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**Abstract:** An efficient protocol for rapid in vitro propagation of valuable medicinal plant *Aloe barbadensis* by using shoot tip as explants were done. *Aloe barbadensis* Mill. is likely to become a major source of a number of medicinal products of high value in the coming future. It is imperative to convert *Aloe barbadensis* from wild plant to plant suited to meet the huge demand of the industries. Therefore, efficient and fast mechanized production need to be established for *Aloe barbadensis* to address the need of the present time. Understanding the biology of *Aloe barbadensis* plant and biochemistry of the sweet glycosides a prerequisites for conversion of *Aloe barbadensis* to a modern crop. Since ancient times, the plant has been an exemplary source of medicines. Ayurveda and other Indian literature mention the use of plants in treatment of various human elements India has about 45000 plant species and among them, several thousands have been claimed to possess medicinal properties While *Aloe* is best known today for its ability to treat burns, it has been used for treating stomach disorders, headache, constipation, influenza and fever, colic, kidney ailments, ringworms skin, hemorrhoids, wounds, dystrophy, blistering, sunburn, menstrual problems, insomnia, snakebite, hair loss, meningitis and other elements. Therefore efficient and fast mechanized production needs to be established for *Aloe barbadensis* to address the need. The present work deals with the establishment of a viable protocol for this valued medicinal plant. Out of nine different hormonal regime tried for induction of multiplication on shoot explants, MS supplemented with 6.0 mg/l BAP + 0.2 mg/l IAA + 100.0 mg/l AdSO<sub>4</sub> was found best to induce maximum number of plantlets per explants. For rooting, increase in auxin (IAA) and decrease in cytokinin (BAP) and adenine sulphate was found effective. The in vitro grown plantlets were successfully transferred to green house for hardening.

**Description:** Optimization of Media for Micropropagation of *Aloe barbadensis* Mill.

**Subject:** Biotechnology

**Theme:** Optimization of Media for Micropropagation of *Aloe barbadensis* Mill.

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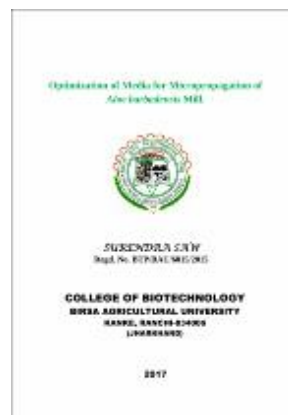
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