



APPLICATIONS UNDER EXAMINATION

PEACH

PEACH (*Prunus persica*)

Proposed denomination: 'V85221'
Application number: 21-10763
Application date: 2021/11/22
Applicant: University of Guelph, Guelph, Ontario
Breeder: Jayasankar Subramanian, University of Guelph - Vineland Campus, Vineland Station, Ontario
Neil Miles, University of Guelph, Guelph, Ontario

Variety used for comparison: 'Harrow Diamond'

Summary: *The over colour on the skin of 'V85221' is a mottled medium red whereas that of 'Harrow Diamond' is a striped light red. The flesh fibre of 'V85221' is absent or weak whereas the flesh fibre of 'Harrow Diamond' is a medium strength. The intensity of anthocyanin colouration on the stone of 'V85221' is absent or very weak whereas for 'Harrow Diamond' it is weak. The fruit of 'V85221' matures very early whereas the fruit of 'Harrow Diamond' matures early.*

Description:

TREE: medium size, medium vigour, upright habit

LEAF BLADE: early leaf bud burst, medium length to width ratio, flat in cross-section, shallow serrate margin, right angle at base, small angle at apex, dark green, red mid-vein present on lower side

STIPULE: medium length

PETIOLE: short to medium length

NECTARIES: present, reniform shape

FLOWERING: early beginning of flowering

FLOWERING SHOOT: medium to thick, medium length of internodes, no anthocyanin colouration, medium density of flower buds

FLOWER: rosette type, dark pink on inner side of corolla

PETAL: medium ovate, five present

STAMEN: positioned below petals, pollen present on anthers

PISTIL: stigma positioned above anthers, pubescence on ovary

FRUIT: very early maturity, medium size, circular in ventral view, no mucron tip at pistil end, weakly depressed at pistil end, symmetric when viewed from pistil end, weak prominence of suture

STALK CAVITY: medium depth, narrow to medium width

FRUIT SKIN: cream yellow ground colour, medium to large extent of medium red mottled over colour, very sparse to sparse pubescence, thick, medium adherence to flesh

FRUIT FLESH: firm, orange yellow carotenoid colour, no anthocyanin colouration directly under skin, no anthocyanin colouration of the flesh in central part of the flesh or around the stone, absent or weak flesh fibre, medium sweetness, low acidity

STONE: small in relation to fruit, elliptic shape in lateral view, absent or very weak anthocyanin colouration, light to medium intensity of brown colour, equal number of pits and grooves on surface, medium to strong adherence to flesh

Origin and Breeding: 'V85221' originated from a cross pollination conducted at the University of Guelph research station in Vineland Station, Ontario in 1985. The cross was made between the two varieties 'Harrow Diamond' and 'V68101'. 'V85221' was selected in July of 1993 based on its maturity time, resistance to split-pit disorder, fruit colour and fruit shape.

Tests and Trials: The comparative trial for 'V85221' was conducted at the University of Guelph, Department of Plant Agriculture in Vineland Station, Ontario during the 2022 growing season. The trial consisted of 6 trees of each variety and were planted in 2015 on 'Bailey' rootstock. Spacing between trees was 4 metres in the row and 5.5 metres between rows.

Observations were taken on 6 trees or parts taken from each of the 6 trees. Measurements were taken from 25 parts of the 6 trees.



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