

Title (en)  
TRANSGENIC PLANTS WITH ENHANCED GROWTH CHARACTERISTICS

Title (de)  
TRANSGENE PFLANZEN MIT ERWEITERTEN WACHSTUMSMERKMALEN

Title (fr)  
PLANTES TRANSGÉNIQUES PRÉSENTANT DES CARACTÉRISTIQUES DE CROISSANCE AMÉLIORÉES

Publication  
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Application  
**EP 09810728 A 20090831**

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Abstract (en)  
[origin: WO2010025466A2] The invention relates to transgenic plants exhibiting dramatically enhanced growth rates, greater seed and fruit/pod yields, earlier and more productive flowering, more efficient nitrogen utilization, increased tolerance to high salt conditions, and increased biomass yields. In one embodiment, transgenic plants engineered to over-express both glutamine phenylpyruvate transaminase (GPT) and glutamine synthetase (GS) are provided. The GPT+GS double-transgenic plants of the invention consistently exhibit enhanced growth characteristics, with T0 generation lines showing an increase in biomass over wild type counterparts of between 50% and 300%. Generations that result from sexual crosses and/or selfing typically perform even better with some of the double-transgenic plants achieving an astounding four-fold biomass increase over wild type plants.

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Citation (search report)  
• [X] US 2007011783 A1 20070111 - LIU JINGDONG [US], et al  
• [XP] US 2009094717 A1 20090409 - TROUKHAN MAXIM [US], et al  
• See references of WO 2010025466A2

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