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LIGNIN IN CROP CULTIVATIONS AND BIOREMEDIATION

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Abstract

It is known that in the natural conditions of organic carbon cycle lignins represents the main source of humus formation. This complex transformation could be accelerated by chemical and biochemical modification of lignins. Along with this natural aromatic polymer, the polyphenols can be considered. Based on chemical and biochemical modification of lignins and polyphenols and the properties of resulted products they can be used to improve soil fertility and to perform different kind of bioremediations. In this review the main possibilities to manipulate these processes are presented.

Keywords: lignins, polyphenols, nonconventional fertilizers, slow release agents, growth stimulators, sequestering agents, soil conditioners, compost activators, bioremediation

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