Table 3. Estimates of the effective populations sizes.

Population	Cellar	Vineyard
Q	0.2452	0.2759
I_c	0.0085	0.0064
I_g	0.0065	0.0047
$N_e(u=10^{-5})$	11000	18500
$N_e(u=0.2x10^{-5})$	8000	11500

The estimates of effective sizes are presented in Table 3. Greater values were obtained for the vineyard population than for the cellar population.

Differences in the allelic rates of cellar and vineyard populations do not exist although the distance between these populations is relatively great. This fact raises the possibility that these are two sub-populations of the same population, and that owing to the greater consanguinity the cellar population has a smaller effective size than the vineyard population.

References: Gonzalez, A. & J.L. Mensua 1983, DIS 59:43-44; Judd, B.H., H.W. Shen & T.C. Kaufman 1972, Genet. 71:139-156; Nei, M. 1968, P.N.A.S. 60:517-524; Wallace, B., The American Naturalist 100:565-578; Wallace, B. 1968, Genet. 60:389-393.

Gupta, J.P. Banaras Hindu University, Varanasi, India. Further additions to the list of drosophilid species from India.

The present communication is in continuation of the previous report appearing in 1981 (DIS 56:50) concerning the drosophilid species described and recorded from India. In the present list an attempt has been made to include all those species recorded thereafter and also the changes which have been made recently regarding the taxonomic status of certain species.

Genus **Acletoxenus** Von Frauenfeld

Genus **Amiota** Loew

1. **indicus** Malloch, 1929
2. **apodemata** Gupta and Panigrahy (submitted)
3. **creberii** Singh, 1976
4. **pictus** (Coquillett, 1904)

Genus **Cacoxenus** Loew

5. **perspicax** (Knab, 1914)
   Cacoxenus punctatus Duda, 1924
   Syn. Ref. McAlpine, 1968, Canad. Entomol. 100(5):514.

Genus **Chymomyza** Czerny

6. **pararufithorax** Vaidya and Godbole, 1973
   vaidyai Okada 1976, Junior Syn. Ref. Okada, 1981, Kontyu 49:171.

Genus **Hypselothyrea** de Meijere

7. **aptera** Papp, 1979

8. **fascipennis** de Meijere, 1906

Genus **Leucophenga** Mik

9. **pentapunctata** Panigrahy and Gupta, 1982
10. **abbreviata** (de Meijere, 1911)
11. **albofasciata** (Macquart, 1851)
    albicincta (de Meijere, 1908)
    Syn. Ref. Bock, 1979, Aust. J. Zool. Suppl. Ser. 71:4.
12. **angusta** Okada, 1956
13. **bellula** (Bergroth, 1894)
    guttiventris (de Meijere, 1908), Syn. Ref. Bock, 1979, Aust. J. Zool. Suppl. Ser. 71:25.
14. **insulana** (Schiner, 1868)
    New Comb. for **D.insulana** Schiner, Ref. Okada, 1977, Cat. Dipt. Orient. Reg. III:347.
15. **pectinata** Okada, 1968
16. **regina** Malloch, 1935
17. **rimbickana** Singh and Gupta, 1981
18. **globosa** Okada, 1965

Genus **Nesiodrosophila** Wheeler & Takada

19. **lindae** Wheeler and Takada, 1964
    pleurostriata Singh and Gupta, 1981
    Syn. Ref. Okada, 1984, Kontyu, 51(1):32.

Genus **Pararhinoleucophenga** Duda

20. **maura** (de Meijere, 1911)

Genus **Phorticella** Duda

21. **flavipennis** (Duda, 1929)
    D.bicolovittata Singh, 1974, Syn. Ref. Wheeler, 1981-83, Add. Cat. World's Drosophilidae:15.

    Zaprionus striata Nirmala Sajjan and Krishnamurthy, 1975. Syn. Ref. Wheeler, 1981-83, Add. Cat. World's Drosophilidae:15.

