

CORRECTION OF CHLOROPHYLL-DEFECTIVE MALE-STERILE WINTER OILSEED RAPE
(BRASSICA NAPUS) THROUGH ORGANELLE EXCHANGE

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Introduction of male-sterile Raphanus sativus cytoplasm into Brassica napus results in a chlorophyll deficiency in the backcrossed male-sterile B.napus line. Characters specific for the defective plants as well as the influence of environmental conditions on the defect are presented. The apparent correction of this photosynthetic defect by protoplast fusion, enabling somatic recombination and/or elimination of organelles, is presented. Two cybrid lines have thus been obtained with the desired organelle composition. Biochemical and molecular analyses of the cytoplasmic genomes of the corrected cybrids are shown.