



## Seasonal Occurrence of AKK Grasshopper *Poeciloceris pictus*, (Pyrgomorphidae: Orthoptera) Mangochi, Malawi

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### Abstract

The preliminary observation and seasonal changes of occurrence of Akk grasshopper *Poeciloceris pictus* Fab. (*Orthoptera: Pyrgomorphidae*) in Mangochi, Republic of Malawi. The present study shows that the primarily the pest of *P. pictus*, a cause lot of the damage to cultivated crops in Malawi. Its leads to reported that *P. pictus* is feeder of maize, corn, cassava, mango orchards, betal creepers, forest trees, compea, okra, brinjal, castor, citrus, papaya and alfalfa in some parts of West Africa and Malawi. The learning further harassed that stringent management measures need to be started to addition research and restore the biodiversity of crops of Mangochi in general and Republic of Malawi.

**Keywords:** *Poeciloceris pictus*; Pyrgomorphidae; Malawi

### Status of locust

*Poeciloceris pictus* of the Family Pyrgomorphidae have extensively scattered in the tropical and sub-tropical regions of the world. *Poeciloceris pictus* is one of the brightly ornamental coloured grasshoppers originate in Malawi (November-December). Akk grasshopper have yellow and turquoise in colour morphology, green tegmina with yellow spots and pale red hind wings. Feed on venomous plant *Calotropis gigantea* also known as Crown Flower. The grasshopper was collected and preserved in formaldehyde. *P. pictus* have usually present in small few numbers, its leads to increase population the great extent of an outbreak and causes severe economic to commercial crops, hereafter, its normal host plant has been defoliated and exhausted. Stock assessment and population dynamics and ecology of (Mileu) numerous locust and grasshopper species, and migratory locust (*Locusta migratoria*),

the red locust (*Nomadacris septemfasciata*), the Italian locust (*Caliptamus italicus*), the Senegalese grasshopper (*Oedaleus senegalensis*), the Mato Grosso locust in Brazil (*Rhammatocerus schistocercoides*), and, of course, the desert locust (*Schistocerca gregaria*) in Africa. However, an attempt has been made here to the present investigation study of the known locust faunistic group of species have observation at Mangochi, Malawi (Figure 1 and 2).

Family: Pyrgomorphidae

Order: Orthoptera

Class: Insecta

Genus: *Poeciloceris* Serville, 1831

Species: *Pictus* (Fabricius, 1775)

*Poeciloceris pictus* (Fabricius, 1775)



Figure 1: *Poeciloceris pictus* [1].



Figure 2: *Poeciloceris pictus* offensive Maize at Mangochi Region.

### Collection of samples

*Poeciloceris pictus* [1] specimen was collected from DMI St. John the Baptist University campus, Mangochi, Malawi dated on 23

November 2019. A few of sample was observed near field (Figure 1 and 2).

### Description

Medium size, Pronotum more or less selliform; Whole disc of hind wing including the tip uniformly bright colour; Size usually proportionately large; Integument; Tegmen relatively broad; parallel-sided with truncated rounded tip; Hind femur slender in both sexes; Sub genital plate of female with an acute point.

### Distribution

Mangochi, Republic of Malawi, Ethiopia, West Africa, East Africa, South Africa, Egypt, Nigeria, India, Pakistan and Yemen.

### Remarks

Ghouri [2] was documented an unexpected epidemic of this pest in Pakistan. He highlighting *Calotropis procera* this insect similarly causes heavy damage to cotton, chilli, cucurbits and sugarcane.

### Biology and ecology

In 1909, Lefroy was published a report on *Poeciloceris pictus* asserting that beside *Calotropis procera*, in which is the most preferred food-plant, this grasshopper too attacks some other plants. Smith have reviewed that the role of different biotic factors, in which plays in the fortitude of population densities of grasshoppers. Isely [3] have also noted the abundance of grasshoppers of different species in a particular grassland and seasonal occurrence of habitat. Chesler [4] also highlighting the biology of South African acridid such as oviposition, hatching and number of instars. Very interesting noted that the detail studied of bionomics, life history and control of *P. pictus* Waloff [5,6] the geographical distribution and its migratory pattern and behavior of European species of *Locusta* and he was assessed the population dynamics of British grasshoppers [7,8].

### Conclusion

The present observation study focused on further documenting of pyrgomorphid communities in dissimilar ecosystems of Mangochi region, Republic of Malawi.

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