

effective against scab (caused by the fungus *Venturia inaequalis*), a second fungicide, such as Benlate, may have to be added to the tank mix when both rust and scab diseases require control.

Bayleton is not inexpensive, but it is applied at a rate much lower than that arborists are accustomed to using and is effective with fewer applications. Bayleton is available from wholesale establishments that distribute lawn chemicals (or contact Mobay Chemical Corporation, Ag. Chemicals Division, Box 4913, Kansas City, MO 64120).

Literature Cited

1. Himelick, E.B. and Dan Neely. 1960. *Juniper hosts of cedar-apple and cedar-hawthorn rusts*. Plant Dis. Repr. 44: 109-112.
2. Nichols, L.P. 1981. *Eleven excellent crabapples*. Am. Assn. Bot. Gard. & Arboreta Bulletin 15: 35-38.
3. Smith, E.M. 1981. *The flowering crabapple — a tree for all seasons*. J. Arboric. 7(4): 89-95.

Section of Botany and Plant Pathology
Illinois Natural History Survey
Champaign, Illinois 61820

ABSTRACT

Shank, B.F. 1982. **Shigo and his saw shed new light on tree health**. Weeds, Trees & Turf 21(6): 28, 30, 34.

Alex Shigo, chief scientist at the USDA Northeastern Forest Experiment Station in New Hampshire, is well known to the tree care community. In 1950, he began to dissect hundreds of trees with a chain saw to pin down the actual response of trees to injury and maintenance practices. His string of discoveries has not stopped. There are many people causing unnecessary damage to trees during pruning by cutting into the collar of the branch. Many still use tree wound paint even though it serves no purpose to the tree. During cavity repair, excessive cleaning may reinjure the tree rather than help it. Injecting materials into the tree may do more harm than good, especially if holes are drilled along the same line year after year. These are just a few of the conclusions made by Shigo while working for the Forest Service. The biggest breakthrough, however, may be just around the corner. Shigo is focusing on the energy needed for a tree to protect itself and the level of stored energy in healthy versus unhealthy trees. If the energy problem can be solved, then perhaps the tree will depend more on itself for maintenance. His work on energy reserves in trees developed out of the Dutch elm disease research he is doing. When potassium iodide was applied to cores or slices of various trees, healthy trees showed good starch reserves while dying trees showed little if any reserves. The thought follows if starch reserves can be restored, the tree's defensive reactions will improve and it will survive.