FOGGING FOR CONTROLLING Phytophthora AND Oidium LEAF DISEASES IN INDIA[1]

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The leaf falls caused by Phytophthora spp. and Oidium heveae are the most serious leaf diseases of Hevea brasiliensis in India. The former occurs during the south west monsoon months of June, July and August and causes very severe defoliation and extensive die-back of tender twigs of the mature plantations. It also causes leaf fall and shoot rot in young plants. It is an annually recurring disease and warranting costly control operations with copper fungicides. Yield loss due to this disease is estimated to be about 30-50 percent in susceptible clones. Oidium leaf fall is mainly confined to high - elevation plantings and to Kanyakumari District of Tamil Nadu. This pathogen infects the tender leaves of rubber during the refoliation period of February - March and causes premature leaf fall and die-back. If left unprotected it can cause yield losses up to 30% in susceptible clones. Fogging trials conducted during 1982 season with "TIFA" Tiga fog generator using 5 kg of copper oxychloride powder 56% in 20 ℓ of diluent spray oil per hectare gave better control of Phytophthora leaf fall than conventional aerial spraying of 8 kg of copper exychloride powder 56% in 42 ℓ of oil per hectare. This experiment was repeated during

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1983 season with reduced dosage of copper ie 4 kg of cocl 56% in 16 ℓ of diluent spray oil per hectare. The result was poor; although in one location fogging was better than aerial spraying, in three others it was marginally less effective. Calixin 80 EC (tridemorph) 3% in diluent spray oil fogged four times at the rate of 5 ℓ/ha/ round at an interval of 10 - 15 days gave better control of powdery mildew disease than an equal round of sulphur dusting at 12 kg/ha/round.

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