RESEARCH NOTE

PHYTOPHTHORA DAMPING-OFF OF "BRUJAS" (BRYOPHYLLUM SPP.)

Damping-off caused by *Phytophthora parasitica* Dast. has occurred on various species of the ornamentals known as "brujas", that are species of *Bryophyllum*, grown in the vicinity of Cabo Rojo in Puerto Rico. A severe diseased condition caused stem rot and leaf rot of large numbers of these plants. The affected areas were large and caused an unsightly condition.

Isolations were secured from diseased tissues and the fungus that developed was recognized as a *Phytophthora*. It was then compared with a known culture of *P. parasitica* that had been obtained previously in studying buckeye rot of tomato fruits. The fungus from the "brujas" and the fungus from the tomatoes showed every evidence of being the same species.

The Bryophyllum disease symptoms were reproduced on that host by artificial inoculations, using zoospores from pure cultures of the pathogen. In addition, cross-inoculations with the fungus cultures from "brujas" and tomato, both induced damping-off of "brujas" and buckeye rot of tomatoes. There seems to be no doubt that Phytophthora parasitica is the organism causing this trouble on "brujas."

Treatment of plants and soil with a well-made batch of Bordeaux mixture (4:4:50 formula), sprayed at weekly intervals, soon controlled the disease on "brujas." It is believed other copper-containing fungicides would be likewise effective. When sprays of Zerlate and Fermate were used it was found that they did not control the trouble.

Luis A. Alvarez García
Department of Phytopathology and Botany