Genus **Scaptomyza** Hardy

22. **elmoi** Takada, 1970
23. **himalayana** Takada, 1970

Genus **Stegana** Meigen

24. **crescentica** Gupta and Panigrahy (submitted)
25. **shirozui** Okada, 1971
26. **penihexata** Gupta and Panigrahy (submitted)

Genus **Zaprionus** Coquillett

27. **argentostriatus** (Bock, 1966)
    multistriatus Sturtevant, 1927, Syn. Ref. Wheeler, 1981-83, Add. Cat. World's Drosophilidae:16.
28. **grandis** (Kikkawa, 1938)
29. **indianus** Gupta, 1970 (for **indiana**)
    paravittiger Godbole and Vaidya, 1972. Syn. Ref. Okada, 1977, Cat. Dipt. Orient Reg. III:387.
30. **obscuricornis** (de Meijere, 1916)
    New comb. for **D.obscuricornis** de Meijere. Ref. Wheeler, 1981-83, Add. Cat. World's Drosophilidae:16.
31. **orissaensis** (Gupta, 1972)
    New comb. for **D.orissaensis** Gupta 1972. Ref. Wheeler, 1981-83, Add. Cat. World's Drosophilidae:16.

Genus **Drosophila** Fallen

Subgenus **Drosophila** Fallen, Str.

32. **acutisima** Okada,1956
33. **bimorpha** Singh and Gupta, 1980
34. **dominici** Dwivedi, 1982
35. **neoimmigrans** Gai and Krishnamurthy, 1982
36. **neomakinoi** Gupta and Singh, 1981
37. **notostriata** Okada, 1966
38. **novaspinofera** Gupta and Singh, 1979
39. **novazonata** Gupta and Dwivedi, 1980
40. **paralongifera** Gupta and Singh, 1981
41. **parazonata** Gupta and Dwivedi, 1980
42. **penidentata** Singh and Gupta, 1981
43. **penispina** Gupta and Singh, 1979
44. **peniclubata** Singh and Gupta, 1980
45. **pentastriata** Okada, 1966
46. **ramamensis** Dwivedi, 1979
47. **setitarsa** Gupta and Dwivedi, 1980
48. **tetradentata** Singh and Gupta, 1980
49. **fascipennis** Okada, 1967
50. **neokurokawai** Singh and Gupta, 1981

Subgenus **Scaptodrosophila** Duda

51. **bansadharae** Panigraphy and Gupta, 1983
52. **cristata** (Singh, 1976)
    New comb. for **Scaptomyza cristata** Singh, (probably Syn. of **D.silvalineata** Gupta and Ray-Chaudhuri, 1970) Ref. Wheeler, 1981, Genet. Bio. Droso. 3a:56.
53. **koraputae** Gupta and Panigrahy, 1982
54. **neomedleri** Gupta and Panigraphy, 1982
55. **paratriangulata** Gupta and Ray-Chaudhuri, 1970
56. **plumata** (Singh, 1976)
    New comb. for **Scaptomyza plumata** Singh, Ref. Wheeler, 1981, Genet. Bio. Droso. 3a:58.
57. **puriensis** Gupta and Panigraphy, 1982

Subgenus **Sophophora** Sturtevant

58. **agumbensis** Prakash and Reddy, 1978
59. **barbarae** Bock and Wheeler, 1972
60. **bhagamandalensis** Muniyappa, Reddy and Krishnamurthy, 1981
61. **biarmipes** Malloch, 1924
    rajasekari Reddy and Krishnamurthy, 1968, Syn. Ref. Bock, 1980, Syst. Entomol. 5:345.
    raychaudhurii Gupta, 1969. Syn. of **rajasekari** Reddy and Krishnamurthy, Ref. Bock & Wheeler, 1972, Univ. Texas Publ. 7213:23.
62. **brahmagiriensis** Muniyappa, Reddy and Krishnamurthy, 1981
63. **brevina** (Wheeler, 1981)
    New name for **brevis** Parshad and Singh, 1971. Ref. Wheeler, 1981, Genet. Bio. Droso. 3a:60.

