

APPLICATIONS UNDER EXAMINATION

TOMATO (Solanum lycopersicum)

Proposed denomination:	'Shivanna'
Application number:	21-10537
Application date:	2020/06/04 (priority claimed)
Applicant:	Enza Zaden Beheer B.V., Enkhuizen, Netherlands
Agent in Canada:	Smart & Biggar LP, Ottawa, Ontario
Breeder:	Martijn van Stee, Enza Zaden Beheer B.V., Enkhuizen, Netherlands

Variety used for comparison: 'E15T41376'

Summary: The leaflets of 'Shivanna' are large whereas those of 'E15T41376' are medium sized. The plants of 'Shivanna' are susceptible to Stemphylium spp. while those of 'E15T41376' are resistant.

Description:

SEEDLING: anthocyanin colouration of hypocotyl present

PLANT: indeterminate growth type, tall

STEM: weak intensity of anthocyanin colouration, long internode

LEAF: horizontal attitude, long, medium to broad, medium to dark green, weak glossiness, weak blistering LEAF BLADE: bipinnate type LEAFLET: large, semi-erect to horizontal attitude of petiolule in relation to main axis

FLOWERING: begins early to mid-season PEDUNCLE: abscission layer present, short INFLORESCENCE: mainly uniparous type FLOWER: yellow, pubescence of style present

FRUIT (BEFORE MATURITY): no green shoulder, light to medium intensity of green colour (excluding shoulder), no green stripes

FRUIT: small, small to medium length to diameter ratio, circular to oblate shape in longitudinal section, weak ribbing at peduncle end, weak to medium depression at peduncle end, small to medium size of peduncle scar, very small to small blossom scar, flat shape at blossom end, medium to large diameter of core in relation to total diameter in cross-section, thin pericarp, two and three locules, red flesh at maturity, medium firm, matures early EPLUT SKIN: red at maturity, medium degree of glossiness.

FRUIT SKIN: red at maturity, medium degree of glossiness

DISEASE REACTION: highly resistant to *Meloidogyne incognita*; resistance to *Verticillium* sp. (Va and Vd) race 0 present; resistance to *Fusarium oxysporum* f. sp. *lycopersici* race 0 (ex1) and race 1 (ex 2) present; no resistance to *Fusarium oxysporum* f. sp. *lycopersici* race 2 (ex 3); resistance to *Fusarium oxysporum* f. sp. *radicis lycopersici*, *Fulvia fulva* (Ff) (ex *Cladosporium fulvum*) race 0 and groups A, B, C, D and E present; resistance to Tomato Mosaic Virus strains 0, 1 and 2 present; no resistance to *Stemphylium* spp.; no resistance to Tomato Yellow Leaf Curl Virus and Tomato Spotted Wilt Virus race 0; resistance to *Oidium neolycopersici* present; no resistance to Tomato torrado virus

Origin and Breeding: 'Shivanna' (breeder's reference E15T.41877) originated from a cross made between two proprietary breeding lines, 'E15T.41877-F' and 'E15T.41877-M', in the spring of 2017 in Enkhuizen, Netherlands. The resulting hybrid tomato variety 'Shivanna' was selected in June 2018 for its plant vigour, regularity, truss behaviour, average fruit weight and taste (Brix, acid, and sugar level).

Tests and Trials: The detailed description of 'Shivanna' is based on the UPOV report of Technical Examination, for National Listing application number TMT3690, purchased from the Naktuinbouw in Roelofarendsveen, Netherlands. The trials were



conducted by the Naktuinbouw in Roelofarendsveen, Netherlands in 2021 to 2022. The National Listing report for 'Shivanna' was used to support the PBR application number 2021/0838 in the Community Plant Variety Office.



Tomato: 'Shivanna'

