New Forest Insect and Disease Pest-Recognition Software for Southern Hardwoods

U.S. Forest Service scientists from the Center for Bottomlands Hardwood Research, Stoneville, MS, a unit of the Southern Research Station, have developed a series of Forest Insect and Disease Research (FIDR) pest recognition softwares on CD-ROMs. The new softwares, written in Visual Basic (for Windows), display images and information on insect and disease pests of selected southern hardwoods and other hosts. The softwares include Ash Pests, Oak Wilt, Cottonwood Pests, Oak Pests, and North American Hardwood Borer Image Libraries. Two addition CDs, one on Clavicipitaceous Endophytes (fungi beneficial to plants, but toxic to pests) and another on the Indian paint fungus (an important wood decay fungus) provide information on specific economically important fungi. The softwares are designed as quick references and guides to provide users with diagnostic tools to aid in the rapid identification and diagnosis of forest insect and disease pests of southern hardwood species. Some show different life stages of pests, lists of hosts, and are easily searched. These are the first CD-ROMs on Forest Health and the first to be produced entirely in-house by the U.S. Forest Service. Each library contains between 100 and 300 or more full- color and black & white images, arranged by topic, with descriptive text captions or paragraphs describing diagnostic characters. Each image requires less than 1 second to load and display on monitors interfaced to 100 MHz or faster computers. A zoom feature is included for extra detail. Topics include insects, diseases, and abiotic incitants of forest pest problems. Some libraries, such as the Oak Wilt Image Library, provide users access to current research activities and results on selected insect and disease problems under investigation at the Southern Hardwoods Laboratory. The softwares operate on 486 or faster IBM-compatible computers with SVGA monitor, Windows 3.x, 95 or 98, mouse or graphics tablet, 2´ or faster CD-ROM drive, and run directly off of the CD to conserve hard drive space. They are useful to forest pest managers, teachers, researchers, forest consultants, university and extension entomologists, pathologists, and other hardwood user groups interested in managing forest pest problems. Image files from the libraries may be imported into other graphics programs for specific applications or used directly from the software for presentations at professional meetings, seminars, demonstrations, workshops, or for teaching. The softwares also may be used on portable laptop computers as a reference for field diagnoses of forest pests.

The CDs are available for a modest fee to cover the cost of materials and physical reproduction. To order any one of these CDs, contact Dr. Dan Wilson preferably at email address: dwilson/srs_stoneville@fs.fed.us and provide your name, complete address, and a list of CDs that you wish to purchase, or if you need more information, contact him via fax at (662) 686-3195, listing any questions and your phone number and he will return your call .   You may also send a letter requesting the CDs, addressed to:

Dr. Dan Wilson
USDA Forest Service
Southern Hardwoods Laboratory
P.O. Box 227
Stoneville, MS 38776-0227

PLEASE DO NOT SEND CHECKS WHEN REQUESTING CDs BY MAIL! Instead, a Bill will be sent to you along with instructions for payment after receiving your order . You may pay by check, money order, or bank draft drawn on a U.S. bank. Sorry no purchase orders or credit cards are currently accepted. See the price list below for currently available CD-ROMs.

Compact Disc Title	Price	Size (Megabytes)	Subjects
1. Ash Pests	$12.50	31	Pests of Fraxinus spp.
2. Cottonwood Pests	$12.50	106	Pests of Populus spp.
3. Oak Pests	$12.50	89	Pests of Quercus spp.
4. Oak Wilt Disease	$12.50	32	Ceratocystis fagacearum
5. North American Hardwood Borers	$25.00	363	Insect borers of hardwoods
6. Clavicipitaceous Endophytes	$12.50	72	Fungal endophytes of grasses
7. Indian paint fungus	$12.50	64	Echinodontium tinctorium

Documentation for Forest Insect & Disease Image Libraries on CD-ROM
USDA Forest Service, Southern Hardwoods Laboratory, P.O. Box 227, Stoneville, MS 38776-0227
(to order CD-ROMs or get more informaton, call Dan Wilson at 601-686-3180)

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The Forest Insect & Disease Pest Image Libraries consist of collections of quality photographic images arranged by type of damage and pest. These are custom programs designed and produced in-house as quick identification aids for forest pest managers, teachers, researchers, forest consultants, and others interested in familiarizing themselves with the major insect pests and diseases of southern and eastern hardwoods, as well as other specific hosts in the United States.

System Requirements
Windows 3.X or 95
486 or better CPU
SVGA monitor supporting 800 × 600 resolution or better, & 256 colors
CD-ROM drive, 2× or faster
mouse or graphics tablet

CD-ROMs Currently Available
1. Ash Pests $12.50
2. Cottonwood Pests $12.50
3. Oak Pests $12.50
4. Oak Wilt $12.50
5. Hardwood Borers $25.00
6. Clavicipitaceous Endophytes $12.50
7. Indian paint fungus $12.50

Technical Notes on Screen Resolutions
The Pests Image Libraries work best at monitor screen resolution 800 × 600 and 256 colors or 1024 × 768 and 256 colors. These programs were **not** designed for screen resolution 640 × 480 (also called VGA). The Oak Pest, Hardwood Borers, & Indian paint fungus CDs require the **large font** driver selection for the resolutions indicated above.

Changing / Checking Screen Resolution Settings**
Windows 3.X The resolutions can be changed or checked in **Windows Setup**, under the **Control Panel** icon in the **Main** window. When changing the monitor settings, in most cases, you will need to use one of the Windows install disks so that the appropriate screen driver can be copied.

Windows95 Click **Start** button, -Settings, -Control Panel, -Display, -Settings, -Color Palette select 256, -Desktop Area select 800 × 600 pixels, select **large font** & click OK.
** Note: Screen resolution 640 × 480 (also called VGA) is **not** supported. In this resolution, the program will run off of the screen and appear to be too big for the screen. If you are experiencing problems with viewing the program after changing resolution, try changing from small font to large font or vice versa when selecting screen resolution.

To Operate Pests Image Libraries
See instructions on the back of the CD-ROM cover photo or on the face of the CD itself (Ash & Oak Wilt CDs).

Using Pests Image Libraries
1. Check to be sure monitor resolution is correct (See Technical Note above).
2. Program will **autoload** in Window95 or 98 upon insertion into your CD-ROM, but in Windows 3.1 you must double click the program icon in the US Forest Service Libraries Window created on your screen in Windows 3.1.
3. Click on a subject category (upper box), then double click to select from the photo listing in the lower box. The corresponding photo will load into the box on the left side of the screen. The caption of the photo will be displayed in the rectangular box below the photo. The filename of the photo will also be conspicuously displayed.
4. As indicated on screen, double click **on the displayed photo** to zoom the photo. To return to the previous screen, click **off of the photo** as indicated.
5. To exit the program, click **Exit** under the **File** menu.

Image File Use
The images contained on the Pests Image Libraries (CD-ROMs) are in the public domain and may be freely used and copied, provided that customary crediting of the source is indicated. If you'd like to use these files in other applications such as graphics or presentation programs, simply use the DOS **Copy** command (or Windows **File Manager**) to copy the desired file(s) from the CD.