



## **Establishment of *in vitro* Shoot Induction and an Evaluation of Antioxidant and Phytochemical Properties of *Mucuna pruriens***

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### **ABSTRACT**

Therapeutic plants have filled in as a steady wellspring of medicaments, which have incredible viability and interest in the treatment of different sicknesses. One of the plants that merit consideration is *Mucuna pruriens*. *M. pruriens* is a fundamental healing plant filling in the shrubs, supports, and dry deciduous woods all through India. It is utilized in conventional homeopathic medication arrangements in India for the treatment of male virility and neurological infections. It is recorded that *M. pruriens* includes L-3, 4-dihydroxy phenylalanine (L-DOPA) a synapse antecedent, utilized for the fix of Parkinson's infection. It has been likewise utilized as a customary food in certain nations. The metal and phytochemical examination showed that seeds of velvet bean or *M. pruriens* can be consumed securely, in light of the fact that their fixation was beneath the most extreme level required. Phytochemical investigation exhibited the occurrence of steroids, tannins, saponins and alkaloids in the methanol concentrate of the plant. However, the primary phenolic part of *M. pruriens* is L-DOPA. It disconnects might be of remedial worth with respect to a few pathologies however this examination additionally worried about the *in vitro* shoot acceptance of *M. pruriens* in light of the fact that the enormous interest of L-DOPA is mostly welcomed by the drug business by the extraction of the build from wild populaces has prompted its deficient accessibility in normal condition.

**Keywords:** Male virility, *M. pruriens*, L-Dopa.

### **INTRODUCTION**

*Mucuna pruriens* Linn (Fabaceae), otherwise called cowhage organic product, kapikacho, or kevach is the most normally utilized ayurvedic drug. *M. pruriens* is an under-used vegetable species filled transcendently in Asia, Africa, and certain pieces of America (Vadivel and Janardhanan, 2000). Among the wild vegetables, the class *Mucuna* is far-reaching in hot, humid, and sub-tropical regions of the biosphere and is measured as an elective protein source. Primarily in India, this vegetable has been considered as a therapeutic plant filled in certain pieces of Madhya Pradesh, Uttar Pradesh, Andaman and the Nicobar Islands. It normally fills in the entire tropical

fields of India from the scope of the lower Himalayans (Saini et al., 2021). Inhabitants of these states utilize these vegetables as customary medication and for the plan of conventional food items. It develops best in regions where yearly daytime temperatures are inside the scope of 20 - 30°C and Annual downpour fall going 1,000-2,000 mm is great for the development of *M. pruriens*. It is an important therapeutic plant used to deal with a few illnesses like jungle fever, malignant growth, epilepsy, Parkinson's infection, looseness of the bowels, helminthiasis, ulcer, fruitlessness, snakebite, scorpion stings, and elephantiasis (Lampariello et al., 2011; Okafor et al., 2013; Oyeyemi et al., 2019). The plant fills in as a cover crop normally