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SOME PRELIMINARY NOTES ABOUT
THE IMMATURE STAGES OF *EACLES OSLARI*
(CITHERONIDAE)

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IN 1972, A RESEARCH PROJECT WAS INITIATED to investigate the relationships between the southern *Eacles* species. A search through the literature revealed that Ferguson (1971), speculated the Texas imperial moth (*E. imperialis nobilis* Neumoegen) acquired its polymorphism by introgression during past contact with *E. oslari* Rothschild, or the ancestor of *oslari*. Ferguson found *oslari* was only from southern Arizona and its immature stages were largely unknown.

In July, 1975, I received 40 ova of *oslari* from Michael Van Buskirk. This note is primarily to report some of the successes and failures of rearing *oslari* on several selected possible foodplants. When the ova arrived, several had already hatched.

Locating the natural Arizona foodplant in Idaho seemed very unlikely, so a series of trials were set up. Based on experience with the rearing of *E. imperialis imperialis* (Drury), several conifers were suspected as possible foodplants. The conifers chosen included the following: colorado blue spruce (*Picea pungens* Engelm.), engelmann spruce (*Picea engelmannii* Parry), lodgepole pine (*Pinus contorta* Dougl.), ponderosa pine (*Pinus ponderosa* Laws.), scotch pine (*Pinus sylvestris* L.), and single-leaf pinyon (*Pinus monophylla* T. & F.).

Blue spruce and scotch pine were placed in a cage together. The larvae placed on blue spruce died without crawling onto the scotch pine. When larvae were placed on scotch pine, feeding began immediately. In addition to scotch pine, larvae also accepted lodgepole and ponderosa pine. In spite of feeding on three species of pine, mortality was high in each instar. All larvae had been held outside until only two remained. These were brought in the house and fed ponderosa foliage. One larva survived to pupate in sand, Figure 1. Extreme changes of environ-

mental conditions between southern Arizona and southern Idaho are probably responsible for the high rate of mortality, as well as inadequate foodplant. It was not established if the same color dimorphism of the larvae occurs with *oslari* that is prevalent with *imperialis*.

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Fig. 1.—Last instar larvae of *Eacles oslari* feeding on Ponderosa Pine.