PROFITABILITY OF INDIGENOUS PEST CONTROL METHODS: THE CASE OF COCOA FARMERS IN OSUN STATE, NIGERIA

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ABSTRACT
Cocoa (Theobroma cacao), which occupies an important position in the Nigerian economy, is attacked by a host of pests and diseases in the field. Despite the emergence of alternative, low-cost indigenous pesticides owing to economic, health and environmental costs associated with the use of synthetic pesticides, cocoa farmers in Nigeria are still using the latter for pest control. This study estimated the direct and indirect costs, as well as the returns from the usage of synthetic and indigenous pesticides on cocoa farms. The study covered cocoa farmers registered with a non-governmental organization (NGO), the Oyo-Osogbo Diocesan Agricultural Programme (OODAP). Data were obtained from three categories of farmers: (i) farmers using indigenous pest control methods only (NCP); (ii) farmers using synthetic methods only (CP); and (iii) farmers using indigenous pest control methods only NCP; (ii) farmers using synthetic methods only (CP); and (iii) farmers using both methods (CNCP). Results showed that (i) indirect costs substantially raised costs of pesticides use from N487.18, N777.54, and N1764.64 to N759.29, N1898.16, and N32.08.92 were obtained for NCP, CP, and CNCP, respectively; (ii) positive gross margins of N36, 422.42, N34, 686.02 and N32, 08.92 were obtained for NCP, CP, and CNCP, respectively; (iii) Extra profits of N1736.50 and N3893.42 would accrue to CP and CNCP, respectively, if he/she used indigenous pesticides only. It is concluded that the use of indigenous pesticides was the cheapest and most profitable pest control measure, hence, it is recommended that farmers using only indigenous pesticides, should continue to do so, whereas farmers who use synthetic pesticides only, and those who use a combination of both pesticides, should adopt the use of indigenous pesticides only, because it was economically beneficial to use only indigenous pesticides.

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