

March 22nd, 2019

Dear Editor,

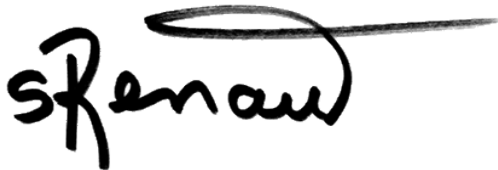
Please find attached our research manuscript entitled "*A commercial seaweed extract structured microbial communities associated with tomato and pepper roots and significantly increased crop yield*". We think that **Environmental Microbiology** is an excellent journal to feature our manuscript that focuses on quantifying changes in productivity and microbial communities following the addition of liquid seaweed (*Ascophyllum nodosum*) Extracts (ANE).

While seaweeds have been used as a source of natural fertilizer and biostimulant for centuries, their effects on soil microbiota remain unclear. Here, we first showed that plant productivity was positively and significantly influenced by the ANE amendment. Then, we used amplicon sequencing targeting fungal ITS and bacterial 16S rRNA gene to quantify Amplicon Sequence Variants and changes in the microbial community structure.

Both bacterial and fungal species composition differed according to the ANE amendment and we identified a number of candidate taxa whose presence was correlated with plant yield increases. As such, these promising microbial candidates linked to the application of liquid seaweed extract may help to enhance crop yield in sustainable agro-ecosystems.

The data of this paper are original and no part of this manuscript has been published or submitted for publication elsewhere. The authors have no competing interests in this study.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Renaut', with a long horizontal flourish extending to the right.

Sébastien Renaut, on behalf of all co-authors

Département de Sciences Biologiques, Institut de Recherche en Biologie Végétale,
Université de Montréal
4101 Sherbrooke Est
Montreal, QC H1X 2B2 CANADA

Potential reviewers

Krishna V. Subbarao <kvsubbarao@ucdavis.edu> (UC Davis, USA)

Peter Belenky <peter_belenky@brown.edu> (Brown University, USA)

Anna Galazka <agalazka@iung.pulawy.pl> (State Research Institute, Puławy, Poland)

James S. Craigie <james.craigie@nrc-cnrc.gc.ca> (National Research Council, Canada)

Balakrishnan Prithiviraj <bprithiviraj@dal.ca> (Dalhousie University, Canada)