September 17th, 2021

Dear Dr. Miftahul Ilmi,

I am pleased to submit our manuscript entitled "Biostimulant activity of Sargassum sp. extracts: compositional analyses of phytohormones and bioassay using maize (Zea mays L.)" by Fauziatul Fitriyah, Muhammad Abdul Aziz, Sri Wahyuni, Hana Fadila, Insyiah Meida Luktyansyah, Sulastri, Priyono & Siswanto for consideration as a *Journal of Tropical Biodiversity and Biotechnology* research article.

In this manuscript, we show that seaweed extract of *Sargassum* sp. (origin from Yogyakarta) obtained from acidic, alkali and water-based extraction protocols showed different phytohormones content and biostimulant activity assayed in germination and early growth of maize. Alkali-based extraction protocols from *Sargassum* sp. showed the highest phytohormones content, while the highest maize growth showed by acidic extract. We proposed that other substances contained in the extract, such as fucose-containing sulfated polysaccharides which may promote plant growth.

We believe that our paper is appropriate for publication by *Journal of Tropical Biodiversity* and *Biotechnology* because is linked to the utilisation of tropical organisms in biotechnology. Our manuscript showed a significant finding regarding to seaweed extraction method for production of plant biostimulant which also provide another challenge in the detection and evaluation of other seaweed extract subtances as plant growth regulators.

This manuscript has not been published before and is not being considered for publication elsewhere. We have no conflicts of interest to disclose.

Thank you for your consideration.

Sincerely,

Fauziatul Fitriyah

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