zero values for leg discs' areas had to be recorded for some of these larvae (table 1).

A graphic representation of the ratios of leg-disc area to body length is given in figure 5 for different times in larval development in the largest, the size-grade (intermediate) and the smallest polymorphic *burchelli* larvae. Leg-disc measurements of larvae of one sample, that of the seventh nomadic day, were excluded from the final analysis of this relationship, since many of these specimens were found noticably mutilated in the thoracic region. Leg-disc growth rate is indicated by the rate of change in the slope of the line. This graph shows that once leg-disc development is initiated, its growth rate is very different in each of the three groups; it is slowest in the largest larvae, intermediate in the size-graded larvae, and fastest in the smallest larvae. Also shown here is the precocious development of the leg dics in the largest and size-graded larvae during the early and middle days of the nomadic phase, as well as the precocious decrease in leg-disc surface area in these larvae during the last days of the nomadic phase. This last fact is accounted for not only by a proliferation of the leg discs themselves beneath the integument at this stage, but also by a partial overgrowing of the discs by the surface integument.

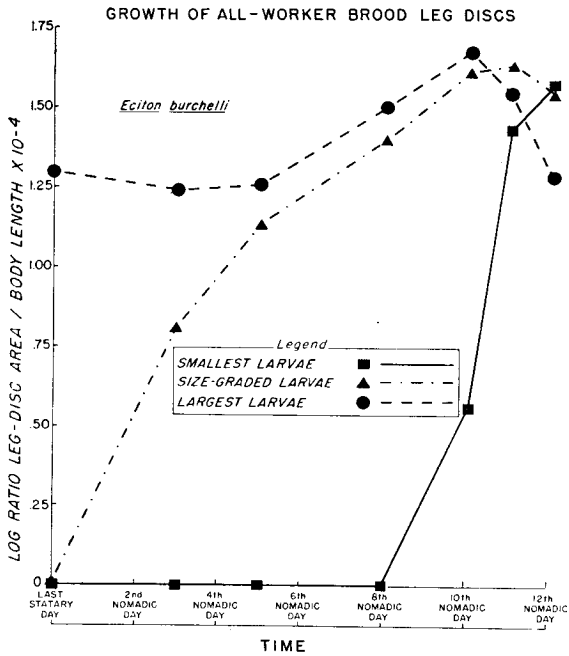

FIG. 5. — Ratio of local and general growth as a function of time throughout larval development in a "synthetic" series representing all-worker broods of *Eciton burchelli*.

F. **Other external structures.**—The paired antennal discs are located on the dorso-lateral surface of the head segment (fig. 3). The gonopodal discs, which are paired, and round or oval in shape, are located on the ventral surface of the seventh, eighth and ninth abdominal segments. The discs of the seventh segment are widely spaced on the segment while those on the eighth and ninth segments are situated nearer the midline. Although the antennal and gonopodal discs are relatively small, opaque patches of the hypodermis, in their first appearance and sequence of