



APPLICATIONS UNDER EXAMINATION

POTATO

POTATO (*Solanum tuberosum*)

Proposed denomination: 'SP326'
Application number: 21-10534
Application date: 2021/05/05
Applicant: Sunrise Potato Storage Ltd., Alliston, Ontario
Agent in Canada: Progest 2001 inc., Sainte-Croix, Quebec
Breeder: Peter VanderZaag, Sunrise Potato Storage Ltd., Alliston, Ontario

Varieties used for comparison: 'Superior' and 'AC Chaleur'

Summary: *The pubescence at the base of the lightsprout of 'SP326' is of sparse to medium density whereas it is absent or very sparse for the reference varieties. The intensity of anthocyanin colouration at the base of the lightsprout of 'SP326' is medium whereas it is absent or very weak for 'Superior'. The intensity of anthocyanin colouration at the tip of the lightsprout of 'SP326' is weak whereas it is absent or very weak for 'AC Chaleur'. The plants of 'SP326' mature mid to late season while those of 'Superior' mature early to mid-season. The anthocyanin colouration of the inner side of the corolla of 'SP326' is of absent or very low extent and absent or very weak intensity whereas the anthocyanin colouration of the inner side of the corolla of 'Superior' is of medium extent and weak to medium intensity. The tuber of 'SP326' has a round shape whereas the tuber of 'Superior' has a short oval shape and that of 'AC Chaleur' has an oval shape. The flesh of the tuber of 'SP326' is white whereas it is cream coloured for the reference varieties.*

Description:

LIGHTSPROUT: conical, few root tips, short lateral shoots

LIGHTSPROUT BASE: medium intensity of anthocyanin colouration, absent or low proportion of blue in anthocyanin colouration, sparse to medium density of pubescence

LIGHTSPROUT TIP: small to medium size in relation to base, closed habit, weak intensity of anthocyanin colouration, absent or very sparse pubescence

PLANT: upright to semi-upright growth habit, matures mid to late season

STEM: absent or very low extent of anthocyanin colouration

LEAF: small to medium sized outline, open, weak presence of secondary leaflets, medium green upper side, absent or very low extent of anthocyanin colouration of upper side of midrib, absent or very weak intensity of anthocyanin colouration of upper side of midrib

PEDUNCLE: absent or very low extent of anthocyanin colouration

INFLORESCENCE: medium to high frequency per plant, medium size

COROLLA: medium size

COROLLA (INNER SIDE): absent or very low extent of anthocyanin colouration, absent or very weak intensity of anthocyanin colouration, absent or low proportion of blue in anthocyanin colouration

TUBER: round, white flesh

TUBER EYE: shallow depth, white at base

TUBER SKIN: light beige

Origin and Breeding: 'SP326' resulted from the cross between 'Dakota Diamond', as the female parent, and 'NY115', as the male parent, conducted in Alliston, Ontario in 2011. Selections were assessed in field trials from 2012 to 2020 whereby the plot size and number of replicates were increased each year. 'SP326' was identified in 2017. The selection criteria were based on the tuber uniformity, tuber shape, general appearance and skin colour.

Tests and Trials: The comparative trial for 'SP326' was conducted during the 2021 growing season at Sainte-Croix de Lotbinière, Quebec. The trial consisted of 4 replicates, a total of 68 plants per variety, grown in 5 metre length rows spaced

91.5 cm apart. The plants were spaced 30 cm apart within the row. The measurements were taken from 10 plants, or parts of 10 plants, of each variety.



Potato: 'SP326' (left) with reference varieties 'AC Chaleur' (centre) and 'Superior' (right)



Potato: 'SP326' (left) with reference variety 'Superior' (right)