inches, where it forms a small elliptical cavity about 1/16" long by 1/2" wide, in which it is found curled up, probably to hibernate as a larva. These cells with their contained larvæ could not be found under infested trees, the majority of which were growing on lawns. Captive specimens were alive and active when distributed on the 12th of November, but were all dead when examined in the following spring.

Life-history and Habits of Z. abnormis Lec.

As previously stated, this is found most abundantly on Balm of Gilead.

Its life-history does not differ much from that given above, though eggs are laid in much larger numbers on individual leaves, as many as 50 having been taken from one leaf. About 28% of the eggs under observation failed to hatch for no apparent reason, and an examination of leaves under natural conditions indicated that this sterility was normal.

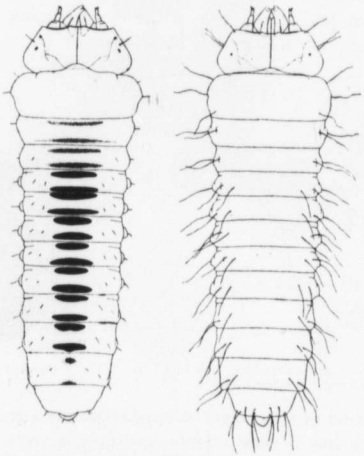

Fig. 4. Larvæ of *Z. scutellaris* and *Z. abnormis*, x 10.

The larvæ are similar to those of *scutellaris*. The main structural differences as shown in Fig. 4, which represents an almost mature larva of each species. Stage II larvæ of *abnormis* have black abdominal markings similar to, though less prominent than, those of *scutellaris*, but from stage III onwards they are entirely missing, and the larva is of a uniform yellowish-green colour.

These larvæ are more gregarious than are those of *scutellaris*, and as many as seven healthy specimens in various stages have been found feeding together in one blister.

The adults attack sheltered trees almost exclusively. The greatest damage is done to foliage 6 to 10 feet from the ground, while the leaves towards the centre of the tree are almost immune from attack.

Though this beetle does not occur annually in such large numbers as does *scutillaris*, it is far more abundant in some years on the comparatively few