

Insects Associated With Freshly Threshed Dry Beans

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Dr. F. G. Holdaway and Mr. T. Nishida contributed the following information on insects associated with freshly threshed dry beans. The beans were grown at Ewa Plantation in an Emergency pilot planting. They were harvested and threshed at the end of September 1941.

THRESHINGS FROM THE THRESHER SCREEN—1½ LBS.

The threshings contained plant debris and a few broken and sound beans of Blackeye cowpea.

Insects recovered

Coleoptera

Bruchidae

19 *Bruchus quadrimaculatus* Fabricius

2 *Callosobruchus chinensis* (Linn.)

1 *Acanthoscelides obtectus* (Say)

Bostrychidae

10 *Sinoxylon conigerum* Gerst.

Anthribidae

2 *Areocerus* sp.

Nitidulidae

6 *Carpophilus dimidiatus* (Fab.)

Hemiptera

Cydnidae

1 *Geotomus pygmaeus* Dallas

Twenty of the twenty-two beans found in the debris had eggs of *B. quadrimaculatus* attached. The number of eggs per bean ranged from one to five; one bean, however, bore seventy-eight eggs.

BLACKEYE COWPEA BEANS FROM THE THRESHER—3 1/10 OZS.

The total number of beans in the sample was 436. Twenty-five percent bore eggs, either 1, 2 or 3 per bean, averaging 40 eggs per 100 beans. The number of adult beetles which emerged from the sample is given below; the beetles were removed as they emerged.

Species	No.
<i>Bruchus quadrimaculatus</i>	115
<i>Callosobruchus chinensis</i>	3

If the beetles had not been removed as they emerged, the beans would undoubtedly have been ruined in due course.

LIMA BEANS (VARIETY UNKNOWN)

No insects were recovered from the lima beans.

These observations indicate the following points:

1. Blackeye cowpea is highly susceptible to attack by *Bruchus quadrimaculatus*.
2. The trash contains large numbers of the adult.
3. Initial infestation occurs in the field before the beans are harvested.
4. Lack of recognition of the injury likely to occur to Blackeye cowpea from bruchids could result in the complete destruction of the harvested crop.