as table 2 shows, these corresponding changes appear first in the largest larvae, next in the larvae of intermediate sizes and last in the smallest larvae.

TIME OF APPEARANCE OF DEVELOPMENTAL CHARACTERISTICS OF AN ALL-WORKER LARVAL BROOD OF ECITON BURCHELLI

LARVAL SIZE	LARGEST (POTENTIAL WORKER MAJORS)	INTERMEDIATE (POTENTIAL WORKER INTERMEDIATES)	SMALLEST (POTENTIAL WORKER MINIMAS)
EXTERNAL DEVELOPMENT	TIME OF FIRST APPEARANCE		
EMBRYONIC DEVELOPMENT	MIDDLE TO LATE STATARY PHASE	LATE STATARY PHASE	VERY EARLY NOMADIC PHASE.
CUTICULAR HAIR DEVELOPMENT	LAST STATARY DAY.	3 RD TO 5 TH NOMADIC DAYS	7 TH NOMADIC DAY.
MOUTH PARTS DEVELOPMENT	LAST STATARY AND FIRST NOMADIC DAYS.	5 TH TO 7 TH NOMADIC DAYS	11 TH TO 13 TH NOMADIC DAYS
IMAGINAL LEG-DISC DEVELOPMENT	LAST STATARY DAY	3 RD TO 7 TH NOMADIC DAYS.	8 TH TO 9 TH NOMADIC. DAYS.
INTERNAL DEVELOPMENT	FUNCTIONAL ONSET OF SALIVARY SECRETION		
BASOPHILIC PROLIFERATION OF GLANDULAR PORTION.	LAST STATARY AND FIRST NOMADIC DAYS.	3 RD NOMADIC DAY	MAINLY BY 6 TH NOMADIC DAY.
LABIAL PORTION DENSE CYTOPLASM, AND IRREGULARITY OF CUBOIDAL CELLS.	8 TH NOMADIC DAY.	9 TH NOMADIC DAY	10 TH NOMADIC DAY
ANTERIOR DUCT AND GLANDULAR PORTIONS DISINTEGRATING.	10 TH NOMADIC DAY	11 TH NOMADIC DAY	12 TH AND LAST NOMADIC DAYS.
ACCUMULATION OF ACIDOPHILIC MATERIAL IN LUMEN.	10 TH NOMADIC DAY.	12 TH AND LAST NOMADIC DAYS	13 TH NOMADIC DAY

TABLE 2. — The times of first appearance and of the apparent onset of function of various external and internal structures and various organs characteristic throughout development in all-worker larval broods of *Eciton burchelli*.

A precocious growth in the largest larvae is indicated by the fact that in the material studied, the largest members of the sample taken at the tenth nomadic day may be considered fully mature and ready to enter the prepupal period of metamorphosis at a time when smaller members of the range are relatively less mature. At this time these larvae approximate a cylindrical shape with their narrow anterior ends curved ventrally (fig. 1). The body widens posteriorly to the region of the fourth or fifth abdominal segment, where it begins to taper and finally terminates bluntly at the posterior end. All of the larvae have fourteen segments,—a head segment, three thoracic segments and ten abdominal segments. The last abdominal segment is usually small and not as distinct as the other thirteen.

Structural indications of development.

A. **Shape and body curvature.** — During embryonic and early larval development, the head segment is the largest segment of the body, but by the time the larvae reach a length of approximately one millimeter, the