Transparencies

Forest Tree Identification, 92 fr.
Over 90 native forest species are illustrated with leaf, flower and/or fruit, and leaf arrangement characteristics. An enlarged twig illustration shows terminal buds and leaf scars in sufficient detail to teach identification features.

T780 .................................. $61.15

CD-ROMS

Introduction to Arboriculture Series

These interactive CD-ROMs were developed as an educational resource for arborists. In the horticulture or forestry classroom, they will have the same benefits.

1. Instructional strategies that simulate job tasks
2. A high level of interactivity
3. Self-paced instruction (can accommodate multiple users)
4. Emphasis on visuals, including video and other graphics
5. Digital audio that enhances text
6. A system of instant feedback that engages the learner
7. Quiz questions
8. Glossary of key terms with definitions and pronunciations

CD1008 Pruning contains lessons on how to prune trees for tree health and human safety. Lesson one introduces the principles of pruning. Lesson two covers practices and strategies.

CD1008 .................................. $69.95

CD1009 Tree Identification and Selection has these objectives:

1. Understand how all plants are classified and how scientific names are based on the classification system.
2. Explain what scientific names are, why they are used, and how they are written.
3. Explain how plant characteristics, such as growth habit, texture, and color, can be used in tree identification.
4. Describe how leaf arrangement is used to help identify trees.
5. Become familiar with the various leaf shapes and types of leaf margins, bases, and apices.
6. Learn to use bud and twig characteristics to identify trees without leaves.

CD1009 ................................. $69.95

CD1010 Diagnosis and Disorders has these objectives:

1. Understand the principles of a systematic approach to the plant diagnostic process.
2. Explain how stress can weaken a tree, predisposing it to secondary problems.
3. Learn to recognize the signs and symptoms of tree disorders.
4. There are three lessons on this CD. Lesson one is on general diagnosis. Lesson two is on abiotic disorders. Lesson three is on biotic disorders.

CD1010 ................................. $69.95

CD1011 Planting and Early Care has these objectives:

Planting
1. Learn the techniques and procedures used to plant trees.
2. Understand how using proper techniques can improve survival and accelerate establishment.
3. Be familiar with the various types of nursery stock.
4. Understand that each stock has its advantages, limitations, and proper planting techniques.

Early Care
1. Understand the special requirements of newly transplanted trees and become familiar with early-care procedures.
2. Understand the nutrient requirements of newly planted trees and learn which types of fertilizers are acceptable and which could be potentially detrimental to an establishing tree.
3. Understand the benefits associated with proper mulching techniques.
4. Learn the techniques used for, as well as the advantages and disadvantages of, staking or guying newly planted trees.
5. Learn how to prune a newly planted tree and how to train a young tree to develop a strong branch structure.
6. Become familiar with which information should be included when writing or accepting written planting specifications.

CD1011 ................................. $69.95

System requirements for CD1008, CD1009, CD1010, CD1011, and CD1012: Windows 2000 or XP; Pentium III or better; 24X CD-ROM or better; sound
CD1012 Tree Maintenance contains three major sections: tree support systems, fertilization, and lightning protection systems.

Tree Support Systems
1. Determine when a tree might be helped by the installation of cables, guys, or bracing rods.
2. Discuss the limitations of cabling and bracing systems.
3. Explain the different ways trees can be cabled, braced, or guyed.
4. Illustrate the techniques and materials used for cabling and bracing.
5. Recognize the fact that trees that have been cabled, braced, or guyed should be inspected periodically to ensure proper functioning of the tree support system.

Fertilization
1. Become familiar with the essential elements that trees require and how these elements are absorbed.
2. Understand the rationale for fertilizing urban trees.
3. Explain the advantages and disadvantages of some fertilizers.
4. Describe the different methods of fertilizer application and the advantages and disadvantages of each.
5. Discuss the problems that can be associated with excessive fertilization and leaching.
6. Explain why determining nutritional requirements and availability is the first step prior to developing fertilization recommendations.

Lightning Protection Systems
1. Discuss the basic principles of lightning-strike physics.
2. Present the circumstances under which a lightning protection system may be recommended for trees.
3. Discuss the probability of lightning damage to trees based on their size, species, and location.
4. Describe the design of a basic lightning protection system and some of the installation procedures.
5. Understand the limitations of tree lightning protection systems.

