

# Bioactive Compound Produced by *Ulva lactuca* and Antifungal Activity against Pathogenic Fungi

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**Abstract:** Seaweeds having antifungal activity against different pathogenic fungi (*Aspergillus oryzae*, *Rhizopusartocarpi* and *Fusariumoxysporum*) collected from coastal area of Kunkeshwar, Sindhudurg district of Maharashtra. The main aim of study was to determine antifungal activity of extracts. The ethyl acetate (26.66mm), methanol (18.59mm) and ethanol (18.36mm) extracts demonstrated the highest activity against mycelial growth of *Fusarium oxysporum*, significantly higher compared to that of Hexane and petroleum ether. Hexaneethanolic extract shows highest activity against *Rhizopus artocarpi* (15.36mm) and *Aspergillus oryzae* (11.50mm) respectively. Based on GC-MS analyses compounds with antifungal activity were detected such as 3-Pentatriacontane, 7,9-Di-tert-butyl-1-oxaspiro-(4,5) deca-6,9 diene-2,8-dione, Cyclohexane, 1- (Cyclohexylmethyl)-2 methyl, cis, n- hexadecanoic acid and Cyclohexasiloxane, Dodecamethyl. These compounds had good general antifungal activity and might have potential future agricultural applications.

**Keywords:** GC-MS analysis, Antifungal activity, *Ulva*, Seaweeds, *Fusarium*, *Rhizopus*

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