

Inhibition of Germination and Growth by Essential Oils

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The phenomenon of inhibition of growth and germination of plants by other plants has been known for many years. Until today, the research on this subject has addressed mainly the ecological aspect. Now, however, with the growing awareness of the need to replace synthetic herbicides with natural products, because of health, environmental and ecological considerations, the need for applicable research has become urgent. In this article the main features of the research performed and data accumulated until recently are reviewed. This review presents the ecological aspect but emphasizes the research into the mode of action of the inhibitors, which, by its nature, is potentially applicable. Our preliminary results are also presented, but they are only first steps in isolation of the inhibitors and their application as natural herbicides.

Key words: Allelopathy, allelochemicals, essential oils, aromatic plants, seed germination inhibitors, terpenes.

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