Discounts:
CD1012 $69.95

System requirements for CD1008, CD1009, CD1010, CD1011, and CD1012: Windows 2000 or XP; Pentium III or better; 24X CD-ROM or better; sound

Grain Production

Units

Crop Breeding: Corn, 28p
Describes the importance of the corn crop, its breeding history, taxonomic relationships, crop characteristics, and breeding objectives. It includes a glossary and shows the steps in making a controlled cross for the crop.

Managing the Environmental Impact of Pesticides
U4083 24p...............................$2.40

Pesticide Application: Equipment & Calibration
U4084 28p...............................$2.80

Glossary of Pesticide Terms
U4085 8p.............(bundle of 10) $8.00

Soils

Units

Managing Soil pH: Agronomic Crops, 24p
Various sections of this publication discuss soil pH adjustment and include pH and limestone problems to be solved. Activities are comparing pH testing technologies, measuring the pH of the water, and a classroom study of the effect of limestone on field soil.

Pesticides

Units

Safe Use of Farm Chemicals Series
Safety in the use, storage, and application of agricultural chemicals is a common goal of agriculturists and the general public.

Pesticide Use: A Benefit/Risk Analysis
U4080 20p...............................$2.00

Reading Chemical Container Labels
U4081 16p...............................$1.60

Using Farm Chemicals Safely
U4082 24p...............................$2.40

Order by FAX (217) 333-3917  Updated 8/07
Planning a Fertilizer Program
U4010a 8p .................. (bundle of 10) $8.00

Hunger Signs in Crops
U4011b (with color insert), 12p $1.50

Understanding Soils
U4052a 20p ........................ $2.00

Using the Illinois Land-Use Scorecard
U4053a 28p ........................ $2.80

**Transparencies**

Soil Science
Introduces the science of classifying and managing soils. Graphically illustrates soil particle size, textural classes, and common types of soil structure.

T701 32 fr. .......................... $22.15

Soil Testing and Fertility
Shows equipment, procedures, and test results of soil testing. Explains how nutrients are held in soils and how soil environmental conditions affect added nutrients. Charts point out the benefits of nutrient application.

T702 57 fr., w/guide ............... $40.40

**Soybeans**

**Unit**

Soybean Production
U4033b 20p .......................... $2.00

**Weeds**

**Units**

The Weed Factor, 8p
Discusses how weeds and their seeds impact agriculture. Lists primary noxious, secondary noxious, and common weeds that are likely to occur in corn, soybeans, wheat, and oats in Illinois.

U4073 ...................... (bundle of 10) $8.00

**Transparencies**

How Herbicides Work
Shows how weeds reduce crop yields and why good control is important. Illustrates life cycles of annuals, biennials, and perennials. Describes herbicides and how they work. Briefly reviews application equipment and its use.

T700 46 fr. .......................... $31.25

**CD-ROMS**

Weed Identification
This is a PowerPoint CD-ROM for teaching weed identification. It includes all the weeds on the IAVAT weed identification list (2007 revision). Presentations include 1) the regular set with images and text descriptions of the weeds, 2) a practice set without weed names appearing by the images, and 3) a set that is an interactive quiz presentation which allows the user to choose an image to answer a question.

In all, there are nearly 700 frames on this CD.

MDS707b CD-ROM ............... $70.00

MDS707b-10 Weed Identification Quiz Pack
(10 identical CD-ROMs for drill and practice) .................. $200.00

**Miscellaneous**

Crop Seed Samples
This identification set contains 41 crop seeds used in the Illinois Agronomy Career Development Event. Includes a key to the numbered samples.

Alfalfa
Alsike clover
Barley
Birdsfoot trefoil
Broccoli
Brome grass
Canola
Corn
Cotton
Cucumber
Fescue
Grain sorghum
Kentucky bluegrass
Ladino clover
Lespedeza
Lettuce
Lima bean
Musk melon
Oats
Orchardgrass
Pea
Peanut
Perennial ryegrass
Popcorn
Pumpkin
Red clover
Red top
Rice
Rye
Safflower
Soybeans
Sudangrass
Sugar beet
Sunflower
Sweet clover
Sweet corn
Timothy
Tomato
Vetch
Watermelon
Wheat

Z7003a ............................... $36.00
**Units**

**Integrated Pest Management Series**

- **IPM I, Ecology, Crops, and Pests** introduces students to management techniques to keep insect and other pest populations at acceptable levels without harm to the environment. **IPM II, Why IPM?** demonstrates that indiscriminate pesticide use leads to serious problems.

