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Cultivation of *Schoenocaulon officinale* for Improving the Procurement of Raw Material: An Ongoing Project

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Abstract

Schoenocaulon officinale (Schltdl. & Cham.) A. Gray ex Benth., known as Sabadilla, is used in folk medicine since ancient times. The agents, belonging to the alkaloids of the veratrum group, are reported to treat skin-infecting fleas, lice, and mites while in homeopathy medicine is used against flu and fever. It is also known as natural insecticide to treat ectoparasites in animals. At present, pharmaceutical enterprises strive for extending the use of *S. officinale* but face many problems regarding quantity and quality of seeds collected from the wild. Therefore, the objective of this project is to establish a seed production system under greenhouse conditions. Seeds of *S. officinale* were collected in January 2008. The tetrazolium test showed a viability of 97 %, the germination test at 20°C showed 97 % germination without any specific treatment for breaking dormancy. Seeds obviously show no dormancy. Further tetrazolium and germination test will be performed at regular intervals during storage to evaluate storability of the orthodox seeds. Cooking at different temperatures will be checked as mean for accelerating and uniforming germination. Seedlings will be grown in greenhouses under different temperatures and light regimes to evaluate optimum development conditions for flowering and seed set. Plant biomass will be weighted regularly to identify optimum growth conditions.

The comprehensive knowledge about the demands of the species during the early development stages will be the basis to initiate species cultivation. Since seed wild collection is currently increasing, future domestication of the species will help to reduce collection pressure on wild populations.

Keywords: Domestication, insecticide, Liliaceae, medicine, veratrum, wild collection

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