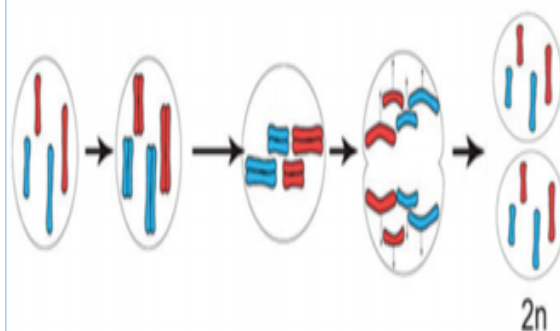


Plants producing 2n gametes and clonal seeds

Description

n gametes are gametes having the somatic chromosome number rather than the gametophytic chromosome number. INRAE's researchers have discovered that by combining the inactivation of multiple genes a genotype in which meiosis is totally replaced by mitosis without affecting subsequent sexual processes is generated. This generates diploid male and female spores, giving rise to viable diploid male and female gametes, which are SDR gametes (second division restitution). Patent references : WO2010079432, WO2012075195 and EP14305828.



Type de transfert envisagé

License agreement

Avantages

Useful for the genetic improvement of several crops

Applications potentielles

- Production of poliploids plants ; - Crossing plants of different ploidy level ; - Production of apomictic plants (clonal reproduction through seeds).

Mots clés

Diplogametes, MiMe (Mitosis instead of Meiosis), clonal reproduction

Echelle TRL 1 2 3 4 5 6 7 8 9

Stade de développement

POC experimented in rice.

Laboratoire:

INRAE - Institut Jean-Pierre Bourgin Versailles

Chercheurs:

Contact:

Alix MALATRAY, Chargée de Valorisation Email: alix.malatrav@inrae.fr Fixe: +33 (0)1 42 75 93 44
Mobile: +33 (0)6 84 70 92 26

Date: 16-09-2020