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## Chemical Composition and Phytopharmaceuticals: An Overview of the *Caulerpa* and *Cystoseira* Genera

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### Abstract

In recent years, macroalgae attracted increasing attention from many industries of diverse branches such as plastics, cosmetics, pharmaceuticals, and food. This interest is due to the diverse chemical composition existing within the various macroalgae classes, which offer the possibility of finding a wide array of primary and secondary metabolites with exciting properties and great potential for pharmacological applications.

*Caulerpa* spp. and *Cystoseira* spp. produce a wide array of exciting compounds that have been isolated and showed a broad range of biological activities such as anti-inflammatory, antibiotic, antiprotozoal, antitumor, cytotoxic activities, among others. These compounds present high biomedical potential, constituting natural structures that could serve as scaffolds for designing novel leads for pharmacological purposes. However, *Caulerpa* and *Cystoseira* species and their cosmetic potential are still understudied, which shows a great research opportunity.

### Keywords

Macroalgae

*Cystoseira*

*Caulerpa*

Phytochemical profile

Bioactivities