## Ornamental

## **Postemergence Control**

Since mechanical cultivation will not control or eliminate many perennial weeds, a postemergence herbicide may be necessary to reduce the weed population. Basically there are two herbicides which are used to control persistent perennial grasses such as Quackgrass, Dallisgrass, johnsongrass and bermudagrass and these include: Glyphosate (Roundup\* systemic weed and grass killer) and dalapon (Dowpon\*). However, it should not be applied over the top of most ground covers.

The herbicide diphenamid (Enide®) may sometimes be used also as a post-emergence control for young grasses if the plants do not exceed 3 inches in height. Additionally, two commercial fertilizers are sometimes used to control weeds in specific ground covers such as iceplant (Carpobrotus edulis). These fertilizers include ammonium sulphate and magnesium chloride.

## GARDEN FUMIGATION

## New opportunity in landscape maintenance.

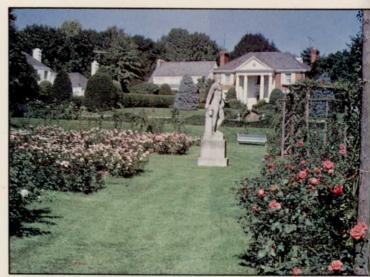
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A ll newly established gardens are plagued with weeds and soil born insects during their first 2 to 3 years of establishment. Turning under of sod or debris from neglected gardens is certain to create severe weed and grub or wireworm problems especially during the first year of gardening unless the soil is fumigated.

Our soils are infested with billions of weed seeds, roots and bulbs of perennial weeds and eggs or larvae of insects. Soils that have been gardened with the same crops for many years often become infected with virulent strains of fungus organisms that reduce yields.

Plowing, liming, fertilizing or adding compost to garden soils all make conditions favorable for seeds, roots and bulbs of annual and perennial weeds to germinate and grow. The most effective immediate control of such weed problems is to fumigate the soil before planting. Fumigating will also kill the eggs and larvae of insects, nematodes and soil born diseases. Because these fumigants are most active when soil temperatures are 60° or above, they may be applied in the fall while soils are still warm or in the spring as soon as the soil warms sufficiently.

Soil fumigants, such as Vapam, have been used for many years by nurserymen, growers of small fruits and vegetables. Soil fumigants leave no residues when they are properly used at recommended tem-



Most homeowners don't have gardens like this, but they might welcome assistance with weed control from landscape maintenance firms in their gardens.

peratures and aerated as recommended by the manufacturers. For maximum effectiveness, the soil should be thoroughly tilled, lime and compost amendments added before fumigating. After the soil has been fumigated and aerated, care should be taken to avoid digging deeply into the soil to prevent bringing to the surface unsterilized soil. Depending on the method of sterilization, only a 6" to 8" layer of soil is sterilized. Care should be taken to avoid sterilizing soils near desirable plants. Soil fumigants are nonselective and will kill desirable as well as undesirable plants.

The cost of fumigating soil is relatively inexpensive when one considers the advantages of weed free gardening and the increase in yields that have been reported. There are no weeds to compete with the desirable plants for water, nutrients and light; no insects to chew the roots or eat the stems; and no diseases to infect the roots and kill the plants.

Fumigating home owner gardens could be a new income source for landscapers and lawn care professionals. The suburban dweller in most cases would prefer a service perform this duty for a fair fee.