World Academy of Science, Engineering and Technology
International Journal of Bioengineering and Life Sciences
Vol:10, No:12, 2016

# Efficacy of Defender 2% WS (Tebuconazole) and Imidal 70 WS (Imidacloprid) to Control Damping-Off Diseases and Early Insect Pests in Sesame in Rain Fed Areas, Sudan

**Authors :** Anas Fadlelmula, Elsafi M. M. Ahmed

**Abstract :** The efficacy of Defender 2% WS (tebuconazole) and Imidal 70 WS (imidacloprid) to control damping-off diseases and early insect pests in sesame crop under rain fed conditions at Damazine and Gedarif areas was evaluated. Defender 2% WS with dosage rates 0.5, 0.75, 1.0 and 1.25 g/kg of seeds and Imidal 70 WS at 2.25, 3.0, and 3.75 g/ kg of seeds were tested singly and as a mixture during 2010/2011 and 2012/013. Sesame seeds treated with Defender at the rates of 0.5 g and 0.75 g/ kg of seeds gave a high significant increase in percent seedlings emergence (84% and 85%) respectively. Imidal 70 WS at rate of 3g/kg seed showed the least percent damaged leaves by sesame webworm (1.7%). However, the mixed Defender at rate 0.75g with Imidal at 3 g/kg seed, significantly gave a highest percentage of sesame seedling emergence (85.1%) and reduced the incidence of post-emergence damping off and percent damaged leaves to the least per cent (2.1% and 0.4% ) respectively, compared to other treatments. Consequently, the mixed treatment of 0.75 g of Defender + 3 g of Imidal improved the crop stand and significantly gave the highest yield (405.2 kg and 418.8 kg/fed) respectively in both sites compared to the other treatments.

**Keywords :** seed dressers, damage, daming off, insects
**Conference Title :** ICE 2016 : International Conference on Entomology
**Conference Location :** Penang, Malaysia
**Conference Dates :** December 01-02, 2016