PERSISTENCE OF PICLORAN IN A BRAZILIAN SOIL

A.L.Cerdeira, R.Forster, EMBRAPA/CNPDA, P.O.Box 69, Jaguariúna-SP, 13820, Brazil

The persistence of the herbicide picloran (4 - amino - 3,5,6 - trichloropicolinic acid) was studied in "Latossolo Vermelho" soil (36% clay, 2% organic matter) in Jaguarlúna county; São Paulo, Brazil. The herbicide was sprayed on plowed soil in March, 1988, at rates of 0.0; 0.56 and 1.12 g/ha. Picloran persistence was evaluated using bioessay with cucumber (Cucumis sativus L.) and bean (Phaseolus vulgarisL.). The data showed the cucumber being more sensitive than bean to the herbicide and it was very persistent up to 180 days after spraying following a rapid decay from 180 to 240 days, just at the raining season, October to December. At the same interval, from 180 to 240 days, the typical visual symptoms disappeared but there was still effects on height of plants, lenght of leaves and dry weight. No effects of the herbicide was detected after 300 days.