



APPLICATIONS UNDER EXAMINATION

POTATO

POTATO (*Solanum tuberosum*)

Proposed denomination: 'FL2126'
Application number: 08-6422
Application date: 2008/07/31
Applicant: Frito-Lay North America, Inc., Plano, Texas, United States of America
Agent in Canada: Frito Lay Canada, Mississauga, Ontario
Breeder: Robert W. Hoopes, Frito-Lay Research, Rhinelander, Wisconsin, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Variety used for comparison: 'Atlantic'

Summary: *The lightsprout of 'FL2126' is small in size while it is medium sized for 'Atlantic'. 'FL2126' has weak anthocyanin colouration at the base of the light sprout while it is strong in 'Atlantic'. The pubescence at the tip of the light sprout of 'FL2126' is absent or very sparse while it is dense in 'Atlantic'. 'FL2126' has a closed leaf silhouette while it is intermediate to open in 'Atlantic'. 'FL2126' has a light green leaf colour while it is medium green in 'Atlantic'. The plant height of 'FL2126' is taller than that of 'Atlantic'. 'FL2126' has absent or very weak intensity of anthocyanin colouration on the inner side of the flower corolla while it is medium intensity in 'Atlantic'. The extent of anthocyanin colouration on the inner side of the corolla in 'FL2126' is absent or very low while it is high in 'Atlantic'. 'FL2126' matures later than 'Atlantic'. The tuber of 'FL2126' is oval to long oval in shape while the tuber is round in 'Atlantic'.*

Description:

PLANT: upright to semi-upright growth habit, intermediate type foliage structure, late maturity

STEM: absent of very low extent of anthocyanin colouration

LEAVES: medium to large size, light green, closed silhouette, medium presence of secondary leaflets, absent or very low extent of anthocyanin colouration on midrib of upper side, absent or very weak intensity of anthocyanin colouration on midrib of upper side, absent or very low frequency of coalescence of terminal and lateral leaflets

SECOND PAIR OF LATERAL LEAFLETS: medium size, narrower to broad width in relation to length

LEAFLETS: weak waviness of margin, medium depth of veins, dull to medium glossiness of upper side, no pubescence of blade at apical rosette

INFLORESCENCE: medium flowering profusion, small to medium size

FLOWER BUD: absent or very low extent of anthocyanin colouration

COROLLA: medium size, absent or very weak intensity of anthocyanin colouration, absent or very low proportion of blue in anthocyanin colouration on the inner side, absent or very low extent of anthocyanin colouration on inner side

PEDUNCLE: absent or very low extent of anthocyanin colouration

TUBER: oval to long oval, light yellow flesh

TUBER EYES: shallow to medium depth

TUBER SKIN: light beige, yellow at base of eye, medium anthocyanin colouration of skin in reaction to light

LIGHT SPROUT: small size, spherical shape, few number of root tips, short lateral shoots

LIGHT SPROUT BASE: weak intensity of anthocyanin colouration, absent or low proportion of blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, closed habit, absent or very weak intensity of anthocyanin colouration, absent or very sparse pubescence

Origin and Breeding: 'FL2126' originated from a cross made between 'FL1867' and 'Hermes' in 1998 at Rhinelander, Wisconsin. Seeds from the cross were sown in a greenhouse in 1999 and the resulting tubers were planted in a field in the spring of 2000. One of the selections of the progeny was 2000 95.12 which went on to become 'FL2126'. Selection criteria included attractive tuber appearance, tuber set, uniform tuber size, yield, high solid content, bruise resistance and fry colour at 42 degrees for 7 months.

Tests and Trials: Tests and trials were conducted during the summer of 2010 in Drummond, New Brunswick. Plots consisted of one row with a row length of 18.5 meters and a row spacing of 90 cm. Plants were spaced 30 cm apart within the row.

