

Student's Exercise



Laboratory Exercises in Plant Pathology: *An Instructional Kit*

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A.B.A.M. Baudoin

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Preface

Laboratory Exercises in Plant Pathology: An Instructional Kit is a collection of exercises designed for introductory laboratory courses in general plant pathology at the college level. The chapters in this collection were contributed by members of The American Phytopathological Society (APS), the professional scientific organization of plant pathologists in the United States, with members in many other countries. The authors are professional teachers and researchers of plant pathology at many institutions in the United States. The exercises are aimed at undergraduate students in Plant Science, Biology, Agronomy, Horticulture, Forestry, as well as Plant Pathology and Pest Management, and many exercises will be suitable for graduate courses as well. The exercises in this collection cover a representative sampling of the important types of diseases and groups of pathogens. However, the focus is not chiefly on the study of individual diseases, but on developing an experimental as well as observational approach to principles of plant disease development, diagnosis, and control — principles that extend beyond the particular organisms used.

It was recognized that instructors would have to make a choice from the exercises included in this collection based on the time available, the focus of the course, the interests of the students, and the facilities available. Many instructors may also want to add exercises based on their own expertise and interests, using materials that may be locally available. In order to keep the cost to students down and allow instructors flexibility for easy adaptation for a particular course, this collection is made available in a loose-leaf format. Thus, instructors may individually select and reproduce those chapters that they intend to use, omit those that will not be used in their course, and conveniently add their own exercises and information specific to their course.

The format of the exercises is appropriate for use as a workbook. Instructions are given step-by-step, and introductions and background information have been kept to the minimum that is needed for understanding. References to the relevant page numbers in several commonly used plant pathology textbooks make it easy to find further information, and it is recommended that students use such a textbook. In many locations, blank tables are provided for results and observations. Additional notes and answers to the questions may be recorded on blank pages that may be added to the manual, or in a separate notebook.

The exercises are adaptable to 2- to 4-hour lab sessions meeting once or twice a week. Many exercises will extend over more than one lab period, since observing the results of an experiment may require several weeks. Occasionally, observations outside scheduled hours may be required or desirable.

The careful and patient execution of most of the drawings by Ms. Ruth Steinberger is gratefully acknowledged.

The editors welcome suggestions for improvement from users, students as well as instructors.

TABLE OF CONTENTS

Preface

List of contributors

1. Use and care of the light microscope — J.W. McCain
 - I. The light microscope
 - II. Specimen preparation
 - III. Plant anatomy
 - IV. Laboratory (scientific) drawingAppendix: Advanced methods in microscopy
 - I. Alignment of research microscopes
 - II. Special types of microscopy
2. Recognition and terminology of disease symptoms and signs—
M. F. Stoner and J. W. McCain
 - I. Introduction to identification keys — J. W. McCain
 - II. Symptomatology — M. F. Stoner and J. W. McCain
 - III. Symptoms and signs — keys and glossaries - M. F. Stoner and
J. W. McCain
3. Isolation of fungi and bacteria —V. N. Armentrout and A. B. A. M. Baudoin
 - I. Culture media: characteristics and uses
 - II. Essentials of aseptic technique
 - III. Preparation of potato dextrose agar
 - IV. Isolation of fungal pathogens
 - V. Isolation of bacteria from plant tissue by streaking
 - VI. Isolation of fungi from soil by baiting
4. Diagnosis of disease and proof of pathogenicity (koch's postulates)
A. B. A. M. Baudoin
5. Plant disease diagnosis in practice—B. D. Nelson
 - I. Steps in disease diagnosis
 - II. An exercise in disease diagnosis
6. Characteristics and structures of fungi—J. W. McCain
 - I. Study of fungal characteristics
 - II. key to fungal spores and sporocarps
 - III. Fungi commonly seen in the laboratory
7. Root infection by Phytophthora — F. A. Gray and A. B. Filonow
 - I. Symptoms of diseased Plants
 - II. Fungal mycelium and spores
 - III. Early root infection by zoospores
 - IV. Effectiveness of host resistance in controlling
Phytophthora root rot
8. Damping-off of seeds and seedlings —D. E. Mathre and T. E. Stasz
 - I. Symptoms
 - II. Pathogens
 - III. Seedling age
 - IV. Chemical treatments

