

## Effect of *Azolla* as organic compost on dry matter yield and chlorophyll content of Sarpagandha plants

■ NIKHIL AGNIHOTRI AND NARENDRA MOHAN

### SUMMARY

Sarpagandha (*Rauvolfia serpentina*) is a well known medicinal plant of family Apocynaceae. Present study deals effect of *Azolla* as organic compost on growth and composition of sarpagandha (*Rauvolfia serpentina* L.). Sarpagandha plants were grown on soil pot culture conditions and treated with different doses of *Azolla*. After 100 days of cultivation sarpagandha plants were studied for dry matter yield, chlorophyll contents. Thus, *Azolla* can be better organic compost for the growth and composition of sarpagandha.

**Key Words :** Organic compost, *Azolla*, Sarpagandha, *Rauvolfia serpentina* L.

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Farming is man's oldest occupation. Since the very early times of human civilization, man started cultivating profitable crops for his living. He arranged plough and oxen for ploughing, constructed wells and ponds for irrigation, learnt how to store the agricultural products properly and safely, found ways of controlling the insects that were harmful for the agricultural products, he used manures to increase the agricultural yield, tamed animals such as cows, buffaloes and goats in order to get continuous supply of manures, and also got ghee, milk etc. from them. Moreover, man worshipped the Earth assuming her as 'Mother Earth'. He learned all these activities through the experiences of a large number of generations, and all the information passed from one generation to other.

Agricultural methods prevailing throughout the world are based on biological processes. Farmers in agriculture based country like India are using biological manures in farming since

thousands of years. There has been a strong relation between Indians and farming and cattle rearing. On the one hand, animals such as cows and others provide milk along with good organic manure; on the other hand, oxen were used for ploughing the fields, transporting heavy materials etc. It has been very rare in human history that a farmer has faced a lack of food material for his own living. Contrary to this, a farmer was always capable of providing fruits, flowers, milk, ghee, and cereals for many others. There have been no evidences of malnutrition, starvation, unemployment and poverty before the establishment of the British rule in India. It was during the British rule that the Indian farming started facing diminution, Indian farming along with Indian industries diminished consecutively, and the conditions became so worse that the Indian farmers became incapable of producing sufficient food according to the need of the country.

During the sixties after independence in India, new changes took place in the conditions and direction of Indian agriculture with the beginning of the Green revolution. Use of developed breed of seeds, chemical fertilizers and insecticides was promoted in order to increase the production of food materials which resulted as per the expectations, and India became self-dependent in the field of food production. Once dependent on foreign assistance for the likes of PL480, India started exporting food materials to a number of countries of

### MEMBERS OF THE RESEARCH FORUM

#### Author to be contacted :

NIKHILAGNIHOTRI, Paryavaran Sodh Ekai, Department of Botany, D. A. V. College, KANPUR (U.P.) INDIA  
E-mail: [nikhilagnihotri2020@gmail.com](mailto:nikhilagnihotri2020@gmail.com)

#### Address of the co-authors:

NARENDRA MOHAN, Paryavaran Sodh Ekai, Department of Botany, D. A. V. College, KANPUR (U.P.) INDIA