In Vitro nematicidal activity of three household disinfectants or crude extracts of pimento leaf or two organic amendments

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[Abstract]
Over the last several years, many pesticides, including some nematicides, have become unavailable to agriculturalists because of the potential they pose for environmental contamination, for damage to non-target fauna and flora, their high costs, and so on. Scientists are therefore obliged to develop alternative “pesticides” or strategies that contribute to sustainable farming practices protective of the environment and human health. In Jamaica, the nematicidal effectiveness of extracts of plant or other materials or of certain household disinfectants is being investigated. Crude alcohol extracts of dried pimento (*Pimenta dioica*) leaves or bioganic or biovegetal (“organic fertilizers’) or solutions of Dettol antiseptic (chloroxlenol), bleach NaOCI) or Jeyes Fluid (a blend of high-boiling tar acids and washed neutral oil, solubilized in vegetable soap) were tested for lethality to *Meloidogyne incognita Rotylenchulus reniformis* or a variety of non-parasitic nematodes. Known numbers of these nematodes were kept in various concentrations of the chemicals for varying time periods, collected on a 500-mesh sieve, washed thoroughly, then extracted on a pie-pan set-up for 48 hours using double-thickness w ply paper towel. Bleach, Dettol and jeyes were as lethal as oxamyl, a traditional insecticide-nematicide, to all the tested nematodes, but pimento leaf bioganic or biovengetal extracts has little in any detrimental effort.

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