## APPLICATIONS UNDER EXAMINATION

**SWEET POTATO** 

## SWEET POTATO (Ipomoea batatas)

**Proposed denomination:** 'NCORNSP-026SCRH' **Trade name:** Sweet Caroline Red Hawk

**Application number:** 19-9982 **Application date:** 2019/08/08

**Applicant:** North Carolina State University, Raleigh, North Carolina, United States of America

**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario

**Breeder:** G. Craig Yencho, North Carolina State University, Raleigh, North Carolina, United States of

America

Meri K. Reeber, North Carolina State University, Raleigh, North Carolina, United States of

America

Kenneth Pecota, North Carolina State University, Raleigh, North Carolina, United States of

America

Dominic A. Gillooly, North Carolina State University, Raleigh, North Carolina, United States

of America

Varieties used for comparison: 'Sweet Caroline Sweetheart Red' and 'NCORNSP-024SCRI' (Sweet Caroline Raven)

**Summary:** The plants of 'NCORNSP-026SCRH' are taller than the plants of 'NCORNSP-024SCRI'. The length of the primary shoot of 'NCORNSP-026SCRH' is shorter than that of 'Sweet Caroline Sweetheart Red' and longer than that of 'NCORNSP-024SCRI'. 'NCORNSP-026SCRH' has a leaf blade that is deltoid shaped whereas 'Sweet Caroline Sweetheart Red' has a leaf blade this is cordate shaped. The upper side of the mature leaf blade of 'NCORNSP-026SCRH' is dark brown whereas the leaf blade of 'Sweet Caroline Sweetheart Red' is grey brown and that of 'NCORNSP-024SCRI' is black.

## **Description:**

PLANT: upright to spreading growth habit, medium degree of branching

STEM: red purple, thick, absent or weak to medium intensity of anthocyanin colouration of tip, absent or sparse pubescence of tip.

INTERNODE: large diameter, strong intensity of anthocyanin colouration

NODE: strong intensity of anthocyanin colouration

PETIOLE: strong intensity of anthocyanin colouration YOUNG LEAF BLADE: light green on upper side

LEAF BLADE: moderate to deep lobing

LEAF BLADE (UPPER SIDE): newly developed leaf is medium brown (RHS 177A) with dark green (RHS 144A) veins, mid-season developed leaf is medium brown (RHS 166A), mature leaf is closest to dark brown (RHS 200A) with brown purple veins (RHS 187A), strong intensity of anthocyanin colouration, very large abaxial veins with very strong intensity of anthocyanin colouration.

LEAF BLADE (LOWER SIDE): mature leaf is dark violet (RHS N79A) with dark violet veins (RHS N79A)

**Origin and Breeding:** The variety 'NCORNSP-026SCRH' originated from a conventional cross made between the proprietary line 'NC8671-022ORN' and the proprietary line 'NC6176-002ORN'. The cross was conducted in September 2014 and March 2015 at the Horticulture Crops Research Station, Clinton, North Carolina, U.S.A. The resultant seed was harvested and sown in 1 litre pots. Vegetative cuttings were taken from each plant and propagated in April 2015. The resultant young plants were planted in the field as part of a unreplicated plot in June 2015. 'NCORNSP-026SCRH' was selected as a single plant on August 31, 2015 based on plant growth habit, plant vigour, branching, plant architecture, leaf colour, leaf shape and appearance.

**Tests and Trials:** The comparative trial for 'NCORNSP-026SCRH' was conducted in a polyhouse during the spring and summer of 2020, at BioFlora Inc., in St. Thomas, Ontario. The trial included 20 plants each of the candidate and reference

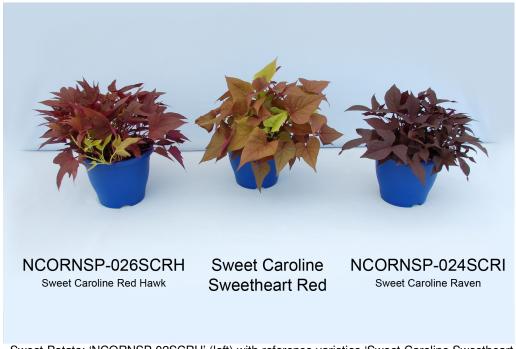


varieties. All plants were grown from rooted cuttings and transplanted into 1 litre containers on April 17, 2020. The observations and measurements were taken from 10 plants or parts of plants of each variety on June 1, 2020. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

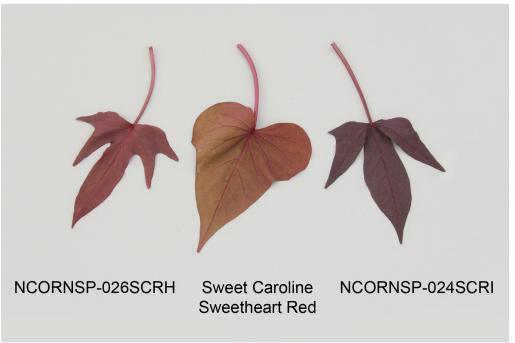
Comparison table for 'NCORNSP-026SCRH'

	'NCORNSP-026SCRH'	'Sweet Caroline Sweetheart Red'*	'NCORNSP-024SCRI'*
Plant height (cm)	)		
mean	20.2	22.9	17.7
std. deviation	2.19	1.68	1.79
Primary shoot lei	ngth (cm)		
mean	14.8	20.7	7.8
std. deviation	1.86	1.01	1.11
Colour of leaf bla	de (excluding anthocyanir	n colouration) (RHS)	
upper side	closest to 200A	closest to N199A	duller than 202A
*reference varieti	<b>AS</b>		

reference varieties



Sweet Potato: 'NCORNSP-02SCRH' (left) with reference varieties 'Sweet Caroline Sweetheart Red' (centre) and 'NCORNSP-024SCRI' (right)



Sweet Potato: 'NCORNSP-02SCRH' (left) with reference varieties 'Sweet Caroline Sweetheart Red' (centre) and 'NCORNSP-024SCRI' (right)