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(54) Title: PROCESS FOR PRODUCING MICROBIAL FAT OR OIL HAVING LOWERED UNSAPONIFIABLE MATTER CONTENT AND SAID FAT OR OIL

(57) Abstract: A process for producing a crude oil having lowered unsaponifiable matter content and/or ester-type sterol content and comprising a highly unsaturated fatty acid as a constituent fatty acid, characterized in that a microorganism capable of producing a fat or oil comprising an unsaturated fatty acid as a constituent fatty acid is cultured in a medium containing a nitrogen source concentration of 2 to 15% within a culture tank equipped with an agitation impeller satisfying the requirement that the ratio of the diameter of agitation impeller (= d) to the inner diameter of the culture tank (= D) is d/D = 0.30 to 0.6.