



Biologically Active Chemicals with Pesticidal Properties in Some Sudanese Plants[#]

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Abstract: Natural chemical compounds found in plants which termed phytochemicals, represent untapped reservoir of biologically active ingredients required for different purposes. Actually, plant derivatives include both primary and secondary metabolites of plant. The former are important for growth, development and reproduction of plants, whereas the latter are found in certain plant species and may play some other functions than the growth and development. However, these secondary metabolites are proved to be of prime importance in the defense mechanisms of plant against phytophagous species. This is reflected through various biological activities including repellent, antifeedant, toxic and hormonal actions on such plant feeders. Accordingly, several plant extracts were found to be potent in pests and diseases control. These plant derivatives are generally termed plant natural products, biologically active compounds, biopesticides or botanical pesticides. It is worthy to state that great concern has been given to the field of botanical pesticides during the last three decades; hence several plant extracts were screened and formulated in commercial natural products. This paper sheds light on the important classes of active compounds detected in some indigenous plants, and demonstrated the pesticidal activities of these compounds against agricultural pests and diseases and pests of public health. Finally, the importance of research followthrough and scientific cooperation in the field of phytochemical screening was stressed on the light of the country's richness in bioactive flora.

Keywords: *Phytochemicals, secondary metabolites, plant extracts, active compounds, botanical pesticides, botanical mosquitocides and botanical molluscicides.*

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