

N. Popovic, and N.J. Milosevic 1992, Glas. prir. muz. Beograd, B 47:175-186; Soos, A., 1945, *Fragm. faunist. hung.* 8:18-23.

Hoenigsberg, H.F., and E. Bustos. Instituto de Genética, Universidad de los Andes, Santafé de Bogotá, D.C., Colombia. Results of comparative fitness of *Drosophila starmeri* (Repleta group) from the Guajiran deserts in Maicao in the Colombian Caribbean.

populations have received considerable attention as far as culturing conditions go. For instance Wagner (1944) found important differences in the way *D. mulleri* and *D. aldrichi* utilize eight species of yeast isolated from natural cactus fruits. Buzzati-Traverso (1949), Da Cunha (1951), Lindsay (1958), and Begon (1973) discovered species of yeast that differentially screen various *Drosophila* species. Richardson and Kambysellis (1968) had to use a cactus-supplemented banana food for cultures of the Repleta group of *Drosophila* in order to produce them in the laboratory. Sang (1949a,b,c, 1950, 1956) in his ecological requirements for population growth of *Drosophila* hinted at the considerable amount of genetic variability that supposedly exists in *Drosophila* to be able to cope with such wide nutritional requirements. The same conclusions can be on hand to rationalize the many media that exist among different laboratories (Wheeler, 1967; Offermann and Schmidt, 1936; Lewis, 1942; Lewis, 1960; Li, 1931; Godbole *et al.*, 1971; Sang, 1956; etc.). The same can be said for difficult species when brought to the laboratory. For example, rye or barley malt (Lakovaara, 1969) as supplement to corn meal medium has been successfully used for some of them. Hoenigsberg (1971) has described three new media quite successful for field studies in tropical forests of South America to support growth of many species in the *saltans*, *willistoni* and *melanogaster* groups. The

Table 1.*

Banana-Agar		Corn-meal	
Water	5000 ml	Water	10,000 ml
Agar	100 g	Corn	300 g
Tegocept	100 ml	Dry Yeast	100 g
Dry Yeast	85 g	Salt	20 g
Bananas	60	Agar	120 g
Propionic Acid	43 ml	Tegocept	160 ml
		Propionic Acid	50 ml

* even when the quantities are halved the result is the same.

Table 2.

<i>D. starmeri</i>	Banana-Agar	Corn-meal
1) Egg produced in mass culture of 10 pairs	1019	436
2) Pupae	60	200
3) Adults	21	184

following is not a complete list of authors that have made important media to cultivate the *quinaria* group (Jaeger, 1957) or the *willistoni* group (Hinton *et al.*, 1951; Spieth, 1974) and of course the various media for the Hawaiian *Drosophilidae* made with a wide variety of substrates like leaves, stems, fruits, flowers and fungi (see Heed, 1968).

In the following two tables. I show that unless specified it is profoundly erroneous to claim highest fitness for a population of *Drosophila starmeri* recently brought from the deserts with just egg laying to deal with.

References: Buzzati-Traverso, A., 1949, *Dros. Inf. Serv.* 25:88; Da Cunha, A.B., 1951, *Evolution* 5:395-404; Godbole, N.N., R.M. Kothari, and V.G. Vaidya 1971, *Dros. Inf. Serv.* 46:58-59; Heed, W.B., 1968, *Univ. Texas Publ.* 6818:387-419; Hinton, T., D.T. Noyes, and J. Ellis 1951, *Physiol. Zool.* 24:335-353; Hoenigsberg, H.F., 1971, *Dros. Inf. Serv.*, 47:77; Jaeger, C.P., and E.C. Jaeger 1957, *Dros. Inf. Serv.* 31:176; Lakovaara, S., 1969, *Dros. Inf. Serv.* 44:128; Lewis, M.T., 1942, *Science* 96:282; Lewis, E.B., 1960, *Dros. Inf. Serv.* 34:117-118; Li, J.C., 1931, *Peking Nat. Hist. Bull.* 5:29-31; Offermann, C.A., and I.K. Schmidt 1936, *Dros. Inf. Serv.* 6:54-65; Richardson, R.H., and M.P. Kambysellis 1968, *Dros. Inf. Serv.* 43:187; Sang, J.H., 1979a, *Physiol. Zool.* 22:183-202; Sang, J.H., 1949b, *Physiol. Zool.* 22:202-210; Sang, J.H., 1949c, *Physiol. Zool.* 22:210-223; Sang, J.H., 1950, *Biol. Rev.* 25:188-219; Sang, J.H., 1956, *J. Exp. Biol.* 33:45-72; Spieth, H.T., 1974, *Dros. Inf. Serv.* 51:146; Wagner, R.P., 1944, *Univ. Texas Publ.* 4445:109-128; Wheeler, M.R., 1967, *Handbook: The Care and Management of Laboratory Animals*, 3^d ed., E. and S. Livingstone Ltd., Edinburgh.

