SUMMARY

The present study deals with the taxonomic account of termites of Haryana and Chandigarh areas. The entire manuscript is divided into 7 chapters viz; Introduction, Topography of the Surveyed Area, Material and Methods, Procedure of Study, Observations and Comments, Scope for further study and, Summary. Other contents of the manuscript are Bibliography, Abbreviations, Photographic Plates and Figures.

The salient features of the present investigation are briefly summarised below:

INTRODUCTION

Termites (Isoptera) constitute a very fascinating group of social insects especially because of superb architectural ability, cryptobiotic nature and enormous economic importance. Different castes of a termite colony include winged reproductives (alates) and apterous soldiers and workers, the queen and the king.

Termites are cosmopolitan and about 300 termite species are reported from Indian subcontinent (Roonwal and Chhotani, 1989; Chhotani, 1997). Only 25 species belonging to 7 genera and 3 families (including 14 species from an unpublished record) have been reported from Haryana so far (Chhotani, 1962; Roonwal, 1980; Verma, 1989; Verma et al., 1993). Keeping in view the pest status of termites and topography of Haryana and Chandigarh areas favouring termite survival, it was felt that many more species were yet to be discovered. The present work was undertaken with this view. Thirty two species from eleven genera and three families have been collected from the surveyed area. Three new species Neotermes morniensis, Bifiditermes pajnii and...
Eremotermes kalkai have been recorded and the so far unknown imago caste of Angulitermes tilkai is described for the first time. Moreover, 1 subfamily, 5 genera and 10 species have been recorded for the first time from the surveyed area.

**MATERIAL AND METHODS**

The material for the present study was collected from in and around Chandigarh and from all the 16 districts of Haryana State in the monsoon months of 1991-1994. District wise allocation of the visited localities is given with the description of the species.

The collected termites were killed with ethyl acetate vapours and preserved in 70% ethyl alcohol containing a few drops of glycerol. All observations were made under a stereo-binocular microscope and measurements of the body parts were taken with the help of an ocular micrometer and a stage micrometer in-situ. The imago/worker mandibles and wings were mounted on slides.

**PROCEDURE OF STUDY**

A detailed account of the taxonomic procedure followed in the present study has been given. Some morphological terms, body measurements and indices used in the present work have been explained. The key to families, subfamilies, genera have been modified or adopted from the works of (Krishna, 1970; Roonwal and Chhotani, 1989; Chhotani, 1997).

**OBSERVATIONS AND COMMENTS**

The general characters of the Order have been recorded in detail, and keys to the families, subfamilies, genera and species have been given. Important characters of the studied families, subfamilies and
genera have also been given. All the species have been described in detail, including the information about their synonymies, measurements and the details of the material examined under each species. Comments on the status of different taxa have been recorded wherever necessary. A list of 32 studied species along with their taxonomic status is given below:

ORDER ISOPTERA
FAMILY KALOTERMITIDAE
GENUS *NEOTERMES* Holmgren
1. *Neotermes momensis* sp. nov.

GENUS *BIFIDITERMES* Krishna
2. *Bifiditermes pajnii* sp. nov.

FAMILY RHINOTERMITIDAE
SUBFAMILY COPTOTERMITINAE
GENUS *COPTOTERMES* Wasmann

SUBFAMILY HETEROTERMITINAE
GENUS *HETEROTERMES* Froggatt
5. *Heterotermes indicola* (Wasmann)

FAMILY TERMITIDAE
SUBFAMILY AMITERMITINAE
GENUS *AMITERMES* Silvestri
6. *Amitermes belli* (Desneux)

GENUS *EREMOTERMES* Silvestri
7. *Eremotermes dehraduni* Roonwal and Sen-Sarma
8. *Eremotermes kalkai* sp. nov.
9. *Eremotermes paradoxalis* Holmgren

**GENUS MICROCEROTERMES** Silvestri

10. *Microcerotermes annandalei* Silvestri
11. *Microcerotermes beesonii* Snyder
12. *Microcerotermes raja* Roonwal and Bose

**SUBFAMILY TERMITINAE**

**GENUS ANGULITERMES** Sjostedt

13. *Angulitermes tikkai* Roonwal and Chhotani

**SUBFAMILY MACROTERMITINAE**

**GENUS MACROTERMES** Holmgren

14. *Macrotermes convulsionarius* (Konig)

**GENUS ODONTOTERMES** Holmgren

15. *Odontotermes assmuthi* Holmgren
16. *Odontotermes bhagwattii* Chatterjee and Thakur
17. *Odontotermes dehraduni* (Snyder)
18. *Odontotermes feae* (Wasmann)
19. *Odontotermes guptai* Roonwal and Bose
20. *Odontotermes gurdaspurensis* Holmgren and Holmgren
21. *Odontotermes horai* Roonwal and Chhotani
22. *Odontotermes indicus* Thakur
23. *Odontotermes latigula* (Snyder)
24. *Odontotermes microdentatus* Roonwal and Sen-Sarma
25. *Odontotermes obesus* (Rambur)
26. *Odontotermes parvidens* Holmgren and Holmgren
27. *Odontotermes redemanni* (Wasmann)
28. *Odontotermes ullahensis* (Wasmann)
GENUS MICROTERMES Wasmann

29. *Microtermes bharatpurensis* Rathore
30. *Microtermes mycophagus* (Desneux)
31. *Microtermes obesi* Holmgren
32. *Microtermes unicolor* Snyder.