

DISEASES OF SMALL GRAIN CEREAL CROPS

A Colour Handbook

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Description:

The small grain cereals wheat, barley, oats and rye are cultivated worldwide. They form the foundation of most agricultural systems and are essential in the manufacture of staple products such as bread, pasta and fermented beverages. Reflecting the global and economic importance of cereal crops, the Colour Handbook aims to make identification of diseases afflicting them easier. Covering 40-50 of the most important pathogens in Europe, North America, Asia and Australia, the handbook contains superb colour photographs accompanied by clear, concise descriptions of diseases with advice on their control.

Diseases are illustrated at varying stages of development and entries follow an easy-to-use format. First the pathogens involved and their symptoms are described; next information on the disease cycle is given, covering epidemiological features and the form taken by the pathogen in different climates. The section on economic significance deals with effects on yield and the ecosystem, while that on control advises growers on measures and techniques to combat the outbreak of disease, including the latest chemical treatments. For each disease, detailed references provide a key to further reading. The final chapter shows the microscopic appearance of pathogens. The colour handbook is competitively priced and will be of use to plant health professionals and scientists, growers, farmers, and students of agriculture.

Contents: **Introduction:** diagnostic guide to cereal disease, **1. Ear and grain diseases** *Blights:* Black chaff (bacterial streak); Head blight; Scab. *Bunts/Smuts:* Bunt; Stinking bunt; Dwarf bunt; Karnal bunt; Loose smut; Semi-loose smut; Black loose smut; False loose smut; Covered smut. *Other:* Black point; Kernel smudge; Sooty mould; Ergot. **2. Leaf and stem diseases** *Blights:* Bacterial streak (black chaff); Bacterial Stripe. *Mildew:* Powdery mildew. *Mosaics/Yellows Diseases:* Barley stripe mosaic; Barley yellow dwarf; Barley yellow mosaic; Soilborne wheat mosaic; Wheat streak mosaic; Wheat yellow mosaic. *Rusts:* Brown rust; leaf rust; Crown rust; Stem rust; Yellow rust. *Smuts:* Flag smut. *Spots/blotches:* Halo spot; Net blotch; Scald; Leaf blotch; Septoria leaf blotch; Glume blotch; Spot blotch; Tan spot. *Snow Moulds:* Pink snow mould; Snow scald; Speckled snow mould. *Stripes:* Cephalosporium stripe; Leaf stripe. **3. Stem base and root diseases** *Fungi:* Common root rot; Foot rot; Seedling blight (spot blotch); Eyespot; Strawbreaker foot rot; Fusarium foot rot; Dryland foot rot; Sharp eyespot; Take-all. **4. Microscopic appearance of pathogens.** Glossary. **Appendix 1:** Diagnostic features of cereal diseases. **Appendix 2:** Worldwide distribution of cereals and diseases. **Index.**

NEW SOFTCOVER EDITION

144 pp, softcover
240 colour illustrations
234 x 156 mm page size
ISBN: 978-1-84076-104-7
Price: £16.95

Readership:

Professionals and students in:
Crop Protection
Plant Pathology
Agriculture
Growers and Farmers

Key Features:

- Coverage includes:
Identification
Disease cycle
Economic importance
Control
- Problem-oriented organisation
- Highest quality colour photos
- Great value for students and young professionals.
- Handy size for practical use