(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
17 April 2014 (17.04.2014)

WIPO | PCT

(10) International Publication Number
WO 2014/058295 A1

(51) International Patent Classification:
C12N 15/82 (2006.01) *C12P 7/64* (2006.01)
C12N 9/90 (2006.01) *A01H 5/00* (2006.01)
C12N 9/04 (2006.01)

(21) International Application Number:
PCT/MY2013/000068

(22) International Filing Date:
1 April 2013 (01.04.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PI 2012700758 10 October 2012 (10.10.2012) MY

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(54) Title: METHODS FOR OBTAINING A GENETICALLY MODIFIED PLANT OR MICROBE AND FOR INCREASING OIL YIELD

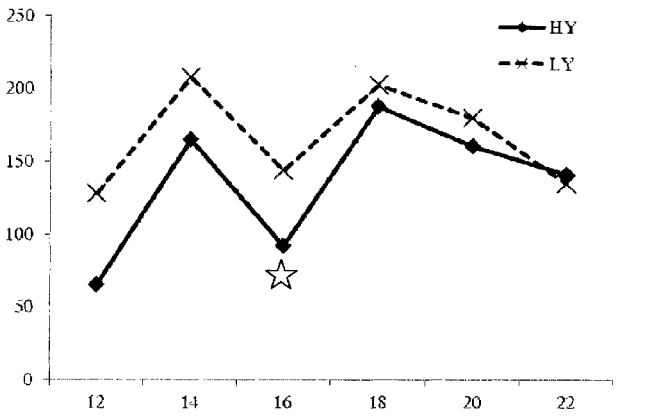


FIG. 1

(57) Abstract: Methods are provided for obtaining a genetically modified plant, wherein the plant exhibits an increased oil yield relative to a corresponding control plant that is not so genetically modified. The methods comprise genetically modifying a plant progenitor cell to cause a decrease in triose-phosphate isomerase activity and an increase in glycerol-3-phosphate dehydrogenase activity. The methods also comprise culturing the genetically modified plant progenitor cell to obtain the genetically modified plant. Also provided are methods for increasing oil yield, comprising genetically modifying a plant to cause, in at least one oil-producing organ or tissue of the plant, a decrease in triose- phosphate isomerase activity and an increase in glycerol-3-phosphate dehydrogenase activity. The genetic modification is carried out across more than a single generation. The genetically modified plant exhibits an increased oil yield relative to a corresponding control plant. Also provided are similar methods directed to a microbe.

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(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*

— *with sequence listing part of description (Rule 5.2(a))*