

UNIVERSITY GRANTS COMMISSION

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BIODIVERSITY OF CATTLE DUNG BEETLES FROM GRAZING LANDS OF PHALTAN TAHSIL”

Dr. A.R.Gaikwad
Department of Zoology
Mudhoji College, Phaltan

SUMMARY OF THE FINDINGS:

The present project work is a result of survey of dung beetle biodiversity of seven cattle grazing lands of Phaltan Tahesil. Extensive and intensive collection trips were made during the study period for these seven sites. The relevant fields notes were written and field nos. were given to all specimens. All specimens collected were properly processed and preserved. The Conclusions are these dung beetles are very important for controlling various harmful Dipterous flies which develops in the cattle dung; Cleanness pastures, and makes soil fertile. Present observations and analysis of beetles diversity indicating the predominant genera in this region is **Onthophagus** (11 species) followed by **Aphodius** (7 species), **Gymnopleurus** (6species), **Onitis** (5 species), **Catharsius** (3 species), **Heliocarpis**(2 species) and single Species form each genera. The data indicates that **Onthophagus catta** is a predominant dung beetle species which shown highest individuals in the sampling dung pads. It is followed by **Onitis philemon**, **Chironitis indicus**, **Aphodius rufipes** and **Liatongus rhadamistus**. Present study also reveals that of seven cattle grazing sites which were selected from Phaltan Tahesil, **Zirapwadi site** showed maximum number of dung beetles of various genera and species from 10 sampling dung pads followed by **Salpe**, **Dhawal** and minimum

number of dung beetles were recovered from **Chaudharwadi site**. This indicates that Zirapwadi cattle grazing land is most suitable habitat for Dung beetles. This may be due to the type of soil which helps the beetles for excavating the tunnels under the dung pad. Zirapwadi site is having porous sand mixed clay soil which may be helpful for dung beetle population. Because of the nidification, parental care and the protective behavior, these insects are well adapted for survival in nature.

. CONTRIBUTION TO THE SOCIETY

As these insects are important from the ecological, Agricultural and Veterinary point of view the conservation of the dung beetles is essential.

1. The pastures and grazing lands must be protected.
2. Initiate studies to document the current status related to resources used in Phaltan Tahesil as well as Physic-Chemical and Agricultural status of Phaltan region.
3. Initiate prompt action against practices that degrade the pastures and cattle grazing lands.
4. Initiate restoration activities to enhance degraded habitats.