

Oilseeds crops sourcing for green chemical applications

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Oilseed crops now offer sources of essential fatty acids for human consumption. Among them, rapeseed and sunflower provide the most important quantities of oil: last year around 3 million's tons of oil was provided by the French production.

A large amount (67%) of the rape seed oil is dedicated to industry (mainly biodiesel). For sunflower, 80% are used as edible oil.

Diversification occurs for the quality of the oil: oleic versus conventional for sunflower, erucic or high oleic for rape seed. From those fatty acid profiles, news applications are coming now for green chemical applications.

These oils offer indeed an interesting environmental profile (biodegradability, renewable).

News crops could also be used for such application. This paper makes an inventory of potential applications of those different sources of fatty acid. Some have already potential uses (biofuels, lipo-chemistry,), as far as climate is adapted, uses established and the technical practices improve to increase profitability in relation to other productions.