

Review of: "Valorization of palm oil wastes into oyster mushrooms (*Pleurotus HK-37*) and biogas production"

Fethya Salem

Potential competing interests: No potential competing interests to declare.

this work is very interesting and the results are encouraging for a double valorization of palm waste, however it remains incomplete, it would be better to characterize the material before and after pretreatment.

Date palm waste is lignocellulosic which makes its degradation a little difficult, hence the need for pretreatment. however it is important to know the effect of each pretreatment, so I would, if possible, complete your work with an analysis of the substrate before and after pretreatment, either by determining the composition of lignin, cellulose, and hemicellulose, or by FTIR which is more precise.

I also advise you to determine the level of fat in your substrate, because a high level of fat has a henibitor effect on anaerobic digestion and also requires pretreatment.

for the composition of biogas, determining the elemental composition of each substrate will allow you to have an idea of the theoretical composition of your biogas.