In Ubx/bx flies, the phenotype is enhanced when one of the chromosomes is involved in a rearrangement which has a break in 3R between the locus of bx and the centromere (the transvection effect, Lewis 1954). In the entire compound chromosome C(2;3)EN. the phenotype is enhanced. The Ubx/bx transvection effect in the one of the chromosomes is involved in a rearrangement which has a break in 3R between the locus of bx and the centromere (the transvection effect, Lewis 1954). In the entire compound chromosome C(2;3)EN.

- **Series** | **Progeny** | **Exceptions** | **Transmitted** | **% tr.** | **0** | **4**
--- | --- | --- | --- | --- | --- | ---
A | 1718 | 37 (2.2%) | 11 | 29.7 | 11 | 0
B | 1638 | 34 (2.1%) | 9 | 26.4 | 7 | 2
C | 1878 | 28 (1.5%) | 15 | 53.5 | 14 | 1
D | 1545 | 20 (1.3%) | 8 | 40.0 | 7 | 1
E | 1189 | 32 (2.7%) | 11 | 34.4 | 11 | 0
F | 1783 | 41 (2.3%) | 27 | 51.2 | 21 | 0
G | 1052 | 19 (1.8%) | 4 | 21.1 | 4 | 0
H | 1642 | 26 (1.6%) | 10 | 38.5 | 8 | 2
I | 2241 | 39 (1.7%) | 18 | 46.2 | 16 | 2
J | 1107 | 21 (1.9%) | 7 | 33.3 | 7 | 0
K | 3322 | 33 (1.0%) | 12 | 36.4 | 11 | 1

The table is a summary of the data. Over 90% have a score of 0. Since they occurred singly, in most cases, and in subsequent crosses appear to be the result of changes on the third chromosome, it seems likely that these represent induced changes of some sort. Some other exceptions also enhance or reduce the haltere effect. Mosaic and complete somatic and gonadal mutants were observed. Cytological analysis of these exceptions will be undertaken.

Gromko, M.H. Bowling Green State University, Bowling Green, Ohio. An attempt to reduce population size through extensive trapping.

Only one attempt to manipulate a local population of Drosophila through extensive trapping is reported in the literature (Dobzhansky and Wright 1943). One possible reason for the failure of extensive trapping to reduce population size is that adults may have been immigrating to the study area from the large continuously wooded surrounding area. Drosophila have been demonstrated to show bait-directed movement (Johnston and Heed 1975) and to be capable of long distance migration. Here I report an attempt to reduce population size of D. affinis in an isolated woodlot. Although migration from other woodlots is not impossible, the frequency of such events is limited by the woodlot's island nature.

The study area, Carter Woods (Wood County, Ohio), is a small (6.3 acre) woodlot dominated by oak and hickory. It is surrounded by fields usually planted in corn. The nearest neighboring woodlot is 1.5 km distant, with no fence rows or migratory corridors of any kind between.

Sixty-four baits (old banana and yeast) were placed in the woodlot at 15.2 m (50 ft) intervals in a rectangular grid. The bait-grid was situated centrally, and occupied approximately 60% of the total wooded area. Collections were made in all activity periods in which it was not raining, and were carried out over a period of 18 consecutive days in August, 1979. Temperature, humidity, approximate wind speed and degree of cloud cover were recorded at the beginning of every collection period. Baits were removed and replaced with previously unused baits so that no bait was left in the woodlot for more than nine days.

8,157 individuals of 19 species of Drosophila were removed from the woodlot over the 18-day trapping period. The most abundant species and their approximate relative frequencies in the collections were D. putrida (0.35), affinis (0.25), tripunctata (0.11), falleni (0.09), robusta (0.06), and algonquin (0.05). The daily relative abundance data were analyzed using factor analysis and multiple regression (SPSS). Of the large number of data manipulations tried, the outcome that explained the largest amount of variability gave the following results. For the fungus-feeding species (predominantly D. putrida, tripunctata, and falleni), the regression of abundance on time was positive, large and highly significant. The increase in population size was not unexpected for these species as the experiment was carried out in late...
summer when large numbers of mushrooms were evident throughout the woods. For D. affinis—which has a population flush much earlier in the year—the regression of abundance on time was in fact negative in sign, but not significantly different from zero.

Thus, extensive trapping has failed to reduce population size of D. affinis significantly despite the fact that flies were probably not immigrating in numbers large enough to replace the trapped individuals. Apparently, replacements are abundantly available from within the small isolated woodlot.

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There has always been a conspicuous gap in our knowledge of world distribution of Drosophila where India is concerned. Although a beginning of such study in the subcontinent of India was made as early as 1920, only about a decade ago have workers shown renewed interest in such study. During these years several collections undertaken by various workers in different parts of the country have yielded considerable data on Indian species. Recently our extensive surveys in different localities of northeast India have uncovered several interesting new species inhabiting this region. A few of them have already been published; manuscripts for those remaining are in preparation and have also been included in this list. In this report an attempt is made to include all species so far described and recorded from India. However, the final picture of the Indian drosophilid species seems to be far from complete. There are undoubtedly more species awaiting discovery.

Genus Amiota Loew
1. shillongensis

Genus Cacoxenus Loew
2. punctatus

Genus Chymomyza Czerny
3. vaidyai

Genus Curtonotus Macquart
4. neoangustipennis

Genus Gitonides Knab
5. perspicax

Genus Hypselothyrea de Meijere
6. guttata
7. varanasiensis

Genus Leucophenga Mik
8. albicincta
9. flavicosta
10. guttiventris
11. interrupta
12. neoangusta
13. shillongensis
14. subpollinosa

Genus Liodrosophila Duda
15. angulata
16. okadai
17. penispinosa
18. rufa

Genus Lissocephala Malloch
19. metallescens
20. sabroskyi

Genus Microdrosophila Malloch
21. purpurata

Genus Mycodrosophila Oldenberg
22. gratiosa

Genus Paraleucophenga Hendel
23. invicta

Genus Scaptomyza Hardy
24. cristata
25. graminum
26. pallida
27. plumata

Singh & Gupta (in press)

Gupta, J.P. Banaras Hindu University, Varanasi, India. A list of drosophilid species so far known from India.