

lections have provided material showing, by salivary gland chromosome sequences, the presence of both "eastern" and "western-northern" athabasca in that part of New England.

As pointed out by Miller and Voelker, sequences of certain chromosome arms have been found in only one of the two kinds of athabasca and not the other (disregarding one ambiguous Minnesota strain classified only by Y type). Some of these, particularly ones involving the distal portions of arms, should be useful for recognition of "eastern" or "western-northern" athabasca even in preparations of "average" or "inferior" quality - specifically "eastern" XL MI-MII vs. "western-northern" I-distal; "eastern" XS MI vs. "western-northern" I-distal (or derived sequences); "eastern" BL MII or MIII vs. I=MI (though the latter occurs in both kinds of athabasca); "eastern" C MII and derived sequences (e.g. MIV, MV, but not III) vs. "western-northern" I-distal and derived sequences. Though complete analysis of salivary gland sequences in recent stocks from Maine has not been accomplished, observations of the above sequences (plus a few others) have shown that the cultures do contain both "eastern" and "western-northern" sequences and that each strain is consistent in having sequences of one kind only. The following numbers of strains have been so identified: Sunset (Deer Isle), 3 "eastern" and 7 "western-northern"; Bar Harbor (Mount Desert Island), 4 "eastern"; Dedham (mainland, ca. 10 miles s.e. of Bangor), 5 "eastern" and 2 "western-northern"; relatively small islands just south of Deer Isle (Dave's, Farrel, George Head, Potato, St. Helena, and Wreck), all "western-northern", 4 from St. Helena and one from each of the others.

Although Miller (Amer. Midl. Nat. 60:52070, 1958) expressed doubt that *D. athabasca* exists at certain points where it had been reported in the Midwest, specifically St. Louis and Lincoln, recently the presence of athabasca in these localities has been confirmed. In 1970 several apparently athabasca males collected at the St. Louis suburb of Webster Groves by Dr. H.D. Stalker came to one of us (D.D.M.), by way of Dr. Robert Voelker. Some of these males were crossed successfully to "eastern" females of a Bass Lake, Minnesota, strain, yielding offspring with strictly "eastern" athabasca salivary gland chromosomes. There is no reason now to doubt that athabasca does exist in the St. Louis area, as had been reported by Carson and Stalker (e.g. 1951). In July of 1972 one of us (D.D.M.) collected *Drosophila*s in southeastern Nebraska (Lincoln and Sprague, Lancaster Co., and Crete, Saline Co.) and got a few females and males that seemed athabasca-like. From five of the females (one from Lincoln, two from each of the other places) strains of athabasca have been established in the laboratory; examination of salivary gland chromosomes has shown that each has "eastern" sequences.

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*Drosophila* fauna of Humbug Scrub and Adelaide, South Australia.

Flies were collected over fermenting banana baits and by sweeping over vegetation between December 1971 and August 1972 at Humbug Scrub, Para Wirra National Park, a dry sclerophyll scrub 25 miles N.E. of Adelaide, and at Toorak Gardens, an Adelaide suburb.

The following species were found:

Species	Humbug Scrub		Toorak Gardens	
	number	%	number	%
<i>D. bryani</i>	1	+	0	
<i>D. buskii</i>	0		3	+
<i>D. enigma</i>	0		12	+
<i>D. fumida</i>	67	12	21	1
<i>D. immigrans</i>	37	7	262	11
<i>D. melanogaster</i>	31	5	66	3
<i>D. novopaca</i>	9	2	3	+
<i>D. repleta</i>	1	+	20	1
<i>D. simulans</i>	415	74	298	84
<i>Pholadoris</i> sp. nov.	2	+	0	
Total	563		2491	

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