



FIG. 2.

LARVAL INSTARS OF *NASCOIODES ENYSI* SHARP
 AS INDICATED BY MEASUREMENT OF A COMPLETE LIFE CYCLE
 SERIES OF MONTHLY COLLECTIONS IN 1956, 1957 & 1958.

POST-EMERGENCE ACTIVITY. First flights by *N. enysi* are not more than 100 feet in length and often end on tree trunks or logs, whence they reach satisfactory foliage by further flights and periods of crawling. When feeding, a definite preference is shown for beech foliage, the leaves of other species such as *Coprosma* spp., *Quintinia* sp., *Weinmannia racemosa* Linn. f., *Myrtus bullata* Soland., and *Neopanax* spp., are not damaged when placed in cages with beetles. A further preference for the older, firmer beech leaves is noticeable, buds and new leaves rarely being damaged. As the beetles feed on the margins of the leaves, it is probably easier for them to eat the stiffer, more mature ones. There is also an indication of a tactile response by beetles to mature leaves which appears to be related to the ability of the beetles to cling to the surface of the leaves during feeding. Tests with soft immature leaves gave strong evidence that beetles cannot gain an adequate foothold to permit chewing. Starved beetles die within 2-10 days, compared with a life-span of 36-74 days when adults receive adequate food. Feeding is usually necessary before mating and oviposition take place, the greater part of each day being spent in the foliage of the trees. This probably accounts for the frequent paucity of adults on the trunks and branches of trees. An adult of *N. enysi*, during feeding, destroys about half an average-sized red beech (*Nothofagus fusca* Oerst.) leaf per day, but damage on any day is usually spread over several leaves. With an average lifespan of about 50 days in good conditions, each beetle will destroy 20-25 leaves, representing quite significant defoliation during outbreaks. Partly damaged leaves do not appear to fall prematurely, except when most of the leaf has been destroyed. Water is taken from leaf surfaces after rain, and beetles will also feed on sap exudations from the cut ends of stems and branches. Except for the restriction of feeding to older, firmer leaves, no real preference has been shown for the leaves of any single species of *Nothofagus*.