Table 1. Offspring numbers of crosses (average of five replications ± standard deviation) for the first generation F_1 and the second generation F_2 among populations of the *D. venezolana* species from Piritu (Eastern Venezuela), Prudencio (Western Venezuela), and Gran Roque Island. M indicates males and F indicates females. Asterisk* indicates that the number of control descendents is statistically different from both together of the intrapopulational control group for a Wilcoxon nonparametric test at $p < 0.05$.

A) First generation of F_1 crosses among *D. venezolana* populations from Gran Roque island, Prudencio, and Píritu.		
Breedings	M x F	F x M
Interpopulational crosses:		
Píritu x Gran Roque	219.0 ± 80.5	162.0 ± 86.7*
Prudencio x Gran Roque	162.6 ± 76.7*	138.6 ± 59.0*
Intrapopulational crosses:		
Grand Roque x Gran Roque	322.4 ± 50.8	
Prudencio x Prudencio	338.6 ± 59.0	
Píritu x Píritu	359.0 ± 23.8	
B) Second generation of F2 crosses among *D. venezolana* populations from Gran Roque island, Prudencio, and Píritu.		
Breedings	M x F	F x M
Interpopulational crosses:		
Píritu x Gran Roque	82.2 ± 31.6*	85.2 ± 10.9*
Prudencio x Gran Roque	36.4 ± 16.6*	70.4 ± 32.6*
Intrapopulational crosses:		
Grand Roque x Gran Roque	301.8 ± 32.1	
Prudencio x Prudencio	320.0 ± 50.8	
Píritu x Píritu	342.0 ± 37.0	

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Singh, B.N.,[1] and S. Lata[2]. [1]Department of Zoology, Banaras Hindu University, Varanasi 221 005, India. [2]Zoology Section, Mahila Maha Vidyalaya, Banaras Hindu University, Varanasi 221 005, India. Variation in the number of males and females without apical black patch on their wings in laboratory strains of *Drosophila biarmipes*.

Drosophila biarmipes males possess a dark apical black patch on their wings. There is variation in the male apical black wing patch and the males without the patch are also found (Singh and Chatterjee, 1987). Singh *et al.* (1995) reported for the first time the presence of apical black patch on the wings of females in two laboratory stocks of *D. biarmipes*. However, in females, the patch is lighter and does not touch the margin of wings. Behavioral studies have been carried out in *D. biarmipes* by Singh and his coworkers (Singh and Chatterjee, 1987; Singh and Pandey, 1993, 1994; Srivastava and Singh, 1996, 1997). Males with wing patch have greater mating success than those without wing patch which provides evidence for the role of visual stimuli in mating behavior of *D. biarmipes* (Singh and Chatterjee, 1987). Males without a patch lack the visual element of courtship display and they have to court the females for a longer time to stimulate the females beyond the acceptance threshold and achieve copulation (Chatterjee and Singh, 1991).

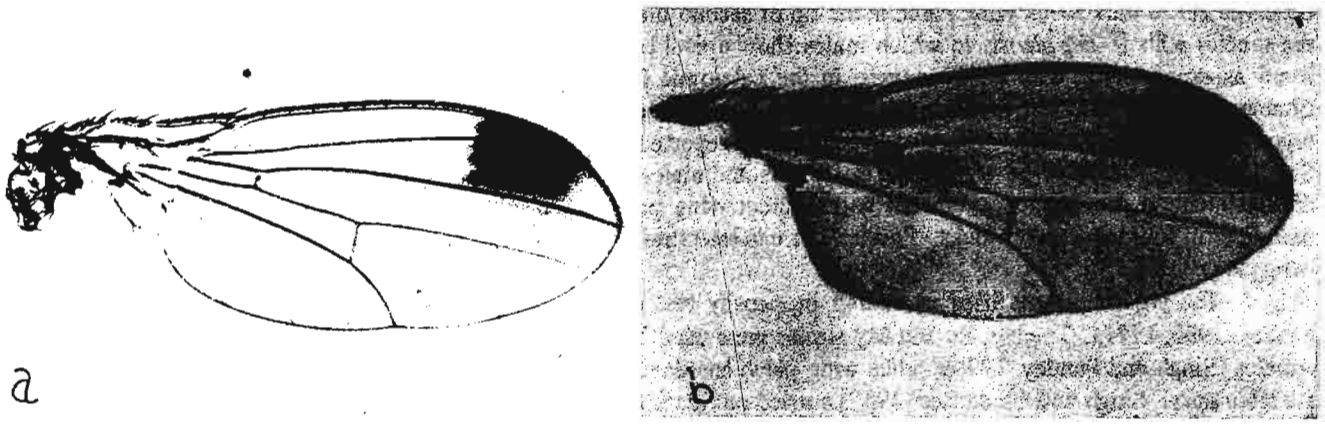

Figure 1. Wings of *D. biarmipes* showing apical black patch: a - male, b - female

