

عنوان مقاله:

Production and fatty acid characterization of DH1025a doubled haploid *Camelina sativa* line

محل انتشار:

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خلاصه مقاله:

Camelina sativa L. as an oilseed plant, belongs to Brassicaceae family, has been indicated in several experiments that need very little water and resistant to chilling injury than other plant oils, especially canola. This Experiment was conducted at Zagros Bioidea Co. Laband Research Field of Campus of Agriculture and Natural Resources. In this research Blaine Greek and Calena cultivars have been crossed. The F1 generation anthers were cultured for doubled haploid lines production. Buds 1–3 mm were removed from the plant and selected for culture. The anthers were isolated and cultured in NLN medium with 120 g/l sucrose. Then cultured anthers were incubated in 25C and dark conditions. After 4 weeks in order to regeneration, the embryos were sub-cultured to B5 medium supplemented with 10 g/l sucrose. The incubation conditions were 25C and 16h photoperiod. The regenerated plants were selfed and seed was produced. Then multiplied the seed and tested in dryland farming conditions. Among the studied lines, the DH1025 showed the best compatibility and performance (1500 kg/ha average seed yield and oil content of about 27.9%). The main fatty acids identified in this line were as α -linolenic acid (ALA) (29.70%), linoleic acid (LA) (21.03%), Oleic acid (16.41%) and eicosenoic acid (14.09). The details of this profile have been reported in this paper

کلمات کلیدی:

Camelina sativa, oilseed, dryland, oil profile, fatty acid

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