



**2016 XXV International
Congress of Entomology**
Orlando, Florida, USA | September 25-30

D3606: Compensation to pest injuries by replacing floral structures by cotton plants

Thursday, September 29, 2016

09:00 AM - 05:00 PM

📍 *Convention Center - West Hall C*

Introduction: Cotton crop have a relatively long cycle, with fruiting time starting from 45 days after emergence, and the abscission and spare floral structures is common and varies with the phenological stage. This study aimed to measure the capacity of 4 cotton cultivars to compensate losses promoted by insects.

Methods: 4 cotton cultivars were sown in irrigated area. The treatments were arranged in a factorial design, varieties are the main factor and intensity of injury is the secondary factor. The damage consisted of 5 levels of manual flower buds, flowers and apples remotion at 75 days after emergence (DAE). The number of floral structures present in plants was recorded at 140 DAE and the number of bolls was registered at the harvest time. Data were statistically analyzed by using analysis of variance and medium-sized cluster test (Scott-Knott, $P < 0.05$).

Results/Conclusion: The acceptable level of injury varied among cultivars, showing differential response for capacity of tolerance to insects injury. FM980GLT and FM975WS presented compensation and overcompensation phases; the same are not happened to FM 913GLT and FM966LL. The phases of tolerance and linearity occurred in cultivars, except FM966LL. The natural process of abscission (shedding) reduced significantly the effect of removing floral structures. The cotton plants offset the loss of structures up to a certain injury threshold, which varies among the cultivars. The compensation occurred by replacement of new structures; compensation by boll weight increasing did not happen.

doi: 10.1603/ICE.2016.108629

Author

José E Miranda

Embrapa

View Related Events

Session: [436 Poster Session 3: Integrated Pest Management and Sustainable Agriculture](#)

Program: [Poster](#)

Day: [Thursday, September 29, 2016](#)