We scored the number of females and males with/without wing patch in four laboratory strains of *D. biarmipes*. The strains used are:

1. My - obtained from Mysore Stock Centre in 1993 (origin-Mysore, Karnataka).
2. BR Hills - obtained from Mysore Stock Centre in 1993 (origin - B.R. Hills, Karnataka).
3. Ng - established from a female collected from Nagpur, Maharashtra in 1990.
4. Rc - raised from a female collected from Nagpur, Maharashtra in 1990.

In each of the four strains, females and males were taken randomly from culture bottles for observation of black patch on their wings. In females, the wing patch is small, lighter and does not touch the margin of wing in all the four strains analyzed. We observed variation in male apical black wing patch in all the four stocks. Males were classified into four groups: dark patch, dark patch not touching third vein, faint patch and without patch. Wings of a male and a female showing the apical black patch are depicted in Figure 1. Table 1 shows the number of males and females with wing patch and without wing patch. Frequency of males without wing patch varies from 0.74 percent (BR Hills) to 4.32 percent (Mysore). Thus the males without wing patch occur in low frequency in all the four strains. Frequency of females without wing patch ranges from 42.94 percent (Mysore) to 89.92 percent (Ng). As compared to males, the frequency of females without wing patch is higher in all the four stocks. Interstrain variation in the number of males and females with/without wing patch has been tested by calculating 2x4 chi-square values. Interstrain differences are significant for males ($\chi^2 = 9.89$; $p < 0.05$) as well as for females ($\chi^2 = 140.82$; $p < 0.001$). Thus there is interstrain variation with respect to apical black wing patch in both sexes of *D. biarmipes*.

Table 1. Number of males and females with wing patch and without wing patch in different wild laboratory strains of *Drosophila biarmipes*.

Strain	Males						Females		
	With dark patch	With dark patch not touching III vein	With faint patch	Total number with patch	Total number without patch	Total number of males scored	With patch	Without patch	Total number of females scored
My	120	7	6	133	6 (4.32)	139	97	73 (42.94)	170
BR Hills	226	25	16	267	2 (0.74)	269	54	147 (73.13)	201
Ng	314	49	13	376	3 (0.79)	379	40	357 (89.92)	397
Rc	297	24	26	347	8 (2.25)	355	57	168 (74.67)	225
	$\chi^2 = 9.89$, df = 3, $p < 0.05$						$\chi^2 = 140.82$, df = 3, $p < 0.001$		

Values given in the parentheses are percentages.

D. biarmipes was described by Malloch (1924) from Coimbatore, India. Malloch mentioned no black wing patch in males, although he observed a slightly darker tinge at the tip of the second vein. Reddy and Krishnamurthy (1968) described a new species *D. rajasekari* from Mysore, India, in which males have an apical black patch on the wings not touching the third vein. However, certain glaring similarities between *D. rajasekari* and *D. biarmipes* were noted by these authors. A new species, *D. raychaudhurii* was described by Gupta (1969) from Varanasi, India, who observed apical dark black wing patch at the tip of second the vein extending to the third vein. Gupta (1969) compared the species with *D. nepalensis* in which males show apical black wing patch. *D. rajasekari* and *D. raychaudhurii* are listed as synonymous with *D. biarmipes*, in the catalogue of world fauna prepared by Wheeler (1981). Singh and Chatterjee (1987) observed variation in the wing patch in males of *D. biarmipes* and males without wing patch were also found in a laboratory stock. None of these authors reported the presence of wing patch in females of *D. biarmipes*. Singh *et al.* (1995) observed wing pitch in females and males in two laboratory stocks of *D. biarmipes*. However, they did not mention the frequency of flies with/without wing patch. We have observed wing patch in both sexes of *D. biarmipes* in four laboratory stocks. Further, there is interstrain variation with respect to the number of flies with/without wing patch.

