

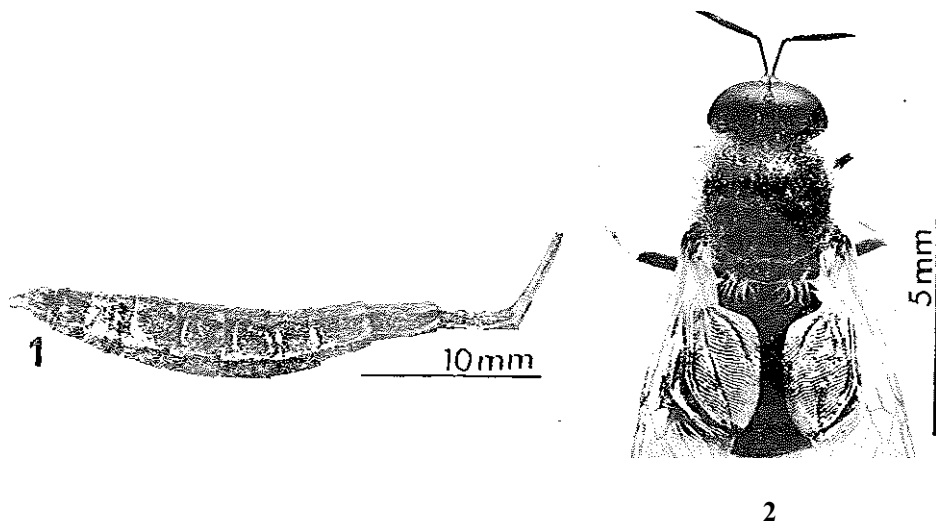
LIFE IN THE DEAD SEA

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The Dead Sea, located about 400 m below sea level, is the lowest water body in the world. Its average salinity is 30-32%, but is considerably less at some sites near the shore, where fresh water springs are located. Chlorophyceae, Cyanophyceae, denitrifying microorganisms and a few additional primitive life forms are known to occur at great depth; near the fresh water springs there are some penetrations into the sea of higher life forms, including fishes. Other than that no life is known to occur in this sea.

On 15.VIII.1981 I received for study two large dipterous larvae (Fig. 1) in a jar of water, collected the day before by Mrs. Tz. Zeydikovich in the Dead Sea, near Ein Gedi, 10 meters off shore. The salinity of this water sample was 25.6% (kindly determined by Mr. I. Sidis of this department), a low value that can be attributed to the specific locality, at the mouth of two fresh water streams, or to underwater, fresh water springs. The fully grown last instar larvae lived in the water without any treatment for at least 7 days, then pupated. On 30.VIII.1981 a ♂ fly emerged and was determined as *Stratiomys longicornis* (Scopoli) (Stratiomyidae) (Fig. 2). I have previously reared several adults of this species from larvae found in a relatively fresh water



Figs. 1-2. Stratiomys longicornis (Scopoli). 1. Pupa, ensheathed inside the last larval skin, lateral view. 2. Adult male.

puddle under a leaking tap. Similar larvae were collected by Mr. A. Valdenberg of this department in the Dead Sea near Ein Gedi several years ago. *S. longicornis* is widespread in the Palaearctic Region from Europe and North Africa to China and Japan (Lindner, 1938:63). In Israel it is found throughout the country practically the year round (Lindner, 1974:107).

Members of the genus *Stratiomys*, including *S. longicornis*, are known to be halophilic, however, the highest salinity, in which their larvae have been found so far, is only 7.8% (Lindner 1938:48,63). Whether the Dead Sea is a regular habitat for *S. longicornis* is a question that cannot be answered with certainty at this moment. The resistance of *Stratiomys* larvae to high salinity and temperature (Séguy, 1950:266) is well documented. The present observation shows that *S. longicornis* is able to cope with other minerals and oily substances existing in the water of the Dead Sea. Yet, it is difficult to imagine females of *S. longicornis* ovipositing directly into the Dead Sea. The only other possibility would be, that the larvae were drifted into the sea from very close, small, fresh water puddles under leaking taps.

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