



सीएसआईआर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान  
पालमपुर – 176 061 (हि.प्र.)

**CSIR-Institute of Himalayan Bioresource Technology  
Palampur – 176 061 (H.P.)**



CSIR-IHBT invites Expression of Interest (EOI) for

**“Micropropagation of *Ferula assa-foetida* (afghani heeng) for secondary metabolite production”**

CSIR-IHBT invites expression of interest (EOI) from interested parties from Industries / SMEs / Progressive Entrepreneurs for licensing technology for a Commercial micropropagation protocol of *Ferula assafoetida* (afghani heeng)

*Ferula assa-foetida* (heeng) is a monocarpic perennial medicinal plant belonging to the family Apiaceae and is native to the high-altitude arid regions of Afghanistan. India is the major consumer of asafoetida (heeng) as well as its secondary supplier/re-exporter. The global asafoetida market is projected to reach approximately US\$ 850.835 million by 2029, growing at a compound annual growth rate (CAGR) of 8.8%. It is rich in resin (40–64%), endogenous gum (around 25%), and volatile essential oils (10–17%), which contain coumarins, sesquiterpenes, and terpenoids known for their diverse therapeutic properties. In vitro propagation offers an effective and viable strategy for the conservation, sustainable cultivation, and enhanced phytochemical production of this species.

Some of the Salient Features are as:

- Developed a high-frequency and reliable micropropagation system for producing uniform, healthy, and quality planting material for *Ferula assa-foetida* through somatic embryogenesis, addressing poor natural germination and propagation constraints.
- Optimized protocol for future biotechnological applications, including secondary metabolite production, genetic improvement, and climate-resilient cultivation strategies.

The application should include details of company profile and marketing strategies. The selected parties shall be called for discussions. Interested parties may send their Expression of Interest, in a sealed cover superscripting “Expression of Interest” addressed to

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