Comparison table for 'FL2126'

	'FL2126'	'Atlantic'*
<i>Plant height (cm)</i>		
mean	65.8	49.7
std. deviation	2.4	3.1

*reference variety



Potato: 'FL2126' (right) with reference variety 'Atlantic' (left)

Proposed denomination: 'FL2137'
Application number: 08-6423
Application date: 2008/07/31
Applicant: Frito-Lay North America, Inc., Plano, Texas, United States of America
Agent in Canada: Frito Lay Canada, Mississauga, Ontario
Breeder: Robert W. Hoopes, Frito-Lay Research, Rhinelander, Wisconsin, United States of America

Note: The applicant has requested an exemption from compulsory licensing to allow time to multiply and distribute propagating material of the variety. If the exemption is granted, it may be allowed for two years from the date rights are granted for the variety.

Variety used for comparison: 'Atlantic'

Summary: 'FL2137' has a strong intensity of anthocyanin colouration at the tip of the lightsprout while it is weak in 'Atlantic'. The stem of 'FL2137' has a medium to high extent of anthocyanin colouration halfway up while it is absent to very low in 'Atlantic'. 'FL2137' has a dark green leaf colour while it is medium green in 'Atlantic'. The midrib of the upper side of the leaf of 'FL2137' has a medium extent and intensity of anthocyanin colouration while it is absent to very low extent and absent to very weak intensity of anthocyanin colouration for 'Atlantic'. 'FL2137' has a high extent of anthocyanin colouration of the flower bud while it is low to medium extent in 'Atlantic'. The peduncle of the inflorescence of 'FL2137' has a medium extent of anthocyanin colouration while it is absent to very low in 'Atlantic'. 'FL2137' has a high proportion of blue in the anthocyanin colouration on the inner side of the corolla while it is absent to very low in 'Atlantic'. The time of maturity of 'FL2137' is late while it is medium for 'Atlantic'. 'FL2137' has a blue colour at the base of the eye of the tuber while it is yellow for 'Atlantic'.

Description:

PLANT: semi-upright to spreading growth habit, intermediate type foliage structure, late maturity

STEM: medium to high extent of anthocyanin colouration halfway up

LEAVES: medium to large size, dark green, open silhouette, medium presence of secondary leaflets, medium extent of anthocyanin colouration on midrib of upper side, medium intensity of anthocyanin colouration on midrib of upper side, absent or very low frequency of coalescence of terminal and lateral leaflets

SECOND PAIR OF LATERAL LEAFLETS: large, narrower to broad width in relation to length

LEAFLETS: weak waviness of margin, medium to deep depth of veins, medium to glossy glossiness of upper side, no pubescence of blade at apical rosette

INFLORESCENCE: high flowering profusion, medium size

FLOWER BUD: high extent of anthocyanin colouration

COROLLA: large, strong intensity of anthocyanin colouration on inner side, high proportion of blue in anthocyanin colouration on the inner side, high extent of anthocyanin colouration on inner side

PEDUNCLE: medium extent of anthocyanin colouration

TUBER: round to short oval, cream coloured flesh

TUBER EYES: medium depth

TUBER SKIN: light beige, blue at base of eye, weak to medium anthocyanin colouration of skin in reaction to light

LIGHT SPROUT: medium size, ovoid shape, few number of root tips, short lateral shoots

LIGHT SPROUT BASE: very strong intensity of anthocyanin colouration, high proportion of blue in anthocyanin colouration, sparse pubescence

LIGHT SPROUT TIP: smaller in size than base, closed habit, strong intensity of anthocyanin colouration, medium density of pubescence

Origin and Breeding: 'FL2137' originated from a cross made between 'FL2006' and 'FL1291' in 1999 at Rhinelander, Wisconsin. Seeds from the cross were sown in a greenhouse in 1999 and the resulting tubers were planted in a field in the spring of 2000. One of the selections of the progeny was 2000 352.01 which went on to become 'FL2137'. Selection criteria included attractive tuber appearance, tuber set, uniform tuber size, yield, high solid content, bruise resistance and fry colour at 42 degrees for 7 months.

Tests and Trials: Tests and trials were conducted during the summer of 2010 in Drummond, New Brunswick. Plots consisted of one row with a row length of 18.5 meters and a row spacing of 90 cm. Plants were spaced 30 cm apart within the row.



Potato: 'FL2137' (right) with reference variety 'Atlantic' (left)