L. J. KLOTZ and T. A. DEWOLFE

Can Phytophthora spp. Transmit Psorosis

SWEET ORANGE TREES with psorosis A lesions were inoculated with *Phytophthora* spp. at the margins of the lesions. On February 9, 1960, a 5 mm disk of trunk bark was removed with a cork borer, a 5 mm disk of *P. citrophthora* on potato-dextrose agar was placed on the cambium, and the inoculation sites were covered with paraffined paper and adhesive tape to prevent drying. Seventy-one days later, when symptoms of gummosis were evident, the fungus was isolated from the gummosis margins advancing into psorosis lesions, and these isolates were used for inoculating the stems of sweet orange seedlings which, when infected with psorosis, readily show symptoms of psorosis on new leaf growth. Gummosis lesions on the seedlings were allowed to involve about half the circumference of the stems, and the disease was then checked by excising the diseased bark. On June 9, 1960, margins of psorosis lesions of the same orchard trees were also inoculated with *P. parasitica*. Seventeen days later the fungus was isolated from the gummosis margin advancing into the psorosis lesion. The remainder of the procedure was carried out as with *P. citrophthora*.

Leaves of the inoculated seedlings are similar to those of the check trees which received only agar on the cambium. Both sets show diffuse clearings somewhat resembling psorosis A symptoms but which are probably caused by copper deficiency. To date there is no evidence that the fungi transmitted psorosis.