

Actual Problems in Chemistry and Biotechnology of Phytoecdysteroids

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Some plants produce ecdysteroids that are structurally identical or closely related to moulting hormones of Insects and Crustaceans. Phytoecdysteroids have anabolic effect on mammals and are perspective in medicinal use as tonic remedy.

Strategy of plant screening and distribution of ecdysteroids in plant kingdom, the peculiarities of the ecdysteroids accumulation in plants and plant cell cultures are considered. Possible participation of phytoecdysteroids in hormonal and trophic relationships between plants and animals is discussed. Bio-mimic principal of the creation of ecdysteroid containing liposomes is proposed. Situation in technology achievements, market and perspectives of practical use of phytoecdysteroids are discussed.

Aspects of international integration and co-operation in the frames of INTAS project "Plant secondary metabolites and insect-plant relationships: distribution and identity of ecdysteroid agonists and antagonists in two geographically distinct Floras" (N 96-1291) will be also touched on in this report.