

## NOTES ON THE PREDACEOUS STINK BUG, *APATETICUS CYNICUS* SAY

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In February of 1935, an egg mass of *Apateticus cynicus* Say was collected in Cummington, Massachusetts and brought into the Massachusetts State College Entomology Laboratory at Amherst. The seventeen eggs were placed in a dry tin pillbox and left undisturbed in the laboratory until April 14 when four of the eggs hatched. Two of the young nymphs died the first day after hatching, but the other two, which later fortunately proved to be a male and a female, survived and lived until July 15 and 16, respectively.

The two nymphs were placed in separate cages on the author's desk and observations were made several times each day to determine as much as possible about the life cycle of these insects.

An adequate cage was made for each insect by standing a glass lantern chimney on a base of glass and covering the chimney above with a piece of cheese cloth which was held in place by a rubber band. A small glass of water was placed in the cage and covered with a disc of cardboard which had a small opening in the center for the insertion of an apple twig. At two-day intervals, larvae of the apple tent caterpillar, *Malacosoma americana* Fabricius, or of the gypsy moth, *Porthetria dispar* Linné, were

placed in the cage on a fresh apple twig as food for the *Apateticus* stages.

As shown in the following table, a definite fasting period was noted directly before the second, third and fourth nymphal instar molts.

A COMPILATION OF RANDOM DAILY OBSERVATIONS OF A PAIR OF *APATETICUS CYNICUS* SAY

	Male	Female
Length of first instar.....	16 days	6 days
Length of second instar.....	7 days	11 days
Fasting period prior to second molt	4 days	8 days
Length of third instar.....	7 days	7 days
Fasting period prior to third molt	3 days	4 days
Length of fourth instar.....	12 days	11 days
Fasting period prior to adult stage	7 days	6 days
Total length of nymphal stage....	42 days	35 days
Length of adult stage.....	53 days	61 days

Observed copulation took place on the following days after the last nymphal molt of the female: 14, 16, 24, 25, 30, 34, 43, 47, 48, 54 and 55. The duration of the eleven different acts varied from fifteen minutes to six hours.

On the fifty-fourth day of adult life and six days before the female died, there were ninety-six eggs laid on an apple twig in three hours.