

Title (en)
FATTY ACID DESATURASES AND MUTANT SEQUENCES THEREOF

Title (de)
FETTSÄUREDESATURASEN UND MUTIERTE SEQUENZEN DAVON

Title (fr)
DESATURASES D'ACIDE GRAS ET LEURS SEQUENCES MUTANTES

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Abstract (en)
[origin: WO9856239A1] Seeds, plants and oils are provided having high oleic acid; low linoleic acid; and low linoleic acid plus linolenic acid; and advantageous functional or nutritional properties. Plants are disclosed that contain a mutation in a delta-12 or delta-15 fatty acid desaturase gene. Preferred plants are rapeseed and sunflower plants. Plants carrying such mutant genes have altered fatty acid composition in seeds. In one embodiment, a plant contains a mutation in a region having the conserved motif His-Xaa-Xaa-Xaa-His, found in delta-12 and delta-15 fatty acid desaturases. A preferred motif has the sequence His-Glu-Cys-Gly-His. A preferred mutation in this motif has the amino acid sequence His-Lys-Cys-Gly-His. Nucleic acid fragments are disclosed that comprise a mutant delta-12 or delta-15 fatty acid desaturase gene sequence.

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