

FERMATE AND POINSETTIA CUTTING ROT

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Encinitas, California
September 25, 1945

Dear Kenneth,

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This year I have made extensive experiments with Fermate and thought that I should pass the information on to you. I used the same sand that I used last year without changing one shovelful. I dusted it with Fermate between each crop of cuttings and washed the Fermate in. It completely sterilized the sand to the extent that there was not one spot of fungus in any of my sand in any crop.

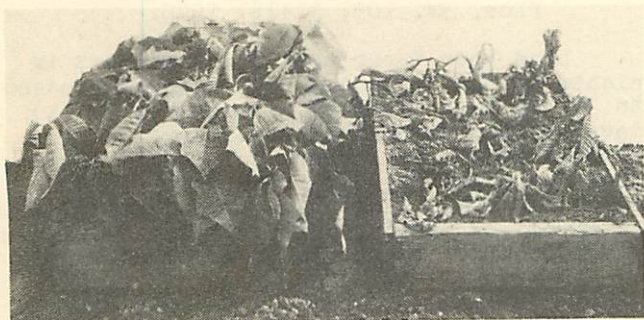
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I did some experimenting with plants by mixing the Fermate in the soil. With an excessive amount of Fermate the roots definitely will not penetrate at all. I feel that I have really bumped into something which is very much worthwhile to the average grower, for this is definitely the most simple way to sterilize the sand at extremely low cost. I would suggest your doing some experimenting along this line.

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Very truly yours,

PAUL ECKE



Left: Sand and trenches dusted lightly with Fermate, cuttings not treated.

Right: No treatment of either sand or cuttings. (Photo Oct. 15, 1945).

About half an hour before the above letter was received, Professor Post and the writer were looking over some of our experiments with poinsettia cuttings which strikingly confirmed the statements of our friend, Paul Ecke. Our tests were even more drastic than Mr. Ecke's since the sand had been heavily inoculated with the rot fungus, *Rhizoctonia*, and untreated cuttings previously stuck in each flat had rotted 100 per cent.

Three treatments were used: (1) bases of the cuttings were dusted with dry Fermate powder and the sand was not treated; (2) cuttings were dusted and the surface of the sand and open trenches was dusted with Fermate in an improvised salt shaker; (3) cuttings were not treated but the sand was dusted with Fermate from the salt shaker; all of the cuttings which were not treated and in sand, not treated with Fermate, were rotted within 10 days, whereas only 4 or 5 plants in each of the flats where Fermate was used either way showed rot a month later. The remaining plants, though not all rooted, were perfectly sound. There was no significant difference between the Fermate treatments so far as rot control was concerned, but the rooting seemed considerably better where the sand was dusted with Fermate but the cuttings were not treated.

Apparently under ordinary greenhouse conditions almost perfect control of *Rhizoctonia* rot can be obtained by the simple practice of dusting the surface of the sand with Fermate.