ERRATUM

Bowers W. S., Sener B., Evans P. H., Bingol F. and Erdogan I.

Activity of Turkish Medicinal Plants Against Mosquitoes *Aedes aegypti* and *Anopheles gambiae*

Page 342 of the above article in Volume 16 (1995) was inadvertently omitted during printing. Its full text is given below.

Considerable effort must be expended in the collection, identification and processing of plants prior to initiating biological assays. These studies, focusing only on the mosquito larvicidal activity of medicinal plants, suggest three specific selection strategies to increase the probability of finding biological activity: First, plants should be selected from a group with known biological activity, such as medicinal plants. Second, it is important to select clearly successful plants such as weeds for extraction and bioassay. It should be noted that a number of the plants with mosquito larvicidal activity enjoy global distribution as weeds. Since weeds are successful due to their ability to thrive in diverse climates and soils, often under adverse conditions, their global success must be largely due to their secondary, defensive chemistry that confers resistance to herbivory and disease. Third, biological assays should use the species targeted for control instead of a general bioassay organism.

A comparison of plants active against mosquitoes, brine shrimp and Hemiptera shows the need for specificity of bioassay. Although the brine shrimp assay is simple and rapid, many false positives occur. Lack of crossover activity between different species of insects which can lead to missed opportunities and false positives is dramatised by the *Oncopeltus* vs. mosquito data. Considering the need to control pest species in the presence of beneficial insects such as predatory and parasitic species, the utility of selective insecticides is clearly apparent.

The pharmacological activity of indigenous plants used in Turkish folk medicine represents the evolution of defensive chemistry by plants in response to competitive pressures from other organisms, particularly insects. The screening of local medicinal plants for mosquito larvicidal activity may eventually lead to their use in natural-product-based mosquito abatement practices. Resource-poor communities at risk of vector-borne diseases and unable to afford imported insecticides for vector control may be able to grow and process selected plants, on a cottage industry basis, and use them to control disease vectors such as mosquitoes. Such practices would generate local employment, reduce dependence on expensive imported products and stimulate local efforts to enhance public health. Equally, the use of intrinsically biodegradable natural products assures safety and compatibility with the environment.

Table 2. Mosquito larvicidal activity of Turkish medicinal plant extracts

	ED_{50} (mg/ml)	
Plant species	*Aedes aegypti*	*Anopheles gambiae*
Sinapis arvensis L. (Cruciferae)	0.07	0.02
Reseda lutea L. (Resedaceae)	0.15	0.07
Onobrychis armena Boiss. & Huet. (Fabaceae)	0.1	0.02
Convolvulus arvensis L. (Convolvulaceae)	0.05	0.007
Echium italicum L. (Boraginaceae)	0.1	0.02
Biphora radians Bieb. (Umbelliferae)	0.12	0.015
Veratrum album L. (Liliaceae)	0.03	0.02
Maclura pomifera L. (Moraceae)	0.12	0.07

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