



APPLICATIONS UNDER EXAMINATION

STRAWBERRY

STRAWBERRY (*Fragaria ×ananassa*)

Proposed denomination: 'Stolo'
Application number: 08-6341
Application date: 2008/05/16
Applicant: Agriculture & Agri-Food Canada, Agassiz, British Columbia
Agent in Canada: Ken Haddrell, Okanagan Plant Improvement Corporation (PICO), Summerland, British Columbia
Breeder: Chaim Kempler, Agriculture & Agri-Food Canada, Agassiz, British Columbia

Varieties used for comparison: 'Totem' and 'Puget Reliance'

Summary: *The terminal leaflets of 'Stolo' can display tip burn when grown under vigorous growing conditions whereas the reference varieties do not. 'Stolo' has weak anthocyanin colouration of the stolons whereas it is absent to very weak on both reference varieties. The terminal leaflet of 'Stolo' is moderately longer than it is wide whereas 'Puget Reliance' is much longer than it is wide. The pose of the hairs on the pedicel of 'Stolo' is horizontal whereas it is upwards on 'Totem' and slightly outwards on 'Puget Reliance'. The petals of 'Stolo' are overlapping whereas they are touching in 'Totem'. The fruit of 'Stolo' is medium red whereas it is dark red on 'Totem' and medium to dark red on 'Puget Reliance'. The sepals of 'Stolo' are posed upwards whereas they are posed outwards on 'Totem'. The fruit of 'Stolo' is firm whereas it is soft to medium in firmness in 'Puget Reliance'. 'Stolo' flowers late whereas both reference varieties flower mid-season. 'Stolo' begins ripening late whereas 'Puget Reliance' begins mid-season.*

Description:

PLANT: upright growth habit, medium to dense foliage, strong vigour, not remontant

STOLON: medium in number, weak anthocyanin colouration, medium density of pubescence

LEAF: medium size, medium green on upper side, absent or very weak blistering, absent or very weak glossiness, variegation absent

TERMINAL LEAFLET: moderately longer than wide, obtuse base, crenate margin, concave in cross section

PETIOLE: medium to long, hairs horizontal, absent or very weak anthocyanin colouration of stipules

FLOWERING: late

INFLORESCENCE: positioned beneath foliage, medium number of flowers, horizontal hairs on pedicel

FLOWER: calyx diameter same size as the corolla, stamens present

PETALS: overlapping, as long as they are wide, white

FRUIT: moderately longer than they are broad, large, conical, none or very slight difference in shape between terminal and other fruit, medium red, even or very slightly uneven colour, strong glossiness, even or very slightly uneven surface, narrow band without achenes

ACHENES: insertion level with surface of fruit

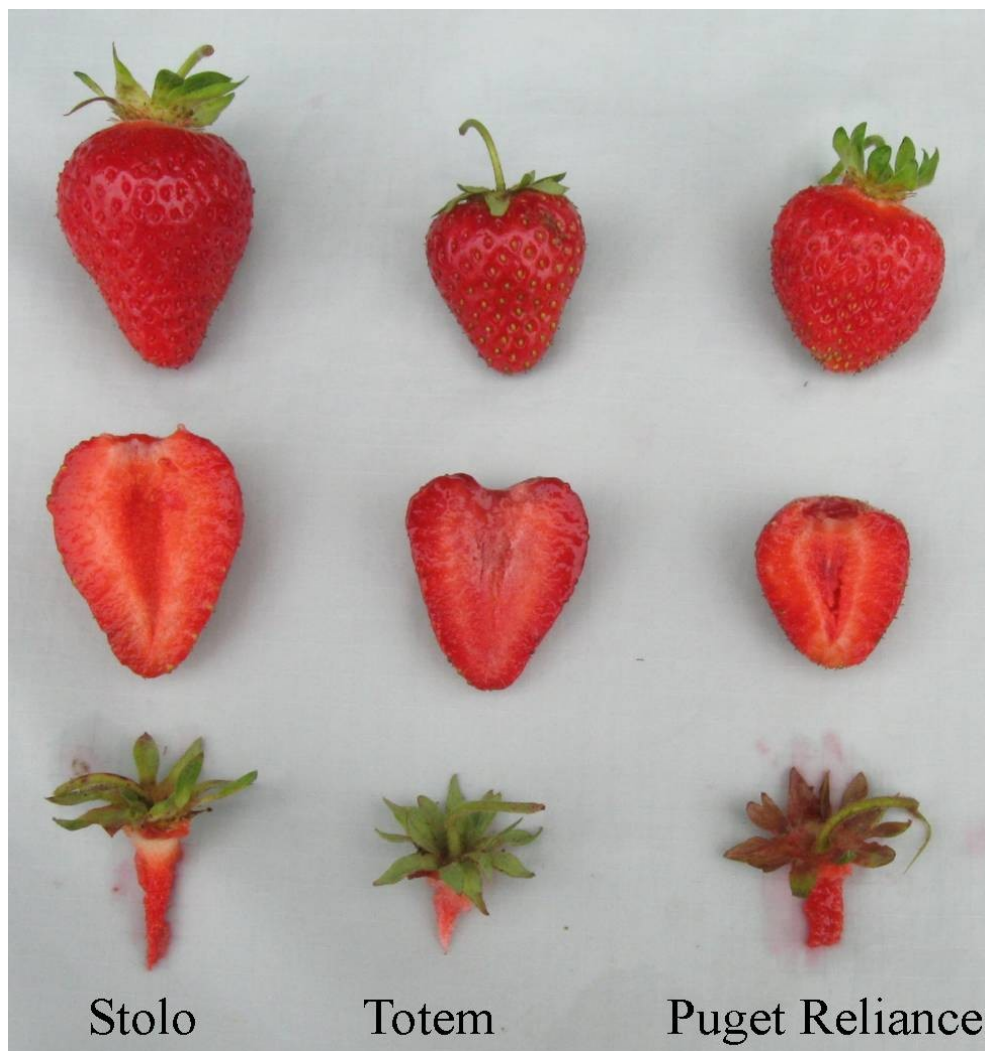
CALYX: insertion set level with fruit, upwards pose of segments, diameter slightly larger than fruit diameter, weak to medium adherence to fruit

FRUIT FLESH: firm, light red, light red core, medium size cavity

FRUIT HARVEST: late

Origin and Breeding: 'Stolo' arose as the result of a cross between the varieties, 'Puget Reliance' and 'Whonnock', conducted in 1994 at the Abbotsford substation of Agriculture and Agri-Food Canada, Pacific Agriculture Research Centre, Agassiz, British Columbia. Asexual propagation by runners and planting out in a trial block at the Clearbrook Road, Abbotsford Substation took place in 1997. 'Stolo' first fruited in 1999 at which time selections began. Originally designated BC96-33-4, 'Stolo' was selected for fruit appearance, taste, flesh texture, harvest maturity, plant quality, productivity and precocity.

Tests and Trials: The tests and trials for 'Stolo' were conducted at the Pacific Agri-Food Research Centre, Clearbrook Substation, near Abbotsford, British Columbia during the 2007 and 2008 growing seasons. Four replicates of each variety were planted in randomized complete block design with 0.3 metres between plants, 1.2 metres between the rows in rows measuring 2.4 metres long. Measured characteristics were based 20 measurements.



Strawberry: 'Stolo' (left) with reference varieties 'Totem' (centre) and 'Puget Reliance' (right)