

Push-Pull Technique: Management of Fall Armyworm (*Spodoptera frugiperda*) and other Agricultural Pests

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Abstract

Recently, the push-pull technique which can eliminate or reduce pesticide use, is becoming among small farmers, a preferred management technique for fall army worm (FAW) and other pests. This technique, is a farming system intensification approach that involves attracting insect pests with trap plants (pull), while driving them away from the main crop using a repellent inter crop plant (push). For this review, papers focusing on infestation, plant damage rate, yield, insect diversity, and farmer's perception on the effectiveness of the push-pull technique, were used. Results, showed that with the adoption of the push-pull technique, there was a significant reduction in plant damage and infestation, and an increase in yields and insect diversity (beneficial insects/predators), when compared to mono crop maize plots (only corn). Moreover, farmers approved the use of the push-pull technique to be effective in the management of FAW. Although, this management approach showed effectiveness in managing FAW in small scale maize production, future research should focus on a more complete IPM package.

Key words: Fall army worm (FAW), Insect diversity, Integrated Pest Management (IPM), Pesticide, Repellent plant (push), Trap plant (pull)

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