

ECOLOGY CONSERVATION OF INSECTIVOROUS MEDICINAL PLANT *DROSERA* THROUGH TISSUE CULTURE

SUPRIT PRADHAN and SUSHIL PRADHAN

Green Paradise,

Plot No. 116 (1), Vivekananda Nagar,

Sonepur - 767017 (Odisha).

E-Mail : drshushilpradhan@gmail.com

Insectivorous medicinal plant *Drosera* belongs to the Family of Droseraceae, Order Caryophyllales, Dicotyledoneae, Angiospermeae. It is locally called "Patkanduri" (Odia), "Mukhajali" (Hindi), and "Sundew" (English). India harbours its three species. From Odisha only *Drosera burmannii* Vahl. is being reported.

This is a small red colour annual herb with white pentamerous flowers completing its life cycle during September - March and dies in March first week, due to hot climate. Local village physicians (Kabiraj and Baidyas) use this plant for the treatment of the cold and cough in the children in rainy season. In the present field investigation, an attempt has been made to understand its unique reproductive phase and life cycle, thereby planning for its conservation and propagation through various techniques of tissue culture and biotechnology.

Drosera was firstly reported from Odisha in the year 2011, from Arjunpur Reserve Forest area of Sonepur in the district of Subarnapur, in shady moist places of running water stream. It is an interesting rare insectivorous medicinal plant frequently used by the local physicians. Until now, 194 species of *Drosera* are recorded all over the world and India harbours three species. Odisha has only one species as reported in this paper.

Present investigation is mainly a field study with some laboratory work for cytological investigation. Until now the chromosome number of this species has not been reported. So it is intended to investigate the cytological work to find its chromosome number, thereby planning for its conservation and propagation through various techniques of tissue culture and sustainable biotechnology.

During September 2015 - March 2016, weekly once the status of the plant *Drosera burmannii* Vahl. was observed. Growth of the plant is maximum during December and January of the next year, and afterwards the plant dies, perhaps due to dry soil. During September, the plant starts growing with beautiful white flowers. Plants were studied for their genome investigation. Its chromosome number (2n) is yet to be reported. The plants are annual but being tried to grow perennially, which is successful in the laboratory con-

ditions, but not in the field conditions yet.

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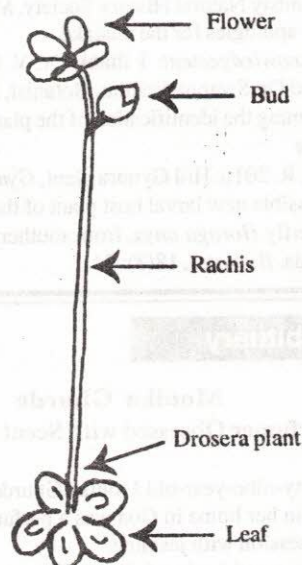


Fig. 1. - *Drosera burmannii* (morphology).