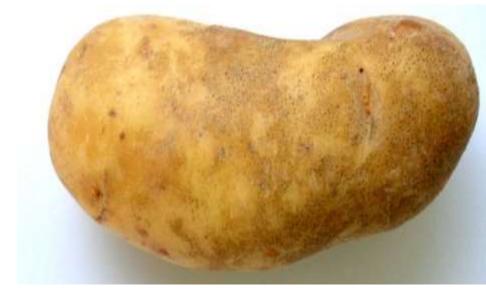
DISCOLORATIONS



Golding Blotch



Non identified cause



Colletotrichum coccodes

Black dot



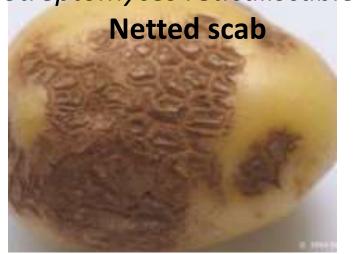
 Its content and its organisation <u>Website</u>

CORKY BLEMISHES

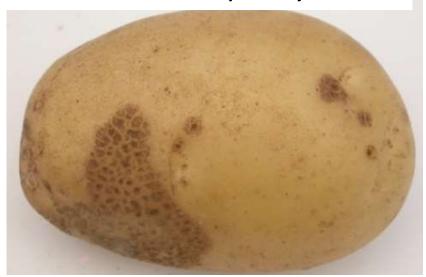


Rhizoctonia solani **Rhizoctonia corcky symptoms**

Streptomyces reticuliscabiei



Rhizoscab R. solani or Streptomyces?





 Its content and its organisation <u>Website</u>

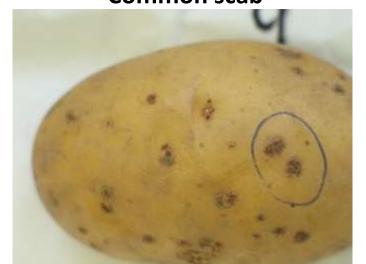
PITTED OR RAISED BLEMISHES



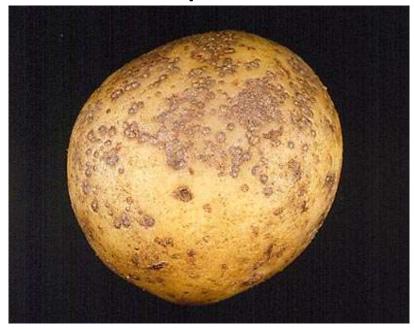
Globodera spp.

Pototo cyst nematodes

Streptomyces spp. Common scab



Polyscytalum pustulans
Skin spot





 Its content and its organisation <u>Website</u>

PITTED OR RAISED BLEMISHES



Rhizoctonia solani **Dry Core**







 Its content and its organisation <u>Website</u>

Cracks & Deformations



Physiological cracking Water stress

Rhizoctonia cracking



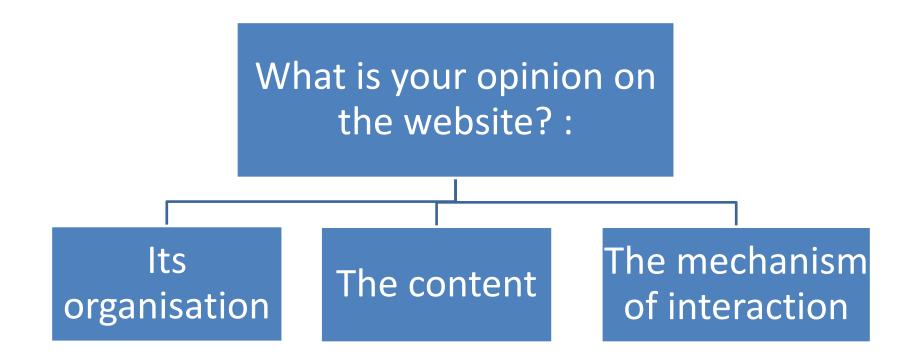


Interaction with website users?

Comments and photos sent for inclusion Group of experts peer review comments and photos Comments and photos published



Open discussion: We need your feedback!





How could the website evolve?

- Continue to restrict to tuber blemishes
- Expand to include:
 - Internal tuber symptoms

Develop information presented in more depth





Constitution of the expert panel

 Do you know of someone who might be appropriate for the expert panel?



Potato tuber blemishes Understanding & diagnosis



How should the website be publicised?



Thank you!