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Abstracts

APPLETON, B.L. 1988. **Fertilizing landscape trees and shrubs: the revised version.** Arbor Age 8(10):12-14.

As research has given us a clearer understanding of how plants grow, many recommendations have needed to be revised accordingly. The objective for mature trees and shrubs should be to maintain the existing growth without overstimulating new growth. They should be fed every two to four years. With young or newly transplanted trees and shrubs, the objective should be to accelerate growth—especially root growth—in order to establish the plants in the landscape successfully. Rather than rely on soil tests or visual inspections, many people prefer to simply set up a regular fertilization schedule. Many areas of the United States have soils with adequate levels of phosphorus and potassium, so nitrogen is the nutrient that is most likely to be needed. In addition, nitrogen readily leaches (washes) through the soil, whereas phosphorus and potassium do not. This is another reason why those two nutrients require less-frequent application. The most common form of direct fertilizer application is also the one that recent research has shown to be generally the most effective, especially relative to cost. It involves simply broadcasting the desired fertilizer (in dry granular form) on the soil or turf surface under the trees and shrubs.

DREA, J.J. and R.M. HERNRICKSON, JR. 1988. **Exotic predators.** Am. Nurseryman 168(8):66-68, 70-71.

Anyone who has grown Euonymus is well aware of euonymus scale, which infests and often kills many varieties of this versatile ornamental. It was accidentally introduced into North America many years ago from Asia. No natural enemies were ever introduced to control it. Several natural American enemies do feed on the exotic invader, but they are ineffective. Two tiny predatory beetles which thrive on euonymus scale have been imported from Korea by the USDA. These beetles are part of an integrated pest management control tactic that is becoming an effective weapon in our battles against insect pests.