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Occurrence of the fall armyworm, Spodoptera frugiperda (J. E. Smith) (Lepidoptera, Noctuidae), on Maize in Katsina State, Nigeria and preliminary study of its Developmental Characteristics under Laboratory Conditions

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Abstract : The fall army worm (FAW), Spodoptera frugiperda (J. E. Smith) (Lepidoptera, Noctuidae) has recently become one of the major threats to maize production in the world. It is native to tropical and subtropical America and began to spread to many African and a few Asian Countries. A survey for the observation of infestation and collection of fall armyworm was conducted in field planted with maize in the northern part of Katsina state. Eggs and immature stages were collected, place in a plastic container and brought to the laboratory for observation and study of developmental stages. FAW was identified based on the morphological characteristics, i.e. the “Y” inverted shape on the head capsule and the patterns of black spots on the abdominal segments (square and trapezoidal forms). Different growing stage of maize are affected by fall armyworm, but the damage is greatest during the early growing phase of corn. Heavy infestation on the leaves also cause defoliation. Four developmental stages (eggs larvae, pupae and adults) of the FAW were studied when fed with young corn under laboratory conditions. Furthermore, effective scouting or monitoring of FAW could be practice at early stage of growth of maize.

Keywords : infestation, katsina, maize, fall armyworm
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