

Progeny Sex Ratio of *Anisopteromalus calandrae*
(Hymenoptera: Pteromalidae) in Relation to the Searching
Efficiency for the Different Larval Instars of *Callosobruchus*
***chinensis* (Coleoptera: Bruchidae)**

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Relationship between the factors involved in the parasitism of *Anisopteromalus calandrae* (Howard) on *Sitophilus oryzae* (L.), the original host and on *Callosobruchus chinensis* L., an alternative host, and the resulting progeny sex ratio of the parasitoid were studied. *A. calandrae* preferred *S. oryzae* to *C. chinensis* and the preference index was estimated to be 0.87. But the resulting sex ratio (female/total) was higher on the latter than on the former. The parasitoid located only a few young larvae of *C. chinensis* (third instar), which could largely be due to the low vulnerability of the young larvae rather than the preference of the parasitoid for the old larvae (third instar). Regardless of the larval age composition of *C. chinensis* exposed, the progeny sex ratio of *A. calandrae* was nearly the same, ranging from 0.660.05 to 0.820.02. The constraint of the parasitoid in searching for *C. chinensis*, especially young larvae, and the females assigning progeny sex based largely on the host size (age) in an absolute manner could result in a high female biased sex ratio.

The host preference and the progeny sex ratio of *A. calandrae* on the two host species, *C. chinensis* and *S. oryzae*, were studied on the basis of the searching efficiency of the parasitoid.