

Abstract

Dithiocarbamate derivatives are compounds that combine derivatives of hydrazides with carbon disulfide and potassium hydroxide and absolute ethanol. Extensive studies on hydrazides and their derivatives show diverse biological activity and good therapeutic properties. Recently, hydrazide compounds have been highly regarded for their biological properties such as antifungal, anticonvulsant, anti-inflammatory, antimalarial and antituberculosis drugs. For this purpose after the synthesis of the compounds from the compounds the melting point spectrum IR and NMR were taken. The effects of compounds in different concentrations on the growth and physiological indices of wheat, including phenol and flavonoid were investigated. The amount of phenolic compounds was measured by folin covalent and flavonoid compounds using aluminum chloride colorimetric method. In general the result showed that the highest amount of phenol, flavonoid and antioxidant, dry weight, root and shoot weight, root and shoot length were related to compound phenyl hydrazine, 4-Bromophenyl hydrazinium chloride. Also dithiocarbamate compounds showed different antibacterial and hundred fungal effects at different concentrations. All the synthesized compounds exhibited antibacterial and antifungal effects against plant pathogens. Also dithiocarbamate compounds showed different antibacterial and hundred fungal effects at different concentrations.

Keywords: Dithiocarbamate, Wheat, Fungi, Physiological indicators, MIC, MBC



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Effect of different concentrations of dithiocarbamate derivatives on the physiological indicators of wheat and their effect on plant disease fungi

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