

Growing conditions for azolla

Azolla prefers shade and requires light (30-50% light required for its growth) for photosynthesis. Azolla is a water based crop; one should ensure at least 5 inches of water in pond for proper growth. Azolla grows well where the ideal temperature range is 20-35°C. It requires a water pH value of 5 to 7 and relative humidity of 80-90%.

Steps in azolla cultivation

- 1) Size of the tank depends quantity of feed to be harvested. For small holders a pond of about 2m length and 1m width is sufficient. The ground is levelled and bricks are laid in required dimension.
- 2) Old plastic sacs or sheets are placed in the bottom of the pond
- 3) Then the pond is covered with 150 gauge durable plastic sheets
- 4) Secure sides of the plastic sheets by placing bricks over the side walls
- 5) About 25 kg of clean and fertile soil is spread uniformly across the pond
- 6) Then, a mixture of 5 kg cowdung and 30g rajphos/musoorie phos is applied uniformly
- 7) Water is maintained at a depth of 10 cm in the pond
- 8) 500g of azolla culture is required per square meter of the pond
- 9) Azolla will fully cover the pond by 1-2 weeks and can start harvesting it







Harvesting of Azolla

Azolla will be ready for harvest by 2-3 weeks. Plastic sieves can be used for harvesting. One can obtain an average of 1kg azolla per day from a pond of above mentioned dimensions. Harvested azolla can be fed directly or mixed with nutrients and fed to livestock like cattle, sheep, goat, poultry etc. Azolla can also be fed in dry forms. The leaves are to be cleaned with fresh water before feeding.

Maintenance of azolla

- Apply 1kg cowdung and 10-20g rajphos once in 2 weeks
- Remove one fourth of water from the pond and refill it with fresh water once in 2 weeks
- Remove the soil and add 5 kg fresh soil to the pond
- The pond should be emptied once in 6 months and cultivation of azolla is restarted with fresh culture and soil

Care to be taken

1. Maintenance of pure culture free from contamination is essential for good yield.
2. Azolla should be harvested regularly to avoid overcrowding.

3. Temperature is an important factor for good growth. It should be around 35 degree Celsius. The fodder plot is to be covered with a plastic sheet in cold regions so as to reduce the impact of cold weather.
4. Places with direct and adequate sunlight should be preferred. A shady place yields less.
5. The pH of the medium should be between 5.5 to 7
6. Suitable nutrients such as cow dung slurry, micronutrients should be supplemented as and when required.

Reference

- <https://www.agrifarming.in/azolla-cultivation-information>
- http://agritech.tnau.ac.in/banking/nabard_pdf/Azolla%20Cultivation/Model_project_on_Azolla_cultivation.pdf
- <https://agricultureguruji.com/azolla-cultivation/>

video

- <http://www.kau.in/video/8646>