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(54) Title (EN): PLANT TREATMENT METHODS AND MEANS THEREFOR

(54) Title (FR): PROCÉDÉS DE TRAITEMENTS DES PLANTES ET MOYENS ASSOCIÉS

(57) Abstract:

(EN): A transgenic plant having a gene construct including a nucleotide sequence including least two of phytoalexin deficient 4 (PAD4) gene, lesion simulating disease 1 (LSD1) gene, and enhanced disease susceptibility 1 (EDS1) gene and a method of regulating growth and increasing biomass production in the plant by over expressing or attenuating the expression of at least two of PAD4 gene, LSD1 gene, and EDS1 gene in the plant is provided. The transgenic plant exhibits increased biomass, increased stress tolerance, efficient growth development, greater fruit or seed yield, and/or efficient use of water or early appearance of fruit or seed than a non- transgenic plant that does not overexpress or attenuate at least two of PAD4 LSD1, and EDS1 genes, when the transgenic plant and the non-transgenic plant are cultivated under identical growth conditions and identical stress conditions.

(FR): L'invention concerne une plante transgénique ayant une construction de gène incluant une séquence de nucléotides incluant au moins deux parmi le gène 4 déficient en phytoalexine (PAD4), le gène 1 de la maladie simulant une lésion (LSD1), et le gène 1 de sensibilité accrue à la maladie (EDS1) et un procédé de régulation de la croissance et d'augmentation de la production de la biomasse chez la plante par surexpression ou atténuation de l'expression d'au moins deux parmi le gène PAD4, le gène LSD1, et le gène EDS1 dans la plante. La plante transgénique montre une biomasse accrue, une tolérance au stress accrue, un développement de croissance efficace, un rendement en fruit et graines plus grand et/ou une utilisation efficace de l'eau ou une apparition précoce des fruits ou des graines par rapport à une plante non transgénique qui ne surexprime pas ou n'atténue pas au moins deux parmi

les gènes PAD4, LSD1, et EDS1, quand la plante transgénique et la plante non transgénique sont cultivées sous des conditions de croissance identiques et des conditions de stress identiques.

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