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Using of neem (azadirachta indica) in management of whitefly (*bemisia tabaci* genn) in Sudan

Sana K. Mukhtar
University of Kordofan, Sudan

Abstract

Field studies were conducted to evaluate three management techniques on controlling whitefly (Bemisia tabaci Genn) in tomato fields. Field evaluation was managed for two successive growing seasons (winter 2002/03 and 2003/04). Severity and infection rate of tomato yellow leaf curl begomovirus (TYLCV) as well as tomato yield were the criteria of evaluation. The techniques used were a) Sumicidin (insecticide), b) Neem (Azadirachta indica) seed oil c) Neem seed extract. Disease incidence was significantly reduced in both previous seasons. TYLCV severity degree was also significantly reduced in 2002/03 season. TYLCV incidence was reduced when using applications of Neem-seed oil followed by Neem-seed extract in both seasons. Tomato yield was highest (8.4 t/ha) during 2002/03 when using Neem oil followed by Neem extract (7.7 t/ha) and Sumicidin application (4.8 t/ha). Tomato yield was highest (9.4 t/ha) during 2003/04 season when using Neem oil application followed by Neem extract application (9.2 t/ha) and Sumicidin (6.0 t/ha).