

AN ABERRATION IN THE DIGESTIVE SYSTEM OF *SCHISTOCERCA GREGARIA* (FORSK.)

WILLIAM F. DEAN¹

In a stock colony of the desert locust, *Schistocerca gregaria* (Forsk.) one newly-moulted fifth-instar nymph was seen to have an orifice on the middle of the vertex of the head. The insect seemed unable to hop and had difficulty in walking and eating. Its mandibles moved slowly and inefficiently and unconsumed food often remained between them.

Soon after its first meal the locust started to pass feces through the orifice in its head (Fig. 1) but no feces passed through the anus. Occasionally the hindlegs moved, apparently spontaneously, but the grasping ability of the hind tarsi was temporarily lost. After three days, no more feces passed through the opening in the head but very thin, elongated feces began to pass through the anus. Between the fourth and fifth day the leg tremors disappeared, the insect regained the ability to hop, and eating became

normal. By the tenth day normal feces were passed through the anus. On the eleventh day the locust moulted to an adult, normal in all respects apart from a light spot on the head where the opening had been in the 5th instar.

The feces eliminated through the opening in the head appeared to have been at least partially digested (Fig. 1). This suggests a temporary dual aberration consisting of an anal obstruction and a diverticulum of the digestive tract from the midgut or hindgut to the opening in the head. The adult locust lived for approximately two weeks, but unfortunately died and was eaten by other locusts in the colony before dissections could be made.

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Fig. 1 Fifth instar nymph of *S. gregaria* passing feces through dorsal opening in the head.

¹ Insect Rearing Technician, Pestology Centre, Department of Biological Sciences, Simon Fraser University, Burnaby 2, B.C., Canada.