

More BRIEFS

Pentachlorophenol tests ON FIBERBOARD

Five paired samples of 1/2-inch insulating fiberboard were treated with pentachlorophenol before a long period of weathering exposure on the ground. Amounts of chemical used ranged from 0.25 to 1.0 per cent.

For several years very little damage occurred, and all specimens remained much alike. Even after 10 years, the damage was negligible, and not in proportion to the amount of treatment. Deterioration, caused by both decay and termite activity, was rapid during the eleventh and twelfth years, however, and the samples became useless. The two samples that were either untreated or treated lightly were so damaged as to be rated 0 per cent remaining, while those with the heaviest treatment (1.0 per cent) were scored at 75 per cent useful.

All samples were very durable up to 10 years; none was useful after 12 years. The untreated fiberboard was about as safe as the others for 10 years, probably because of the protective effect of the manufacturing process. Heavy treatments were most beneficial only during the eleventh and twelfth years. Such material could be expected to serve many times as long in ordinary building construction as in this severe exposure.—*L. W. Neubauer, Dept. of Agricultural Engineering, Davis.*

Quick test for

CITRUS SEED VIABILITY

A quick method for testing viability of citrus seed has been developed. It involves use of the chemical, 2,3,5-triphenyltetrazolium chloride, a water-soluble white powder. Citrus seeds are cut lengthwise and placed in an aqueous solution of the chemical. If the seeds are viable, cut surfaces turn red as a result of their enzymes' reaction with the tetrazolium salt. Dead seeds do not react, but retain their original color.

Results from experimental and commercial trials indicate that the test is useful in establishing rough estimates of seed germinability.—*C. N. Roistacher, Dept. of Plant Pathology, Riverside.*



Part of the isolation area for new pear plantings made by the Department of Plant Pathology on the Davis Campus. Plantings were made as part of the extensive work being done to combat pear decline.

DRAINAGE TEST FACILITY

Apparatus for studying drainage under controlled conditions is being constructed at Davis. The first of a series of tanks 50' long, 3' wide, and 10' high is in use at the new Irrigation and Drainage Laboratory near the University Airport.

The first tank is filled with sandy loam soil and instrumented so that complete measurements can be made of the water flowing through the soil toward the drainage facility. Drainage tile lines of various lengths and materials and drainage pipes of both plastic and fibrous materials will be tested in this tank.

The first experiment will determine the effect of crack widths between tiles on the drainage flow into tile lines. In addition, a study will be made of the spacing of perforations in solid pipes made of bituminous fiber.

To obtain a more satisfactory understanding of the problems of drainage design, each tank will be filled with soil of a different texture. Factors to be investigated include depth and spacing of tile lines, accumulation of salts on the soil surface as related to drainage, and the use of interceptor drains in areas where water moves laterally through the soil.—*James N. Luthin, Dept. of Irrigation, Davis.*



One of the tanks being used on the Davis Campus in making soil drainage tests. The soil in the foreground will be put into the tank.