The Ng strain was used in mating propensity test but wing patch was not observed in females (Singh and Pandey, 1993, 1994). The Ng, Rc and My strains were used in sexual isolation tests but wing patch was not observed in females (Singh and Pandey, 1994). Thus wing patch has developed in females in the stocks during their maintenance in the laboratory. Singh and Chatterjee (1987) carried out mating propensity tests with two types of males of *D. biarmipes*, with patch and without patch using a laboratory stock established from a female collected from Bhagalpur, Bihar.

Several males without wing patch were regularly found in that stock. However, the number of males without patch is very low in all the stocks used during the present study. Thus the number of males without patch is gradually decreasing in the stocks during their maintenance in the laboratory. We have initiated selection experiments to study the genetic basis of wing patch in *D. biarmipes*.

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Pavković Lučić, S., and V. Kekić. Institute of Zoology, Faculty of Biology, University of Belgrade, Studentski trg 16, 11000 Belgrade, Yugoslavia. *Drosophila* (*Lordiphosa*) *miki* Duda, first record for Yugoslavia.

In our investigations of *Drosophila* fauna in habitats on the Yugoslav coasts of the river Danube, we have found 26 species (Kekić, 1997). Continuing these investigations, in June 1996, we have collected flies on the locality of the Kamarište (about 1360 km far from the mouth of the Danube to the Black Sea). Following the methodology applied in previous researches, flies were collected by sweeping net over fruit-fermenting baits (banana, apple, small amount of seasonal fruit with baker's yeast and sugar) distributed over the studied habitat - in a quite dense green belt following the river, where the trees of old willows and poplars dominate. The habitat of Kamarište, compared to the other investigated habitats along the Danube, is most wild. For illustration, while collecting flies we have seen wild pigs and deer. So far we have analyzed only a part of a rather rich Drosophilidae collection, and among them we have identified a male of *Drosophila* (*Lordiphosa*) *miki* Duda, 1924 (see also Laštovka and Máca, 1978). *D.* (*L.*) *miki* is a very rare European species whose taxonomic status is not yet defined (Gimaldi, 1990; Máca, 1991); up to now it was only recorded in Austria (Duda, 1924), Hungary (Papp and Pescenye, 1988), Czechoslovakia (Máca, 1991), Switzerland (Bächli, 1996) and now in Yugoslavia.

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Sultana, F. Institute of Low Temperature Science, Hokkaido University, Sapporo, Japan. Drosophilidae from Bangladesh.

The family Drosophilidae is a large family of muscomorphan Diptera, containing very nearly 3,500 species around the world (Wheeler, 1986; Toda, pers. comm.). A considerable number of species have been recorded from the Indian subcontinent and its surrounding areas: 262 spp. from India (Gupta, 1993; Singh and Fartyal, 1997), 71 spp. from Nepal (Okada, 1966), 148 spp. from Sri Lanka (Okada, 1988; Toda, pers. comm.), 127 spp. from Myanmar (Toda, pers. comm.) and 20 spp. from Bhutan (Gupta and Abhijit De, 1996).

Our knowledge about drosophilid flies of Bangladesh is still very meagre and fragmentary, in comparison with other countries of the Indian subcontinent. It remains as a virgin field to be explored. Only eight species of Drosophilidae have been recorded from Bangladesh: *Drosophila* (*Sophophora*) *kikkawai, D.* (*So.*) *ananassae, D.* (*So.*) *bipectinata, D.* (*So.*) *melanogaster, D.* (*Dorsilopha*) *busckii, D.* (*Drosophila*) *repleta, D.* (*D.*) *latifshahi,* and *Scaptodrosophila meijerei* (Anwara Begum *et al.*, 1977).

The present report deals with the result of a preliminary survey carried out at two localities, Dhaka and Rajshahi (Table 1). Flies were collected near human habitations by traps baited with various kinds of fruits in 1997. The collected species were mostly domestic ones. In total, 750 flies were caught, belonging to seven species and three subgenera of the genus *Drosophila.* Two species, *D.* (*So.*) *takahashii* and *D.* (*D.*) *sulfurigaster albostrigata,* were recorded for the first