

were done by chi-square tests. The results are shown in Fig. 1. The unselected stock population "Namur" appears significantly less phototactic in May 1984 than in September 1983. In both populations I and II, the selection for positive phototactism has succeeded: after 15 generations, the resulting strains are significantly more phototactic than the population "Namur" as it appears from the September 1983 initial tests and as well in the May 1984 final experiments. The selection for negative phototactism seems to have succeeded in the population II only: some flies seem to be really attracted by darkness. For the population I, the difference with the population "Namur" consists essentially in a greater proportion of flies which are locomotrically less active and remain in the starting test tube. A 30°C temperature certainly increases the excitement and the agitation of the flies, and consequently influences the segregation between the "runner" and the "sluggish" flies. It doesn't seem to influence the phototactism in itself.

References: Benzer, S. 1967, Proc. Nat. Acad. Sci. 58:1112; Dubucq, D., E. Depiereux & A. Elens 1984, DIS 60:87; Kekic, V. 1981, DIS 56:178; Tompkins, L., J.A. Fleischman & G. Sanders 1978, DIS 53:211.

Bihari, B. and J.P. Gupta. Banaras Hindu University, Varanasi, India. Records of *Drosophila* species from three different areas of Madhya Pradesh, India.

As a matter of fact, there has been a conspicuous gap in our knowledge of world distribution of *Drosophila* where India is concerned. It is only very recently that interest has grown considerably in this field in India. However, a vast area of the Indian subcontinent still awaits exploration. Madhya

Pradesh is one of the 22 states of India which has been largely neglected for such studies. Although it was Bächli (1973) who made for the first time a cursory survey of *Drosophilid* fauna of Kanha national park (M.P.) and collected 17 species of *Drosophilidae*. Since then nothing could be known about the *Drosophilid* species inhabiting this state of India.

Table 1. *Drosophila* species collected from Madhya Pradesh (India) during August 1984.

Species	Sub-genus	Locations			Total
		Betul	'Bilaspur'	'Shahdole'	
<i>D. kikkawai</i>	<i>Sophophora</i>	32	16	24	72
<i>D. malerkotliana</i>	"	91	80	65	236
<i>D. jambulina</i>	"	71	52	64	187
<i>D. punjabiensis</i>	"	56	43	48	147
<i>D. bipectinata</i>	"	42	13	29	84
<i>D. biarmipes</i>	"	75	91	35	201
<i>D. takahashii</i>	"	56	39	47	142
<i>D. latifshahi</i>	<i>Scaptodrosophila</i>	49	64	26	139
<i>D. bryani</i>	"	42	17	59	118
<i>D. brunea</i>	"	4	3	--	7
<i>D. nasuta</i>	<i>Drosophila</i>	47	19	62	128

During the present study, collections were undertaken at three different localities, namely Betul, Bilaspur and Shahdole, using different fermenting fruits as baits and also by net sweeping over wild vegetation. Altogether eleven species of *Drosophila* were collected from these areas as shown in Table 1. Based on the collection data, it was found that there lies a remarkable similarity in the species spectrum of these three areas. Although similar distribution of species suggests that similar, but obviously not that similar, ecological niches are also utilized by these species in these areas.

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Reference: Bächli, G. 1973, Vjschr. Naturf. Ges. Zürich 118:29-30.

