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## Geographical Distribution of the Species *Schoenocaulon officinale* in Venezuela

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### Abstract

*Schoenocaulon officinale* (Schltdl. & Cham.) A. Gray ex Benth. (Liliaceae), known under the common name ‘sabadilla’, seems to originate from Mexico and was spread southward by Native American Indians. The species contains alkaloids of the veratrum group and since ancient times, has been used as a natural insecticide. It also has medicinal properties which have been used to treat circulatory and hypertensive disorders. *S. officinale* has been reported to occur in Venezuela; however, little is known about the geographical distribution of the plant which is a prerequisite to undertake wild seed collection.

The objective of the study presented here was to assess the distribution of the species in Venezuela in order to evaluate the feasibility of undertaking wild seed collection. An ecogeographical survey was conducted to identify ecological areas where the species grows, and based on this information; two sites were selected to estimate the species’ population density under natural conditions.

As a result of this survey, it is shown that 1) *S. officinale* grows in four states, *i.e.* Aragua, Distrito Capital, Miranda, and Trujillo, 2) the species is not native to the country but it was probably introduced, and 3) the sampled areas have a mean population’s density of approximately 8.75 plants m<sup>-2</sup>; which represents a minimum potential seed harvesting amount of 83.63 kg ha<sup>-1</sup>. With these results, it can be concluded that wild seed collection of *S. officinale* in Venezuela is feasible. To achieve this goal, strategic cooperation with Venezuelan institutions should be taken into consideration in order to ease the access to the plant genetic resources.

**Keywords:** Insecticide, Liliaceae, medicine, natural distribution, veratrum, wild collection