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Review on: Revolutionizing Farming of *Asafoetida* with HVAC Technology

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Abstract: *For many years, asafoetida—a gum-like material with a strong aroma—has been utilized in traditional medicine and cuisine. The Ferula plant from which it is derived, however, is difficult to grow since it needs certain growth circumstances. The viability of growing Ferula asafoetida in a controlled environment with an HVAC system was investigated. Two groups of Ferula plants were grown by the researchers using various techniques: one group was outdoors, while the other was housed in a greenhouse with an HVAC system that kept the temperature at 20–25°C and the humidity at 50–60%.The findings demonstrated that compared to plants cultivated outdoors, Ferula plants grown in the greenhouse with the HVAC system generated much more gum-like resin. The plants produced in the greenhouse also exhibited a more regular development pattern and fewer insect and disease issues. The study concludes that cultivating Ferula asafoetida in a climate-controlled environment using an HVAC system can boost yields and enhance plant health. This may help the commercial asafoetida industry and make this priceless crop more available to farmers in areas with challenging growing circumstances. To ascertain the ideal growth environments and the viability of this strategy economically, additional study is necessary.*

Keywords: Cultivation of *Asafoetida*, Medicinal use, HVAC System

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