Hoenigsberg, H.F. Instituto de Genética, Universidad de los Andes, Santafé de Bogotá, D.C., Colombia. Collecting *Drosophila* species in natural surroundings.

rain forest collection. In this brief but, I hope, equally helpful species depend on the kind of bait used.

One of our research notes in this volume presented some useful hints on how to use various baits to collect *Drosophila*. Moreover, the success in field work was shown to depend on different know-hows displayed in high mountain field work and in the lowland and tropical suggestion, I will show how the attraction of *Drosophila*

(1995)

Table 1. *Drosophila* species attracted to figs in the Sierra Nevada of Sta. Marta, Colombia at 1000 m. of altitude. The following species were found flying and surrounding a fig tree with many rotten figs on the ground. This collection was found in the rain forest far away from human habitation.

Species	No. individuals (♀♀ & ♂♂)
<i>D. nigricincta</i>	20
<i>D. willistoni</i>	49
<i>D. paulistorum</i>	21
<i>D. capricorni</i>	12
<i>D. mediotriata</i>	7
<i>D. tripunctata</i>	6
<i>D. crocina</i>	10
<i>D. calloptera</i>	1
<i>D. lumiformis</i>	15

Table 4. Collection of *Drosophila* species using *P. quayada* (*quayaba*) only.

Species	No. individuals (♀♀ & ♂♂)
<i>D. melanogaster</i>	11
<i>D. willistoni</i>	200
<i>D. cardini</i>	1
<i>D. capricorni</i>	2
<i>D. sturtevantii</i>	2
<i>D. subsignoides</i>	2
<i>D. latifasciataeformis</i>	3

Table 2. Collection done near human dwellings but also around fig trees, no other bait was used.

Species	No. individuals (♀♀ & ♂♂)
<i>D. willistoni</i> group	74
<i>D. capricorni</i>	29
<i>D. fumipennis</i>	115
<i>D. tripunctata</i>	61
<i>D. nigricincta</i>	75
<i>D. angustibuca</i>	28
<i>D. shiri</i>	38
<i>D. unipunctata</i>	5
<i>D. medianotata</i>	3
<i>D. parabocainensis</i>	2
<i>D. angustibuca</i> var. A	2
<i>D. castanea</i> like	15
<i>D. nebulosa</i>	1
<i>D. tripunctata</i> B	2
<i>D. albicans</i>	1
<i>D. paulistorum</i> like	1
<i>D. paulistorum</i> like A	1
<i>D. paulistorum</i> like B	2

Table 5. Collection done over fallen flowers near human dwellings

Species	No. individuals (♀♀ & ♂♂)
<i>D. tripunctata</i> type 3	8
<i>D. castanea</i>	1
<i>D. unipunctata</i>	1
<i>D. tripunctata</i> type 11	1
<i>D. angustibuca</i>	1

Table 3. Collection made on avocados left on the ground with *Oenothera* flowers.

Species	No. individuals (♀♀ & ♂♂)
<i>D. tripunctata</i>	8
<i>D. tripunctata</i> like	2
<i>D. fumipennis</i>	2
unknown browns sp.	4

Table 6. Over mangoes.

Species	No. individuals (♀♀ & ♂♂)
<i>D. willistoni</i> group	50
<i>D. capricorni</i>	22
<i>D. melanogaster</i>	23
<i>D. ananassae</i>	1
<i>D. mediotriata</i>	2
<i>D. castanea</i>	2
<i>D. black fascioloides</i>	1
<i>D. gibberosa</i>	2
<i>D. emarginata</i>	12
<i>D. nebulosa</i>	1
<i>D. prosaltans</i>	1