

Valorization of two plants *Melia azedarach* and *silybum marianum* of Morocco in the production of biodiesel

Souâd ALAOUI ISMAILI^{1,2}, Banacer HIMMI², Said KITANE³, Assia SLITA¹, Mohamed ALAOUI El BELGHITI¹

- 1. Laboratoire de Chimie Physique Générale, Département de Chimie, Université Mohammed V, Faculté des Sciences. Rabat. Maroc*
- 2. Filière Techniques de Santé. Institut Supérieur des Professions Infirmières et Techniques de Santé. Rabat. Maroc.*
- 3. Laboratoires de chimie appliquée à l'Ecole Nationale de l'Industrie Minérale. Rabat. Maroc .*

Abstract

The present study gives an overview on two plants; The Milk Thistle (*Silybummarianum*) family of Asteraceae, and Neem (*Melia azedarach*) family Meliaceae. These two plants are very present in Morocco, but they do not have a deserved place among the plant species. They illustrate a double interest: resolution of environmental problems and increasing industrial interest.

This study is part of a contribution from acquisitions of knowledge on the valuation of these two plants. Namely The physical characteristics of seeds, extraction and physicochemical analyzes.

It appears from this study that our results are in good agreement with the dielectric oils and their conversion into biodiesel converges indices of diesel.

Mots clefs: *Silybummarianum*, *Melia azedarach*, Morocco, oil extraction, physicochemical characterization,.