

José Roberto Scarpellini 1 jrscarpellini@apta.sp.gov.br; Guiiti Nakamura 2 guiiti.nakamura@syngenta.com 1- APTA Regional Centro Leste – Agência Paulista de Tecnologia dos Agronegócios. Av. Bandeirantes nº 2419 – Vila Virgínia – CEP 14030-670 – Ribeirão Preto – SP – SP; 2 Syngenta Proteção de cultivos Ltda. Avenida Nações Unidas, 18001 - 2o andar - CEP: 04795-900 São Paulo – SP

INTRODUCTION: The cotton culture has a number of pests associated, among which stand out the aphids and thrips. The whitefly *Bemisia tabaci*, almost always is present in most cultures in Brazil. Also has occurred with frequency soil pests, such brown root stink bugs *Saptocoris castanea*.

OBJECTIVE: This experiment was developed in Ribeirão Preto County, São Paulo State, Brazil, to observe the effect of insecticide Durivo (Chlorantraniliprole more Thiametoxam) in the control of brown root stink bug *S. castanea*, thrips *Frankliniella schultzei* and aphids *Aphis gossypii* on cotton.

MATERIAL AND METHODS: This study was performed in experimental station, Ribeirão Preto, SP, conducted during the period from Dec/02/2009 to Jun/01/2010, from planting to production. The cultivar used was "NuOpal" planted on Dec/02/2009, spacing 0.9 m. The experiment was randomly in blocks, with 8 treatments and 4 replications. Were tested the following treatments: 1-Durivo (Chlorantraniliprole + Thiametoxam) to 200 ml c.p./ha; 2-Durivo 300 ml c.p./ha; 3-Durivo 400 ml c.p./ha (all in the planting groove); 4-Cruiser (thiametoxam) 350 FS to 600 ml c.p./100 kg seeds in seed treatment (TS) + Durivo p.c. to 200 ml c.p./ha; 5-Cruiser 350 FS 600 ml c.p./100 kg seeds (TS) + Avicta 500 FS (abamectin) to 300 ml c.p./ha; 6-Cruiser 350 FS 600 ml c.p./100 kg seeds + Avicta 500 FS-300 ml c.p./ha + Durivo to 200 ml c.p./ha; 7-Standak 250 FS (Fipronil) to 500 ml c.p./100 kg seeds + Gaucho 600 FS (Imidacloprido) to 500 ml c.p./100 kg seeds and 8- Check. Durivo applications were made with prototype applicator bound to planter manual, reaching the furrow of planting before close the groove. For evaluations of brown root stink bug were made two trenches by plot (0.5 x 0.3 x 0.3 m) and counted the number of nymphs of brown root stink bug. Were observed weekly 25 plants per plot, counting the number of aphids and thrips, and presence of white fly, until the residual loss of these treatments, when passed to control pests and diseases in General. The vigour of plants and plant height in the initial phase was evaluated weekly

RESULTS AND DISCUSSION: The treatments maintained the stand of planting and provide satisfactory control of pests (aphids, thrips and whitefly) until 30 days after germination (DAG), although the brown root stink bugs were presented in low population in the area. At harvest noted that the treatments always preserved the productivity, with additions that ranged between 4.5 to 35% compared to the check.

CONCLUSIONS: The Durivo (thiametoxam + Clorantraniliprole) from 200 ml p.c./ha (implementation in the Groove of planting) as well as the Cruiser 350 FS 200 g c.p./ha were efficient in control of brown root stink bug *Saptocoris castanea*; thrips *Frankliniella schultzei*; white fly *Bemisia tabaci* and aphids *Aphis gossypii* in cotton.