- **Integrated Pest Management I, Ecology, Crops, Pests, 36p**  AU8004 ..................................................$3.60
- **Integrated Pest Management II, Why IPM?, 36p**  AU8005 ..................................................$3.60

**Nontraditional Crops, 28p**

Describes several nontraditional crops, including kenaf, guayule, rapeseed, crambe, castor, lesquerella, milkweed, and others. An introductory section lists factors to consider when evaluating nontraditional crops.

- **U4071** ..................................................$2.80

**Precision Agriculture, 28p**

This unit provides a basic outline of precision agriculture and its components. The major sections of the publication are Introduction, Soil Sampling, Remote Sensing, Global Positioning Systems, Yield Monitors, Geographic Information Systems, Variable Rate Technology, and The Future. Color illustrations appear throughout the unit, and a companion Web site of precision agriculture Web links has been prepared.

- **U4074** ..................................................$4.20
- **SETU4074 (bundle of 10) ..................$35.00

**Introduction to Plant Biotechnology, 28p**

- **U4086** ..................................................$2.80

**Transparencies**

**Practical Agronomy, 40 fr.**

Provides general illustrations and reference tables for agronomy. Can be used to supplement lectures and talks or for projection during student lab exercises. Major categories are Breeding, Growth and Development, Soils and Nutrition, and Miscellaneous.

- **T730** .................................................$27.35

**Agronomy Diseases and Pests Picture Sheets**

Sold only in bundles of 25

**Weed Seed Samples**

This identification set includes 42 weeds listed in the Illinois Association of Vocational Agriculture Teachers (IAVAT) Agronomy Career Development Event rules.

- Barnyardgrass
- Buckhorn plantain
- Burdock
- Chicory
- Common cocklebur
- Common lambsquarters
- Common mallow
- Common milkweed
- Common mullein
- Common ragweed
- Curly dock
- Dandelion
- Fall panicum
- Field bindweed
- Field pennycress
- Giant foxtail
- Giant ragweed
- Green foxtail
- Horseweed (marestail)
- Ivyleaf morningglory
- Jimsonweed
- Johnsongrass
- Ladysthumb smartweed
- Large crabgrass
- Musk thistle
- Peppergrass
- Prickly sida
- Purslane
- Quackgrass
- Redroot pigweed
- Shattercane
- Shepherd's-purse
- Velveteaf
- Waterhempp
- Wild carrot
- Wild mustard
- Wild oats
- Wild parsnip
- Wild sunflower
- Woolly cupgrass
- Yellow foxtail
- Yellow nutsedge nutlets

- **Z7004a** .................................................$99.00

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**Updated 8/07**
Agronomy

X799.81 Barley and Rye Diseases ................................................................. $13.50
X898.01 Field Crop Weeds ................................................................. $13.50
X899.01 Corn Herbicide Injury I .............................................................. $13.50
X899.02 Corn Herbicide Injury II .............................................................. $13.50
X899.06 Soybean Herbicide Injury I ........................................................ $13.50
X899.07 Soybean Herbicide Injury II ....................................................... $13.50
X899.16 Injury Symptoms from Selected Herbicides ................................... $13.50
X899.17 Herbicide Injury-Meristematic Inhibitors I ...................................... $13.50
X899.18 Herbicide Injury-Meristematic Inhibitors II ...................................... $13.50
X899.19 Herbicide Injury-Plant Growth Regulators & Pigment Inhibitors ........ $13.50
X899.20 Herbicide Injury-Photosynthetic Inhibitors & Contact Herbicides ...... $13.50

Booklets, Binders, Manuals, Pocketbooks, and More

Diseases and Pests of Field Crop Plants
An 8 1/2” x 11” spiral bound booklet with 31 photo identification sheets with one side of color photos and descriptions on the back. 31 sheets which include: Corn Diseases I-V, Sorghum Diseases I & II, Soybean Diseases I & II, Alfalfa Diseases I & II, Clover Diseases I & II, Forage Grass Diseases I, Wheat Diseases I & II, Oat Diseases, Barley and Rye Diseases, Corn Herbicide Injury I & II, Soybean Herbicide Injury I & II, Corn Insects-Above Ground, Corn Insects-Below Ground, Soybean Insects, Stored Grain Insects and Molds, Injury Symptoms from Selected Herbicides, Herbicide Injury-Meristematic Inhibitors I, Herbicide Injury-Meristematic Inhibitors II, Herbicide Injury-Plant Growth Regulators and Pigment Inhibitors, and Herbicide Injury-Photosynthetic Inhibitors and Contact Herbicides.

