

OFT -7

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|----|--|---|
| 1. | Title of On farm Trial                                     | <b>Assessment of Different Insect Control Methods in Nursery &amp; Rearing pond</b>   |
| 2. | Problem diagnosed  | High mortality of Fingerlings due to high infestation of harmful aquatic insect like Ranatra, Notonecta, Girris, Nepa, Cybester etc.  |
| 3. | Details of technologies selected for assessment/refinement | <b>Farmers Practice</b> = Application of Kerosene oil @ 0.25 – 0.5 lit per decimal water area before stocking.<br><br><b>Technology Option I</b> = Application of Soap – Oil Emulsion (soap 72 gm + oil 224 ml) per decimal water area before stocking.<br><br><b>Technology Option II</b> = Option I + Fixing & use of 3ft diameter light trap @ 1 piece per decimal water area for consecutive 4 days in an interval of 20 days |
| 4. | Source of Technology                                       | CIFRI   |
| 5. | Production system and thematic area                        | Nursery & Rearing pond.<br>Fish seed Production   |
| 6. | Performance of the Technology with performance indicators  | Technology option –II showed better performance with respect to control of insect survival of fingerlings, production and return.   |
| 7. | Final recommendation for micro level situation             | This may be recommended use of light trap in nursery & rearing pond to control water insect, better yield and income  |
| 8. | Constraints identified and feedback for research           | It is hazardous to fix up light trap in the evening for 4 days in 20 days interval<br>Eco – friendly water insect control measures to find out  |
| 9. | Process of farmers participation and their reaction        | Farmers participated in collaborative. Mode. The farmers are satisfied with the performance of the technology   |

*Thematic area:* Fish seed Production

Problem definition: High mortality of Fingerlings

Technology assessed: **Farmers Practice** = Application of Kerosene oil @ 0.25 – 0.5 lit per decimal water area before stocking.

**Technology Option I** = Application of Soap – Oil Emulsion (soap 72 gm + oil 224 ml) per decimal water area before stocking.

**Technology Option II** = Option I + Fixing & use of 3ft diameter light trap @ 1 piece per decimal water area for consecutive 4 days in an interval of 20 days

Table: 7 Assessment of Different Insect Control Methods in Nursery & Rearing pond

| Technology option  | No. of trials | Yield component    |               |                 | Disease (%) | Cost of Culture (Rs./ha) | Gross return (Rs/ha) | Net return (Rs./ha) | BC ratio |
|--|---------------|--------------------|---------------|-----------------|-------------|--------------------------|----------------------|---------------------|----------|
|  |               | % of inset control | % of survival | Yield /lakh /ha |             |                          |                      |                     |          |
| <b>Farmers Practice</b> = Application of Kerosene oil @ 0.25 – 0.5 lit per decimal water area before stocking.   | 10            | 41.6               | 63.2          | 1.89            | Nil         | 84000.00                 | 103950.00            | 19959.00            | 1.24     |
| <b>Technology Option I</b> = Application of Soap – Oil Emulsion (soap 72 gm + oil 224 ml) per decimal water area before stocking.                                  | 10            | 77.0               | 70.7          | 2.12            | Nil         | 88420.00                 | 116600.00            | 28180.00            | 1.32     |
| <b>Technology Option II</b> = Option I + Fixing & use of 3ft diameter light trap @ 1 piece per decimal water area for consecutive 4 days in an interval of 20 days | 10            | 89.24              | 79.34         | 2.38            | Nil         | 91700.00                 | 130900.00            | 39200.00            | 1.48     |
| <b>SEM±</b>  |               | <b>3.8331</b>      | <b>1.338</b>  | <b>.0663</b>    |             |                          |                      |                     |          |
| <b>CD at 5%</b>  |               | <b>6.64</b>        | <b>2.32</b>   | <b>0.11</b>     |             |                          |                      |                     |          |

**Results:** Control of insect in Option- II is 214.52 % & 115.9 % higher than farmers practice & Option –I respectively. Survival of fingerlings in Option- II is also 214.52 % & 115.9 % higher than farmers practice & Option –I .Technology Option –II shows highest production & net return