# CRAMBE ABYSSINICA OIL AS RAW MATERIAL FOR RENEWABLE FUEL PRODUCTION – Review

Francisco Aléxis Dantas Maia<sup>1</sup>, Amanda Gondim<sup>1</sup>, Anne Santos<sup>2</sup>, Aruzza Araújo<sup>1</sup>, Vasco Pinto<sup>1</sup>, and Marcio Souza<sup>1</sup>

<sup>1</sup>Universidade Federal do Rio Grande do Norte

September 20, 2022

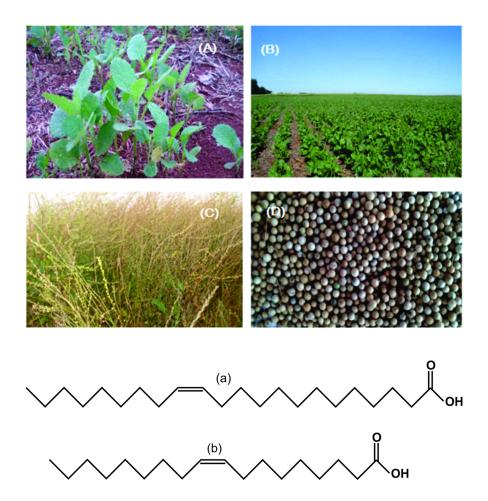
#### Abstract

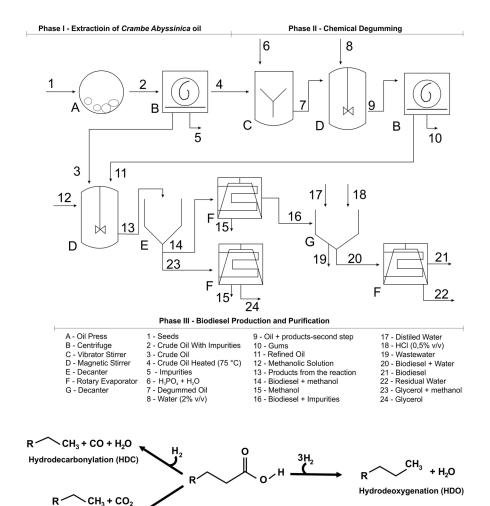
This paper presents information about Crambe Abyssinica Hochst and discusses various aspects of oil planting, extraction and treatment, chemical composition, and the physical and chemical properties of the oil. In addition, it discusses the possibility of its use as a raw material for biofuels. Crambe Abyssinica Hochst is an oilseed from the Mediterranean that has a good oil content in its seed (~ 38%). Other advantages are presented as the short growth period and can be grown in environments considered unsuitable, which are desirable requirements for use in the production of biofuels. Crambe oil has erucic acid as its main fatty acid, which is not edible, so it is an oil that does not compete with the food industry. This crop is already used in the industry in various parts of the world for the production of various products, including biodiesel with oxidative stability considered promising.

#### Hosted file

CRAMBE ABYSSINICA no modelo do Jornal.docx available at https://authorea.com/users/509650/articles/586998-crambe-abyssinica-oil-as-raw-material-for-renewable-fuel-production-review

<sup>&</sup>lt;sup>2</sup>Universidade do Estado do Rio Grande do Norte





#### Hosted file

Decarboxylation (DCX)

 $\label{thm:composition} Table 1 -- \mbox{Main manuscript on Crambe Abyssinica.docx} \quad available \quad at \quad \mbox{https://authorea.com/users/509650/articles/586998-crambe-abyssinica-oil-as-raw-material-for-renewable-fuel-production-review}$ 

## Hosted file

Table 2 - Experimental studies on the culture of Crambe.docx available at https://authorea.com/users/509650/articles/586998-crambe-abyssinica-oil-as-raw-material-for-renewable-fuel-production-review

### Hosted file

Table 3 - Composition of abyssinic crambe oil extracted by.docx available at https://authorea.com/users/509650/articles/586998-crambe-abyssinica-oil-as-raw-material-for-renewable-fuel-production-review