

RAUWOLFIA SERPENTINA BENTH. TISSUE CULTURE AS SOURCE OF ANTIARRHYTHMIC ALKALOID AJMALINE

Areas of Application

The tissue culture is used to produce herbal remedies for the treatment of heart ventricular arrhythmias and for the prevention of cardiac arrhythmias in the case of excessive physical exertions (astronauts, pilots, submarine sailors, athletes, etc.)

Specification

The strain of *Rauwolfia serpentina* tissue culture is ajmaline monoproducer. *Rauwolfia serpentina* callus growth cycle is 45–50 days. The yield of dry biomass is 25–30 g per 1 liter of medium. Ajmaline content is 1.2–2.1% on dry biomass basis

Advantages

In Ukraine, there is no ajmaline production. Its synthetic substitutes have serious side effects. The strain of *Rauwolfia serpentina* tissue culture has no analogs in the world both as ajmaline monoproducer and in terms of its performance. The proposed ajmaline costs about 30% lower as compared with the world market price

IPR Protection

IPR3



General view of *Rauwolfia serpentina* Benth. tissue culture, the ajmaline monoproducer

Stage of Development. Suggestion for Commercialization

IRL4, TRL4

Technical ajmaline in limited quantities (100 g) provided upon request. Seeking partners for mass production of ajmaline

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