

False codling moth (FCM) is regarded as the most significant indigenous pest. Over 70 host plants are attacked by larval, many of which are horticultural crops with fruit, pods, and berries, such as beans, grapes, citrus, capsicum, avocado, guava, pomegranate, and ornamental plants. They eat macadamia nuts, cotton, tea, and a variety of other wild plants as well. Female moths are drawn to the flower heads as well as other parts of the plant, making this pest especially problematic on roses grown for cut flowers. Therefore, controlling this pest is of importance. For more effective control, pheromone traps are used to capture males attracted to the artificial pheromone. In this study, mathematical model of FCM control using pheromone trap is developed. The model, is based on biological and ecological assumptions, and is governed by an ODE system. The coexistence and pest free equilibria is determined through a theoretical analysis. The theoretical analysis of the model allows for the identification of pheromone threshold values that are practical for field applications. We show that there is a threshold above which the global asymptotic stability of the trivial equilibrium is guaranteed. Finally, we demonstrate the theoretical results through numerical experiments