



BREEDING BIOLOGY OF THE FRESHWATER SNAIL *Limnaea truncatula* OF BINDUSARA RIVER AREA BEED

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Abstract: The Breeding Biology of Snail *Limnaea Truncatula* was studied for a period of One year. The snail attains first maturity at the end of its first year of life. The breeding activity is continuous excepting during monsoon season. The population appears to be sexually balanced larval abundance showed two peaks in a year.

INTRODUCTION:

The knowledge on breeding biology of organism is helpful in growth of snail. Desai, Duch and Underwood all the above works relate mainly to the pacific and Atlantic form and information on Indo-pacific Species[1,2,4].

The present work was undertaken for a period of one year to study the reproductive cycle of Snail *Limnaea Truncatula*.

MATERIAL AND METHOD:

The freshwater snail *Limnaea Truncatula* were collected every month from the Bindusara River area after breaking the shell the gonadial conditions were recorded based on the colour of the gonad and the length to which the gonads has spread over the visceral coil. Fresh smear examination were also made under the microscope to ascertain. The sex maturity conditions of gonads to determine the minimum size at the first maturity snails were assorted into different size group month wise observation on the larval abundance in the plankton were made.

RESULTS:

As no sexual dimorphism could be noticed externally in snail *Limnaea Truncatula* observation of gonads and smear preparations helped to determine the sex, maturity stages and breeding activity based on the development of

gonads. Percentage of mature male and female showed in table No.1

Month	Mature Female	Mature Male
January	60	80
February	170	215
March	210	190
April	230	180
May	315	310
June	218	190
July	250	189
August	195	185
September	180	176
October	103	95
November	190	84
December	40	28

DISCUSSION:

The freshwater Snail *Limnaea Truncatula* has an extended breeding period as evidenced by the occurrence of males and female with developing gonads.

No significant deviation could be noticed in the sex ratio of *Limnaea Truncatula* and the population appeared as homogenous and sexually balanced mature males and females in the population were 100% during February, March, June and July showing the peak breeding activity.

The larval abundance also showed two peaks in a year.

Majority of the snails in the size group attain first sexual maturity corroborating them with information on age and growth. It could be inferred that *Limnaea Truncatula* attain maturity of the end of the year of their life span. (Rajgopal 1982)

Similar observation are also made by S. Rajgopal in the pros branch snail *Umbonium vestiarium* [3].

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