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## Biology and Life Table of the Fall Armyworm *Spodoptera Frugiperda* (J. E. Smith) (Lepidoptera: Noctuidae) on Maize

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## Abstract

Maize is one of the major cereal crops of the world. Maize is the second most important cereal crop in the world after wheat contributing substantially to the total cereal grain production in the world econom. as a trade, feed and industrial grain crop. Maize is important animal feed for poultry industry in Myanmar. Fall armyworm is a sporadic pest with a diverse host range challenging food security over 300 million people by causing severe damage to world's 1<sup>st</sup> rank cereal crop maize. Fall armyworm is a real threat to food security. Fall Armyworm is new invasive pest in Myanmar in 2018. Experiment was conducted in the laboratory of the Entomology Research Section, Department of Agricultural Research (DAR) in Yezin in September 2019. Egg masses were collected from Maize Research farm of the DAR, Yezin. The collected egg masses were kept in petridish under the laboratory conditions range from  $31 \pm 1$  °C and  $46 \pm 4$  % relative humidity and L12:D12 photoperiod to obtain the different stages from the experiment throughout the study. Incubation period, larval and pupal period were observed to be from 3-4, 11 and 7-8 days under the laboratory conditions range from  $31 \pm 1$  °C and  $46 \pm 4\%$  relative humidity and L12: D12 photoperiod respectively. The total life cycle of male and female was recorded to be 26–28 days. The female adult survived for 6 days and male for 4 days with a range of 4–6 days. Mortality of egg was found to be highest and then slowly decreased from first instar larvae to adult stage. The mortality of egg was high with 64 in the early immature stages such as egg and first instar larvae of Fall Armyworm. The percentage of survival from egg to adult was less than 20.

Keywords: Fall armyworm, keywords: Biology, Life table, Maize

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