MX799.91a Booklet........................................ $19.25

Diseases and Pests Binder
A 3-ring binder containing all 74 color photo sheets is organized with 25 tab dividers. Major divisions of the binder include diseases, herbicide injury, pests, and weeds of agronomic and horticultural crops.

MX800 3-ring binder with 25 tab dividers and 74 color photo sheets ........................................ $37.00
MX800 3-ring binder with 25 tab dividers .................................................. $12.00

Diseases of Soybeans and Corn
This 3” x 5 1/2” booklet (spiral-bound) is a guide to help identify diseases of soybeans and corn quickly and accurately. It assists in early, in-the-field identification when control measures are generally more effective. Over 50 different diseases are illustrated with color photos.

X830 Pocketbook........................................ $4.95

Vegetative Identification of Common Row Crop Weeds
This spiral-bound pocketbook has been revised and expanded. Describes 48 weeds.

X840a Pocketbook ......................... $8.80

Broadleaf and Grass and Grasslike Weed Vegetative Identification Keys
These keys describe 27 broadleaf and 20 grass or grasslike weed seedlings found in corn and soybeans. They focus primarily on characteristics of leaf arrangements, true leaves, grass ligules, and cotyledons. Sketches are used to determine proper identification.

Z840.1 Two keys, 8p ............................... (bundle of 25) $33.00

Waterhemp Management in Agronomic Crops
In 12 pages, this booklet describes the biology and identification of waterhemp, considers its increased prevalence, and details interactions with soil-applied and postemergence herbicides in corn and soybean fields. Contains color photographs.

X855 Color booklet, 12p............. $2.20

Crop Plants
Each 8 1/2” x 11” booklet has 40 sheets with clear color photographs that help identify plants quickly and accurately. Each crop plant is shown in 4 stages—seed, seedling, mature plant, and flower.

X860 Book, 82p......................... $12.35

Insect Pest Identification of Corn, Soybeans, and Alfalfa
A handy 3” x 5” pocketbook with 25 color photographs of insect pests. Describes damage, scouting procedures, and guidelines for control.

X870 Pocketbook, 52p.................. $3.30

Field Crop Scouting Manual Fifth edition
This manual is designed to aid in identification and evaluation of common problems in the field. It describes nutrient deficiencies, herbicide injuries, insects, diseases, weeds, and other agronomic crop problems. Filled with color photos, line drawings, and scouting worksheets and guidelines. Revised 2004.

The fifth edition’s main features: 10% more content 30% more color photos each chapter is revised more durable front and back covers improved binding

The CD-ROM recreates the printed manual as Adobe Acrobat documents for onscreen viewing, with the added benefit of easy navigation. All the content is fully indexed and
searchable by keywords. The freely distributable Adobe Acrobat Reader is included on the CD-ROM.

X880d, manual only, 236p, ............ $60.00
CDR880d, CD-ROM only, .... $60.00
SETX880d, manual + CD-ROM, .... $109.00

Crop Sciences Laboratory Manual, 234p

Written by Patricia Stoller, Department of Crop Sciences, University of Illinois at Urbana-Champaign, this manual is a good reference for the agriculture classroom. High school agriculture instructors may find the manual useful for supplementing their class laboratory activities. College and University classes can use it as a class text.

There are color illustrations and color photographs throughout the manual. Each of the 14 chapters has a notes-taking section at the end of the chapter, and there is a multipage laboratory exercise for each chapter.

An instructor guide CD-ROM consists of a 46-page Adobe Acrobat document. The guide contains suggestions to help the instructor coordinate lab activities. These suggestions include a list of potential plants and other materials that can be used for exercises. Lab preparations are outlined and sample answers to lab exercise questions are presented. Bookmark navigation is provided to the 14 chapter exercises. A freely distributable Adobe Reader is included on the CD-ROM.

X900, manual only, 234p, ............ $50.00

Soybean Rust Assessment Tool

Designed to be used in the field when scouting for soybean rust, this tool consists of a lanyard with a retractable soybean rust assessment card. On one side, the card shows actual 1%, 3%, 5% and 10% infected leaf tissue with lesions. The reverse side describes assessment steps.

X881 ........................................ $9.99

Pocket Magnifier

Soybean rust lesions are small and good magnification is required for proper examination. This high-quality, 20X folding pocket magnifier with lanyard and carry case is recommended by scouting experts as an essential part of your scouting tools.

X882 .................................... $32.99