

Select Street and Lawn Trees

*for site adaptability,
minimum maintenance, and
resistance to pollution,
insects and disease*

PEOPLE today expect beauty around them. Urban workers and dwellers tend to take for granted the greenery which is built into busy city streets and suburban areas for their comfort and either conscious or unconscious enjoyment.

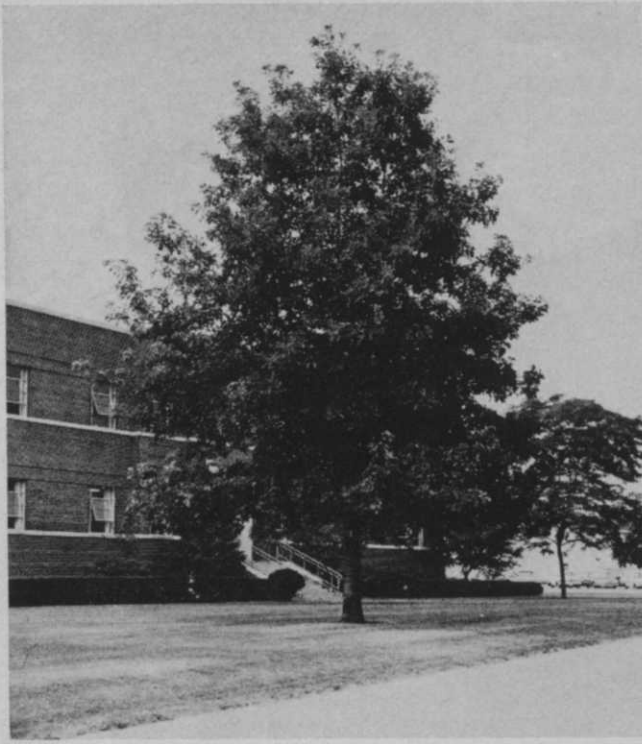
Credit for reducing glare and softening hard building lines, breaking up the suburban landscapes, providing shade and multiple other uses must go to professional arborists and landscapers who understand the problem. Street and lawn trees often have to withstand pollution, lack of moisture, incredible summer heat, and generally adapt to artificial conditions. At the same time, the tree must have the size and proportion to contribute to its surroundings. It must stay within its territorial bounds, including root system, trunk, and canopy. Above all, the city tree must thrive. This is expected despite pruning to avoid overhead lines or other obstacles, lack of normal humus

Golden-rain Tree, *Koelreuteria paniculata*. Age, 15 years from seed; height 13.5 feet; diameter, 7.7 inches; crown spread, 16 feet. Located on OARDC campus, Gourley Hall.



Sweet Gum, *Liquidambar styraciflua*. Age, 16 years from seed; height, 21 feet; diameter, 4 inches; crown spread, 13 feet. Located on OARDC campus, Williams Hall.





Texas Red Oak, *Quercus shumardii* var. *texana*. Age, 19 years from seed; height, 31 feet; diameter, 12.1 inches; crown spread, 32 feet. Located on OARDC campus, Gourley Hall.



Moraine Honey Locust, *Gleditsia triacanthos inermis* Moraine. Plant patent 836. Age, 19 years; height, 32 feet; diameter, 7.3 inches; crown spread, 30 feet. Located on OARDC campus, Gourley Hall.

and mulch, and disrupted root areas.

No single tree can meet the many needs of a city. Trees of many forms and sizes are needed, some to beautify homes and parks, others for streets, and still others for highways leading into the central city. In recent years, the tendency has been to promote small trees which do not exceed 40' in height at maturity. The so-called forest giants are discounted because they interfere with walks and other city conveniences. However, when there is enough space, such trees provide more shade and sheer beauty than many of the smaller trees.

Planting Site Governs Selection

Naturally, the planting site must govern the selection of trees. Smaller species are recommended for planting under wires and to fit specific areas. Yet there are other factors equally important in selecting trees for yard or street. Such characteristics as form, hardiness, longevity, resistance to insects and disease, and soil requirements are mandatory.

A few trees, planted with these

factors in mind, have performed well at the Ohio Agricultural Research and Development Center for a period of years (see illustrations). These include selections of thornless honey

locust, Texas red oak, pin oak, sweet gum, ginkgo, little-leaf linden, and Washington hawthorn. Others of the newer cultivars of maples, oaks, lindens, and flowering trees could well be in-



Washington Hawthorn, *Crataegus phaenopyrum*. Age, 19 years from seed; height, 16 feet; diameter, 5.1 inches; crown spread, 16 feet. Located on OARDC campus, Gourley Hall.



Little-leaf European Linden, *Tilia cordata*. Age, 13 years from seed; height, 26 feet; diameter 8.4 inches; crown spread, 19 feet. Located on OARDC campus, Maintenance building.



Pin Oak, *Quercus palustris*. Age, 17 years from seed; height, 37 feet; diameter 11.8 inches; crown spread, 40 feet. Located on OARDC campus, Gerlaugh Hall.

cluded. However, some of these require further testing according to Dr. O. D. Diller. The elms, silver maple, catalpa, mulberry, and the poplars are not recommended.

Equally as important as size or scope of the mature tree is hardiness. Ability to withstand insects and disease and adapt to the ex-

isting environment is a strong measure of any tree's worth. City planners are increasingly concerned that trees be easy to maintain and service. Increased labor costs dictate that trees require little in the way of pruning or care beyond the city's regular fertility and spraying program.

Thus, trees must be selected

for their natural ability to fit the specific elevation, air pollutants, climate, and either available moisture or the moisture which can be made available to the tree. Trees for street use must also be free from odor such as that of the fruit from the female ginkgo. They cannot possess root systems which clog sewerlines, a characteristic of the Lombardy poplars. Nor can they be readily susceptible to disease such as the canker stain and anthracnose of sycamores. Problems throughout the country with Dutch elm disease point up the extreme hazard and expense of losing large inventories of trees.

Public moneys are normally responsible for a large percentage of any major city's trees. Few cities provide more than the nominal percentage funds desired by the city forester or other planners. Thus, smaller than desired trees or fewer trees may be used. Because of these factors, it is even more necessary that careful variety selection be made for new plantings. Competent landscape architects and arborists are mandatory during planning. Proper planting and follow-up care by trained personnel can then insure that trees live and provide the beauty and use intended.

By way of summary, remember that people expect beauty around them, though they may not be aware that trees reduce glare and add to their comfort. Trees must be selected which can adapt to the often unnatural site as well as being able to resist pollution, insects and disease. More important, they must fit into the city's regular program of maintenance. Fortunately, today we find many such trees available.

A WTT staff report based on an interview with Dr. O. D. Diller, curator of Secrest Arboretum, a 115-acre development now established as an independent unit of the Ohio Agricultural Research and Development Center at Wooster, Ohio. Dr. Diller served as chairman of the Center's forestry department from 1950 to 1965, serving on the Center's staff since 1937.



Ginkgo, *Ginkgo biloba*. Age, 58 years from seed; height, 48 feet; diameter, 22.9 inches; crown spread, 48 feet. Female tree, though fruitless male trees are preferred.