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### DISTRIBUTION AREAS OF THE AZOLLA PLANT AND BEYOND WAYS TO USE.

#### Tokhirov Bakhtiyor Bakhshullaevich<sup>1</sup>, Yusupov Jamshid Ismatovich<sup>2</sup>, Raupova Mehri Haydarovna<sup>3</sup>

Associate Professor Bukhara State University, Department of Biology<sup>1</sup>, Master student Bukhara State University, Department of Biology<sup>2</sup>, Teacher Bukhara State University, Department of Biology<sup>3</sup>, **E-mail:** toxirsayfiyev0@gmail.com **E-mail:** jamshidy070@gmail.com

**Abstract:** Currently, the world's population is growing, which in turn increases the demand for wastewater treatment and the production of quality protein products. The azole plant can be used to solve these problems. Azole can be used to treat contaminated water and as a feed in fishing. This article gives you a brief overview on azaleas and how to grow them.

Keywords: azole, crustacean, spores, native aquatic plant, red, nitrogenous plant.

#### Introduction

Azola is a group of aquatic, spore-forming perennial plants belonging to the crustacean family. There are lateral roots under the water and thick leaves on the water. There are 6 types of azole. The number of fossil species is about 50. Some of the azolas are common in the tropics of present-day South America, Africa, Southeast Asia, and Australia. Fossil remains of azole (spores, leaf traces, and megaspores) are found in layers from the Cretaceous to the Pleistocene. They are found in Cretaceous in western Kazakhstan, in the Eocene in India, in the Ustvurt, and in the Oligocene in Kazakhstan. Azolla species are used to increase soil fertility due to their nitrogen content. It is a common aquatic plant in Tasmania. This is common behind farm dams and other water bodies. Plants are small (usually only a few cm in length) and float, but can be abundant and form large beds. The plants are usually red in color and have small, water-resistant leaves.



Azolla floats on the surface of the water with the help of many tiny, tightly connected scalelike leaves hanging from the surface of the water. They form a symbiotic relationship with the cyanobacterium Anabaena azollae, which binds atmospheric nitrogen. The plant can easily colonize freshwater areas and grow at a great rate - doubling its biomass every two to three days. The limiting factor inherent in its phosphorus. Abundance growth is of phosphorus, for example due to euphoria or chemical flow, often leads to Azolla blooms. Unlike all other known plants, its symbiotic microorganisms are passed directly from generation to generation. Azolla is completely



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dependent on the host because several of its genes are lost or transferred to the nucleus in Azolla cells.

Azolla reproduces sexually and asexually (by division). Like all ferns, sexual reproduction leads to the formation of spores, but other members of this group, Azolla, produce two species. During the summer, many spherical structures called sporocarps appear at the base of the branches. The male sporocarp is green or reddish in color and resembles the egg mass of an insect or spider. It is two millimeters in diameter and has many male sporangia. Male spores (microspores) are extremely small and are formed within each microsporangia. Microspores adhere to compounds called masses. Female sporocarp are quite small, containing one sporangium and one functional sport. The individual female spores are called megaspores because they are much larger than the male spores. Azolla has microscopic male and female gametophytes that develop within the male and female spores. one has one egg. The microspore forms a single antherid male gametophyte that produces eight swimming sperm. Thorny gloxidia in male spore clusters causes them to adhere to female megaspores, thereby facilitating fertilization.

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