9. Soil fungistasis — A. B. Filonow
 - I. Effect of soil sterilization on fungistasis
 - II. Effect of distance to a seed on fungistasis
 - III. Comparing different soils with respect to fungistatic capacity
10. pathogen survival in soil: Pythium oospore dormancy — T. E. Stasz
11. Biological control of soilborne Plant pathogens by antagonistic fungi—R. D. Martyn and J. P. Stack
 - I. Antibiosis
 - II. Hyperparasitism
 - III. Competition
 - IV. Disease control
12. Soilborne fungi: inoculum density — A. B. Filonow
13. Population assessment of Fusarium spp. in soil — V. N. Armentrout
14. Foliar infection by fungi — S. F. Jenkins, Jr. , A. B. A. M. Baudoin and F. A. Gray
 - I. Effect of environment on sporulation
 - II. Effect of environment on infection
 - III. Leaf infection: observation of spore germination and infection
15. Dissemination of fungus spores and bacterial cells by wind and water—R. B. Carroll
 - I. Movement by splashing water
 - II. Movement by wind
16. Fungicides for the control of foliar infection—P. A. Arneson
 - I. Fungicide formulation
 - II. Fungicide deposits and residues
 - III. Protectant versus systemic fungicides
17. Race identification of wheat leaf rust—J. F. Schafer and D. L. Long
18. Bacterial pathogens—E. B. Nelson and E. J. Braun
 - I. observation of bacterial streaming
 - II. observation of motility
 - III. Isolation of bacteria from Plant tissue
 - IV. Identification of bacterial plant pathogens
 - V. Inoculation with bacterial Plant Pathogens
19. Crown gall—E. J. Braun
 - I. In vitro test of sensitivity to agrocin 84
 - II. Biological Control of Crown gall
20. Frost injury and ice nucleating bacteria — S. S. Hirano
 - I. Bacterial ice unclean assay
 - II. Bacterial ice unclean assay on leaf surfaces

21. Viruses: mechanical transmission and host range — J. W. Hilty,
G. J. Weidemann , and R. B. Carroll
 - I. Mechanical transmission
 - II. Identification of unknown Plant viruses by host range and symptoms
22. Insect transmission of Plant viruses — J. W. Hilty and G. J. Weidemann
 - I. Transmission efficiency
 - II. Retention time
23. Electron microscopy —K. L. Klomparens , J. M. Gillett , and D. C. Ramsdell
 - I. Negative staining
 - II. Metal shadow - Casting
 - III. Demonstration of diseased tissues/pathogens with TEM and/or SEM
24. Virus identification by serology—R. C. Gergerich and C. L. Sutula
 - I. The Ouchterlony agar double-diffusion test
 - II. ELISA (Enzyme-Linked ImmunoSorbent Assay)
25. Study of Plant - parasitic nematodes - E. B. Nelson
 - I. Extraction of nematodes from soil and Plant tissue
 - II. Identification of Plant-parasitic nematodes
26. Root-knot nematodes: symptoms , life stages, and control — F. A. Gray and E. B. Nelson
 - I. Root - knot disease: symptoms and signs
 - II. control of root-knot disease
27. Cvst nematodes - E. B. Nelson
28. Foliar nematodes on begonia — R. M. Riedel
29. Physiological aspects of Plant disease — G. J. Weidemann , E. J. Braun
A. Kelman , E. M. Nuckles , and J. kuc
 - I. Influence of a pathogen toxin on Plant disease — G. J. Weidemann
 - II. Pectolytic enzymes—E. J. Braun
 - III. Factors influencing infection of fleshy vegetables by soft rot
bacteria—A. kelman
 - IV. Phytoalexin accumulation in potato caused by a nonpathogen of potato-
E. M. Nuckles and J. kuc
 - V. Induced resistance to anthracnose in cucumber E. M. Nuckles and
J. kuc
30. Abiotic diseases - A. R. Chase , R. T. Poole , C. L. Foy, R. jain ,
and A. B. A. M. Baudoin
 - I. Air pollution— A. R. chase and R. T. Poole
 - II. Chilling injury—A. R. Chase and R. T. Poole
 - III. Cold Water damage—A. R. Chase
 - IV Low light —A. R. Chase
 - V. Micronutrient excess —A. R. Chase and R. T Poole
 - VI. Excess soluble salts—A. B. A. M. Baudoin—

VII. Phytotoxicity of disease control chemicals A. R. chase

VIII. Herbicide injury — C. L. Foy and R. Jain

31. Disorders caused by higher Plants — C. L. Foy and R. Jain

I. Parasitic seed Plants

II. Allelopathy

Appendixes:

1. Writing reports — A. B. A. M. Baudoin

2. Collecting plant diseases — M. F. Stoner and J. W. McCain

3. Use of a hemocytometer — E. M. Nuckles and J. Kuc