

SCHOLARSHIPS

Promote MSU Student Research



David F. McNeill



William D. Starrett



Sandra W. Woolfolk

By Bob Ratliff

Research is an important part of graduate school, and three students in the Department of Entomology and Plant Pathology at Mississippi State University are receiving significant research scholarships for the current school year.

Master's degree student David F. McNeill of Louisville, Tenn., has been awarded the L.S. Olive Scholarship of the North Carolina-based Highlands Biological Station. The \$2,400 scholarship supports his research into a fungus that attacks American chestnut trees in the eastern United States.

Once abundant from Maine to the Southeast, American chestnuts were almost wiped out by an imported fungal disease during the early 1900s.

"A few pockets of American chestnut trees can still be found in the Smoky Mountains," McNeill said. "Some of these trees survive until they are about 20 years old because of a virus that attacks the fungus, helping the trees survive."

McNeill has studied fungus from more than 300 trees from the Great Smoky Mountains National Park in an MSU lab. His research, he said, has found fungus samples with abnormal growth rates and other characteristics that could be caused by a virus. He will be working with those samples during the next few months to determine if a virus is present.

William D. Starrett of Chattanooga, Tenn., also is receiving a \$2,400 scholarship from the Highlands Biological Station. The

master's student is studying areas of rhododendron dieback or decline in the southern Appalachians.

"Only one other study has been done, and it looked at what's happening with the plants above ground, but this is the first research with what's going on in the soil under the plants," Starrett said. "My study is focusing on the fungi, nutrients, nematodes and other material in the soil to draw a picture of what's actually going on."

Rhododendron, he added, is a major understory species throughout the Appalachian Mountains. The species provides habitat for other plant and animal species.

Doctoral student Sandra W. Woolfolk of Starkville is one of four students selected for \$1,500 national awards by the Pi Chi Omega professional pest control fraternity. The award is supporting her research with natural control methods for the red imported fire ant.

"I'm looking at the bacteria and fungi in the soil around fire ant mounds in Mississippi," she said. "Three or four fungi in soil collected from mounds and studied in the lab appear to have potential for natural control of fire ants."

Her next step is to study the promising fungi in the field. Woolfolk also is receiving a \$3,500 scholarship from the United Methodist Church's General Board of Higher Education and Ministry.