

Invasive alien species – potential cheap resources of plant substances for medicinal use

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Some alien species demonstrate rather invasive behaviour. They have high tolerance of various habitat conditions and potent propagation ability. They not only over-compete the local vegetation but suppress the seed development of the native plants. In the newly invaded habitats they might not have suitable herbivores to control their populations. The only effective enemy might be *Homo sapiens*. Humans are known with their destructive power once an object has become significant for industrial utilization.

The aim of this study is to review research data and reveal the potential of *Ambrosia artemisiifolia* L., *Erigeron canadensis* L., *Xanthium strumarium* L. and *Dittrichia graveolens* (L.) W. Greuter, as cheap sources of compounds with valuable pharmacological activities.

Ethnobotanical data from their habitats reveal promising medicinal potential. A growing body of scientific literature points to their therapeutic properties. Valuable chemical constituents of these alien invasive species are sesquiterpene lactones, essential oils etc. They possess different activities such as anticancer activity, as well as antitussive, antifungal, antiinflammatory, antinociceptive, hypoglycaemic, antimutagenic, antioxidant, antitrypanosomal, CNS depressant activity, diuretic effects, contact dermatitis, insecticidal and herbicidal activities, hepatoprotective and hypolipemic activities etc.

Due to the fact that these are aggressive invasive species, they can provide abundant and cheap resources rich of plant chemical constituents which can be utilized for therapeutic purposes. Additionally, exploitation of the biomass for medicinal use might contribute to relieving the destructive impact of these species on natural habitats.