Phytochemical Properties and Ethnobotany of *Selaginella bryopteris* (L.) Baker. – "The Sanjeevani"

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ABSTRACT

Selaginella bryopteris (L.) Baker. is a vascular cryptogam. It has a highest degree of heat and drought tolerance capacity and also has several medicinal properties. Time to time several experiments were designed to decipher its anti protozoal activity as well as its heat resistant capacity. The plant is also very popular as "Sanjeevani" and is used in various therapeutic medicines. Traditionally, the plant is used in jaundice treatment, in easy delivery of women and restoring menstrual regularities, in relief from heat stroke and burning sensation during urination. Other than these traditional uses, our field study, in two districts of West Bengal from where it is reported, explored that *S. bryopteris* is also used in local liquor to increase hallucination property. We have also gathered some ethnomedicinal uses. Local 'ojha's and 'kabiraj's prescribed this plant to procure menstrual problem and erectile dysfunction and many other disorders. Our objectives were to collect ethnomedicinal uses of this very important herb and to explore its major chemical composition, so that one can characterized the active principles further for human benefits and can be manufactured in large scale production after establishing the pharmacognosy. We have performed phytochemical analysis and screening tests of this plant for exploring its medicinal potentiality. Phytochemical analysis revealed that *Selaginella bryopteris* L. Baker. possesses 38.4 mg/g protein, 118.075 mg/g insoluble carbohydrate, 8.4 mg/g soluble carbohydrate, 1.423 mg/g chlorophyll and 0.6 mg/g phenol. Screening tests for secondary metabolites, *viz.*, alkaloids, flavonoids, steroids, saponins, cardiac glycosides and tannins showed positive result, whereas anthroquinone showed negative result.

Key words: Chemical analysis, ethnomedicine, screening test, traditional use, vascular cryptogams

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