

## Growth of reared Cambodian field crickets (*Teleogryllus testaceus*) fed weeds, and agricultural and food industry by-products



A reared female Cambodian field cricket (2:nd generation after the wild generation).

### THE STUDY

Crickets are potential food and feed and cricket rearing is becoming popular. Currently, commercial chicken feed is often used to rear crickets. This results in high feed costs, accounting for up to 60% of total production cost. To reduce the feed cost, this study aimed to evaluate growth of reared Cambodian field crickets (*Teleogryllus testaceus*) fed weeds, and agricultural and food industry by-products.

### METHODS

- Wild crickets were caught, reared in nursery pens and fed chicken feed and cassava tops.
- Cricket nymphs of the second generation were used for the study.
- Nymphs were reared in ventilated plastic cages (55 L).

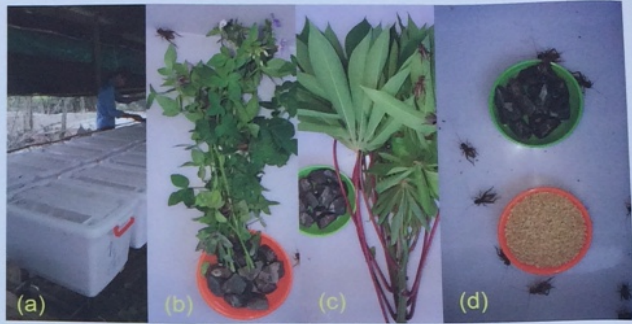


Nursery pens



A low-cost light trap used to catch wild crickets at night.

- Nine feeds (cassava plant tops, chicken feed, *Cleome rutidosperma*, *Cleome viscosa*, *Synedrella nodiflora*, residue from mungbean sprout production, *Commelina benghalensis*, spent grain and rice bran) were fed for 70 days to 80 nymphs randomly divided into 4 replicates per feed. Water was provided in a plate filled with stones.



Rearing containers (a) and examples of watering and feeding of *Cleome rutidosperma* (b), cassava tops (c) and chicken feed (d)

### RESULTS

- The was no difference in the weight increase in nymphs fed cassava tops and *Cleome rutidosperma* compared to nymphs fed chicken feed (Figure 1).

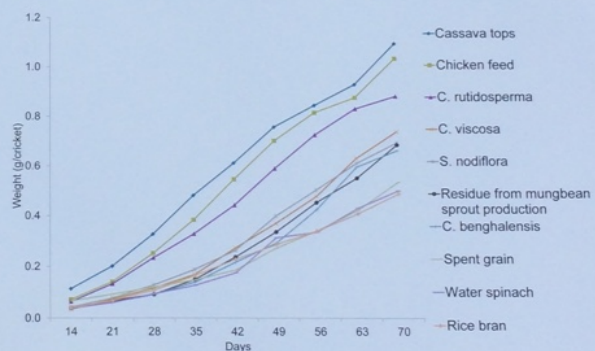


Figure 1. Weight of crickets fed on different feed types for 70 days.

### CONCLUSION

Cassava tops and *Cleome Rutidosperma* can be used as the sole feed for field cricket without any adverse effect on growth up to 70 days. The rest of the feed types could also be used if the above alternatives are not available.