



Bioactive compounds in agricultural soils.

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This volume looks at the impact that different cropping systems and tillage have on soil's biologically active substances. It considers how phytotoxins accumulate and can inhibit the development of cultivated plants. Coverage explores the continuous cropping of rye, crop rotation, no tillage, and conventional tillage. It offers a comprehensive, comparative approach to allelopathic plant-soil interactions. The authors focus on free and bounded biologically active substances such as amino acids, auxins, humic and fulvic acids, transient radicals, and enzymes in light sand soils fertilized with different mineral and organic fertilizers. The chapters address fundamental questions relevant to the environmental challenges we face today and will deal with in the future. The results involve asking basic questions motivated by soil's chemical and biochemical processes. The answers will lead to the improvement of the quality of soil's organic matter, which, in turn, can lead to increased crop yields. Readers will come to understand the relationship between ecological processes and environmental change on individual levels of biocomplexity as well as on systems in their entirety. The title is ideal for students and teachers for laboratory practical classes. Soil scientists, biochemists, chemists, plant ecophysiologicals, "Natural Products" organic chemists, and other environmental scientists and specialists will also find it useful.

Słowa kluczowe

Allelopathy, Biologically Active Substances, humic acids, Organic nitrogen in soils, Organic carbon in soils, Phytohormone, Plant-Plant Interface, Plant-Soil Interface

Adres publiczny

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