

**BIOLOGY OF *BRACON HEBETOR* SAY (BRACONIDAE: HYMENOPTERA) A  
LARVAL ECTO-PARASITOID ON RICE MEAL MOTH, *CORCYRA  
CEPHALONICA* STANTON (LEPIDOPTERA : PYRALIDAE)**

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**Abstract:** Biology study was made on reproductive parameters of *B. hebetor* reared on Rice meal moth, *Corcyra cephalonica* Stainton at ordinary room temperature under laboratory conditions. The mean incubation period was 1.5 day and larval period 0.37 days. The pupal period lasted for 0.37 days with a range from 5-4 days. The mean development period of the parasitoid was 18.78 days. The females lived longer period (10.20 days) than males (6.40 days).

**Keywords:** Biology, *Bracon hebetor*, Rice meal moth, *Corcyra cephalonica*

**REFERENCES**

- Benson, J. F.** (1973). Intraspecific competition in the population dynamics of *Bracon hebetor* Say. *Journal of Animal Ecology*, 42: 193-197.
- Dabhi, M. R., Korat, D.M. and Vaishnav, P. R.** (2013). Reproductive parameters of *Bracon hebetor* Say on seven different hosts. *African Journal of Agricultural Research*. 8(25), pp. 3251-3254.
- Dabhi, M. R., Korat, D. M. and Vaishnav, P. R.** (2011). Comparative biology of *Bracon hebetor* Say on seven lepidopteran hosts. *Karnataka J. Agric. Sci.*, 24 (4) : (549-550).
- Darwish,-E; El-Shazly,-M; El-Sherif,-H.** (2003). The choice of probing sites by *Bracon hebetor* Say (Hymenoptera: Braconidae) foraging for *Ephestia kuehniella* Zeller (Lepidoptera: Pyralidae). *Journal-of-Stored-Products-Research*. 39(3): 265-276.
- Farag,-M-M-A; Sayeda,-S-A; El-Husseini,-M-M.** (2012). Life history of *Habrobracon hebetor* Say (Hymenoptera: Braconidae) parasitizing *Cadra (Ephestia) cautella* (Walker) (Lepidoptera: Pyralidae) on dried date fruits. *Egyptian-Journal-of-Biological-Pest-Control*. 22(1): 73-77.
- Griggs, R. C.** (1959). A study of succinic dehydrogenase activity in the wasp *Habrobracon juglandis* (Ashmead). *Bios*, 202-207.
- Hagstrum, D. W. and Smittle, B. J.** (1978). Host utilization by *Bracon hebetor*. *Environmental Entomology*, 7: 596-600.
- Heimpel, G.E., Antolin M.F., Franqui R.A., Strand M.R.** (1997). Reproductive isolation and genetic variation between two "strains" of *Bracon hebetor* (Hymenoptera: Braconidae). *Biological Control*. 9, 149-156.
- Landge, S. A., Wankhede, S. M and Gangurde, S. M.** (2009). Comparative Biology of *Bracon hebetor* Say on *Corcyra cephalonica* Stainton and *Opisina arenosella* Walker. *International Journal of Plant Protection*, 2 (2): 278-280.
- Orr, D.** (2009). *Biological Control and Integrated Pest Management*. Department of Entomology, North Carolina State University, Raleigh, North Carolina, 27695- 7613, USA.
- Shonouda, M. L. and Nasr, F. N.** (1998). Impact of larval-extract (kairomone) of *Ephesia kuehnie//a* Zell. (Lep., Pyralidae), on the behaviour of the parasitoid *Bracon hebetor* Say. (Hym., Braconidae). *Journal of Applied Entomology*, 122: 33-35.
- Strand, M. R. and Godfray, H. C. J.** (1989). Superparasitism and ovicide in parasitic Hymenoptera: theory and a case study of the ectoparasitoid *Bracon hebetor*. *Behaviour Ecology and Sociobiology*, 24: 421-432.
- Yu S.H., Ryoo M.I., Na J.H., Choi W.I.** (2002). Effect of host density on egg dispersion and the sex ratio of progeny of *Bracon hebetor* (Hymenoptera: Braconidae). *J. Stored Prod. Res.* 39 (4): 385-393.

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