

76. Roberts, B.R. 1977. *The response of urban trees to abiotic stress*. J. Arboric. 3: 75-78.
77. Sakai, A. 1970. *Mechanism of desiccation damage of conifers wintering in soil-frozen areas*. Ecology 51: 657-664.
78. Schoeneweiss, D.F. 1978. *The influence of stress on diseases of nursery and landscape plants*. J. Arboric. 4: 217-225.
79. Schoeneweiss, D.F. 1981. *Infectious diseases of trees associated with water and freezing stress*. J. Arboric. 7: 13-18.
80. Selye, H. 1952. *The Story of the Adaptation Syndrome*. Acta Inc., Montreal, Canada.
81. Shanklin, J. and T.T. Kozlowski. 1984. *Effect of temperature preconditioning on response of Fraxinus pennsylvanica seedlings to SO<sub>2</sub>*. Environ. Pollut. 36: 311-326.
82. Smith, W.H. 1981. *Air Pollution and Forests*. Springer-Verlag, New York.
83. Tattar, T.A. 1983. *Stress management for trees*. J. Arboric. 9: 25-27.
84. Van der Boon, I., A. Pouwer, and N.M. de Vos. 1963. *Nitrogen dressing in orchards with a grass sward*. Sixteenth Int. Hort. Congr. Proc. 3: 151-157.
85. Weiser, C.J. 1970. *Cold resistance and injury in woody plants*. Science 169: 1269-1278.
86. Winner, W.E., G.W. Koch, and H.A. Mooney. 1982. *Ecology of SO<sub>2</sub> resistance. IV. Predicting metabolic responses of fumigated trees and shrubs*. Oecologia 52:16-21.
87. Zahner, R. 1962. *Terminal growth and wood formation by juvenile loblolly pine under two soil moisture regimes*. For. Sci. 8: 345-352.
88. Zahner, R. 1968. *Water deficits and growth of trees*. p. 191-254 In T.T. Kozlowski, (ed.) *Water Deficits and Plant Growth*. Vol. II Academic Press, New York.

*Department of Forestry  
University of Wisconsin  
Madison, Wisconsin*

## ABSTRACTS

GREY, G.W. 1984. **Painless shrub pruning**. Am. Forests 90(5): 13-16.

There are nine things you need to know before you prune: 1) what it is, 2) the difference between pruning and shearing, 3) why you want to prune it, 4) what nature intends it to look like, 5) when it leafs, blooms, and fruits, 6) when to prune it, 7) how it will respond to pruning, 8) how to prune, and 9) when to remove it.

SHIGO, A.L. 1984. **Tree decay and pruning**. Arboricultural Journal 8: 1-12.

The major aims of pruning for amenity trees have been to control growth and maintain desired shapes. It is possible to prune in such a way that no more decay will develop than develops normally when branches are shed. Proper pruning techniques will come from a better understanding of trees. Trees respond to injuries and infections by setting boundaries to resist the spread of microorganisms. The boundaries also resist the spread of microorganisms from dying branches into the joining stem. Pruning cuts should not be made behind the branch bark ridge. Such cuts remove the protective boundaries, allowing microorganisms to spread rapidly into the system. When branches are pruned properly, there is no need for wound dressings. When branches are pruned improperly, no amount or type of wound dressing will help.