

**Title of Article:** Effect of Poultry Manure and Carbofuran Soil Amendments on Soil Nematode Population and Yield of Pineapple.

**Authors:** Daramola, F.Y.,S.O., Afolami, A.A Idowu and I.S Odeyemi

**Outlet:** International Journal of AgricScience. vol 3(4):294-307.

**Date:** 2013

### **Abstract**

Two field experiments were conducted at the National Horticultural Research Institute, Ibadan and the Federal University of Agriculture, Abeokuta to assess the efficacy of poultry manure and carbofuran in suppressing nematode populations and promoting pineapple yield. Three rates of poultry manure (0, 20 and 25 tonnes per hectare) and carbofuran (0, 3.0 kg a.i/ha and 3.4 kg a.i/ha) were applied to pineapple plants in a Randomized Complete Block Design replicated three times in each of the two locations. Soil samples were collected from the rhizosphere of plants at 0, 3, 6, 9, 12, 15 and 18 months after planting to monitor soil nematode populations. Plant growth data were obtained by measuring the length and breadth of 'D' leaves for five randomly selected plants per plot. Flowering was induced at the 18 thmonth by spraying with 0.5 kg ethephon in 2000L of water/ha. Results showed that Poultry manure and carbofuran treatments significantly ( $P < 0.05$ ) suppressed plant-parasitic nematode populations in both locations. At harvest, significantly bigger fruit sizes, higher fruiting percentage and number of fruits were recorded on both poultry manure -and carbofuran-treated plots. It was concluded that appropriate management of plant-parasitic nematodes will promote higher fruit yields in pineapple farms in Nigeria.