Subgenus **Lordiphosa** Basden

64. **cauverii** Muniyappa, Reddy and Prakash, 1982
65. **elegans** Bock and Wheeler, 1972
66. **fruhstorferi** Duda, 1924
67. **gangotrii** Muniyappa and Reddy, 1981
68. **jagri** Prakash and Reddy, 1979
69. **madikerii** Muniyappa and Reddy, 1980
70. **microdenticulata** Panigrahy and Gupta, 1983
71. **nagarholensis** Prakash and Reddy,1980
72. **neotrapezifrons** Ranganath, Krishnamurthy and Hegde, 1983
73. **parabipectinata** Bock, 1971 (authorship error in earlier report)
74. **rhopaloa** Bock and Wheeler, 1972
    coonorensis Reddy and Krishnamurthy, 1973. Syn. Ref. Wheeler, 1981-83, Add. Cat. World's Drosophilidae:12.
75. **sahyadrii** Prakash and Reddy, 1979
76. **sampangensis** Muniyappa and Reddy, 1980
77. **trapezifrons** Okada, 1966
78. **unipectinata** Duda, 1924
79. **coei** Okada, 1966
    angusi Okada, 1977. Syn. Ref. Wheeler, 1981, Genet. Bio. Droso. 3a:54.

Harisanova, N.T. and K.H. Ralchev. University of Sofia, Bulgaria. The effect of 10°C temperature on the embryonic development of **Drosophila hydei.**

(Author's note: This note is related to and follows in sequence the note by Ralchev & Harisanova 1985.) The usual temperature for raising Drosophila is around 24°C though this organism can also live at temperatures ranging from 15 to 34°C (Hedman & Krogstad 1963; Powsner 1935).

We have investigated the influence of 10°C temperature upon the duration of **Drosophila hydei** embryonic development.

A number of embryos were collected within one hour employing the method already described in the preceding paper (Ralchev & Harisanova 1985, this issue). Each egg was put onto a drop of black-coloured agar as shown on Fig. 1. The embryos were kept at 10°C for different periods of time (4, 8, 12, 16, 20 and 24 hr) and transferred to 25°C after that. The control embryos were left to develop at 25°C. Sixty eggs were used for each experimental group.

Table 1. The effect of preserving **Drosophila hydei** eggs at 10°C on their embryonic development.

Time of preserving eggs at 10°C (hr)	Duration of the embryonic development at 25°C (hr)	Percentage of survival*
0(control)	27	89 ± 2.04
4	25	95 ± 0.86
8	24	89 ± 2.12
12	24	89 ± 2.63
16	24	93 ± 1.11
20	24	93 ± 3.47
24	24	82 ± 1.84

* The results are mean values from 6 to 8 experiments.

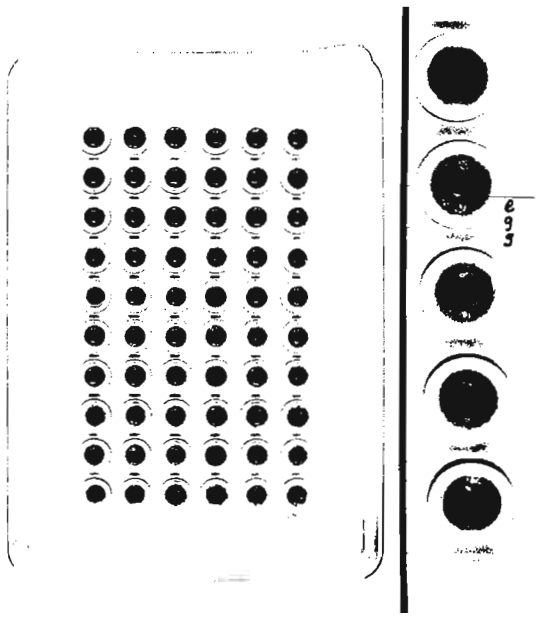

Figure 1. Chamber with black-coloured agar drops. Magnification: (a) 1.3x (b) 4x