

Title (en)
CO-EXPRESSION OF PROTEINS

Title (de)
COEXPRESSION VON PROTEINEN

Title (fr)
CO-EXPRESSION DES PROTEINES

Publication
EP 1141347 A1 20011010 (EN)

Application
EP 99918663 A 19990416

Priority
• US 9908525 W 19990416
• US 22465598 A 19981231

Abstract (en)
[origin: WO0040738A1] The subject invention pertains to materials and methods for transformed plants and plant tissues that are capable of expressing high levels of stable proteins which are localized as protein bodies within the plant cell. Transformed plants co-expressing high levels of both the 15kD and 10kD zein proteins are disclosed which accumulate to high levels as protein bodies in the vegetative tissue of the plant. Transformed plants co-expressing the 15kD and 10kD zein proteins are useful for providing forage crops containing increased levels of sulfur containing amino acids, such as methionine, in the diet of animals that normally feed on such crops. Also contemplated by the subject invention are transformed plants or plant tissue comprising stable protein bodies which contain heterologous proteinaceous material. In one embodiment, a stable protein body is expressed in a plant or plant tissue as a fusion protein comprising a zein protein and an operably linked protein or peptide. The protein bodies provided in the present invention are resistant to rumin digestion or environmental degradation.

IPC 1-7
C12N 15/82; C07K 14/425; C12N 15/29; C12N 15/62; C07K 16/16; C07K 16/38; A01H 5/00

IPC 8 full level
A01H 5/00 (2006.01); **C07K 14/425** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01); **C12N 15/29** (2006.01); **C12N 15/82** (2006.01)

CPC (source: EP)
C07K 14/425 (2013.01); **C12N 15/8251** (2013.01); **C12N 15/8253** (2013.01); **C12N 15/8254** (2013.01)

Citation (search report)
See references of WO 0040738A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0040738 A1 20000713; AR 016256 A1 20010620; AU 3652299 A 20000724; BR 9916731 A 20011106; CA 2358548 A1 20000713; CN 1334877 A 20020206; EP 1141347 A1 20011010; JP 2002541768 A 20021210

DOCDB simple family (application)
US 9908525 W 19990416; AR P990102089 A 19990504; AU 3652299 A 19990416; BR 9916731 A 19990416; CA 2358548 A 19990416; CN 99816020 A 19990416; EP 99918663 A 19990416; JP 2000592432 A 19990416