also act to enlarge the size of existing cracks over time.

To prevent the formation of bark cracks associated with injection sites, injection holes should be made as low as possible on the stem, preferably at or near the root flare, and successive injections to individual trees should be discouraged, if possible. In addition, holes should be made as shallow as possible to minimize excessive bleeding caused by bacterial wetwood which can cause mortality of cambial tissue (Shigo and Campana 1977). Crown wounds such as pruned branches should be made with care, and in such a way that walling off and successful closure of the wounds are promoted.

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## **ABSTRACT**

Palmieri, Judy. 1982. How plants can modify the environment. Am. Nurseryman 155(12): 43-44.

A sound reduction of only a few decibels can mean a significant difference in loudness. That kind of reduction can be accomplished with landscaping. Combining plants with a fixed barrier cuts sound better than either could do alone. The most effective way is to put buffering zones of plants on both sides of a berm or wall. The plants tend to reflect the sound down, where a lot of it is absorbed by the earth. Plants can reduce the air pollution around cities and industrial areas, too. Plants can absorb such pollutants as carbon monoxide, chlorine, fluorine, hydrocarbons, nitrates of oxygen and ozone. They can also remove dust particles from the air. In addition, they help modify air pollution by releasing oxygen through photosynthesis. Plant material can modify the climate of a small area most noticeably in its effects on sunlight and air speed. Vegetation can also raise the humidity and lower the temperature, but these effects occur over a much larger area. In much of the U.S. and in Canada, there are two primary goals in comfort control. In winter, the goal is to gain as much heat from the sun as possible and cut heat losses. In summer, it is to minimize solar gain and expand heat losses. Landscape design and maintenance programs must go beyond cost and cultural practices. They must also take into account people's attitudes, their physical and psychological health, and the economic benefits a landscape can provide.