

Abstract

Dithiocarbazinate 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, antiinflammatory, 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 potassium 2-(4-nitrobenzoyl)hydrazine-1-carbodithioate. Also dithiocarbazinate compounds showed different antibacterial and hundred fungal effects at different concentrations. The best compound that showed the antibacterial effect was compound potassium 2-(furan-2-carbonyl)hydrazine-1-carbodithioate, which showed the highest antibacterial effect at the lowest concentration. The best synthesized compound with a good antifungal effect is compound potassium 2-acetylhydrazine-1-carbodithioate. In general depending on the type of compounds showed different biological effects. So it is important to optimize the and type and concentration of compounds.

.Keywords: Dithiocarbazinate, Wheat, Fungi, Physiological indicators.



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Title

**Effect of different concentrations of dithiocarbazinate
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