



## APPLICATIONS UNDER EXAMINATION

## SMOKEBUSH

### SMOKEBUSH (*Cotinus coggygria*)

<b>Proposed denomination:</b>	'NCCO1'
<b>Trade name:</b>	Winecraft Black
<b>Application number:</b>	17-9295
<b>Application date:</b>	2017/09/25
<b>Applicant:</b>	North Carolina State University, Raleigh, North Carolina, United States of America
<b>Agent in Canada:</b>	BioFlora Inc., St. Thomas, Ontario
<b>Breeder:</b>	Thomas Green Ranney, Arden, North Carolina, United States of America

**Variety used for comparison:** 'Royal Purple'

**Summary:** *The plants of 'NCCO1' have medium density branching while the plants of 'Royal Purple' have sparse branching. The stem of 'NCCO1' is thin to medium thick while that of 'Royal Purple' is medium to thick. Including the petiole, the leaf of 'NCCO1' is shorter than the leaf of 'Royal Purple'. The leaf blade of 'NCCO1' is oblong shaped with an attenuate base whereas the leaf blade of 'Royal Purple' is ovate to elliptic with an obtuse rounded base.*

#### **Description:**

**PLANT:** shrub type, globose shape, bushy to arching growth habit, medium density branching, slow growth rate

**STEM:** brown, thin to medium thickness, round shape in cross-section, absent or very sparse pubescence, smooth texture of bark, absent or very weak degree of glaucosity, many orange red lenticels

**PETIOLE:** strong intensity of anthocyanin colouration

**LEAF:** simple type, arranged alternately and in spiral pattern along shoot

**LEAF BLADE:** oblong shape, rounded apex, attenuate base, entire margin, no lobing, no variegation, absent or very weak rugosity, weak waviness of margin

**LEAF BLADE (UPPER SIDE):** brown purple (darker than RHS N77A) in autumn, absent or sparse pubescence, very sparse pubescence along veins, weak glossiness, smooth texture

**LEAF BLADE (LOWER SIDE):** reddish purple in autumn, absent or sparse pubescence, medium to strong intensity of anthocyanin colouration along veins

**FLOWER:** not observed

**FRUIT:** not observed

**Origin and Breeding:** 'NCCO1' originated from an open pollinated cross conducted by Thomas Green Ranney, an employee of North Carolina State University in Raleigh, North Carolina, USA. The cross was made between a female parent variety *Cotinus coggygria* f. *purpureus* and an unknown male parent in the spring of 2005 in Mills River, North Carolina. From the resulting progeny, 'NCCO1' was selected as a single unique seedling in the spring of 2006 for its compact plant growth habit, dark purple foliage and inflorescence number and characteristics. 'NCCO1' was first propagated asexually by stem cuttings in 2009 in Mills River, North Carolina, USA.

**Tests and Trials:** The comparative trial for 'NCCO1' was conducted in an outdoor irrigated container trial during the summer of 2020 at BioFlora Inc. in St. Thomas, Ontario. The trial included a total of 10 shrubs each of the candidate and reference variety. All shrubs were grown from rooted cuttings and transplanted into 13.6 litre containers on August 6, 2019. Trials were arranged outdoors in rows with 1 metre spacing between plants. Observations and measurements were taken from 10 plants, or 10 parts of plants, of each variety on July 21, 2020. The flowering and fruiting characteristics were not observed. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

**Comparison table for 'NCCO1'**

	<b>'NCCO1'</b>	<b>'Royal Purple'</b> *
<i>Leaf blade length, including petiole (cm)</i>		
mean	6.85	8.61
std. deviation	0.67	0.54

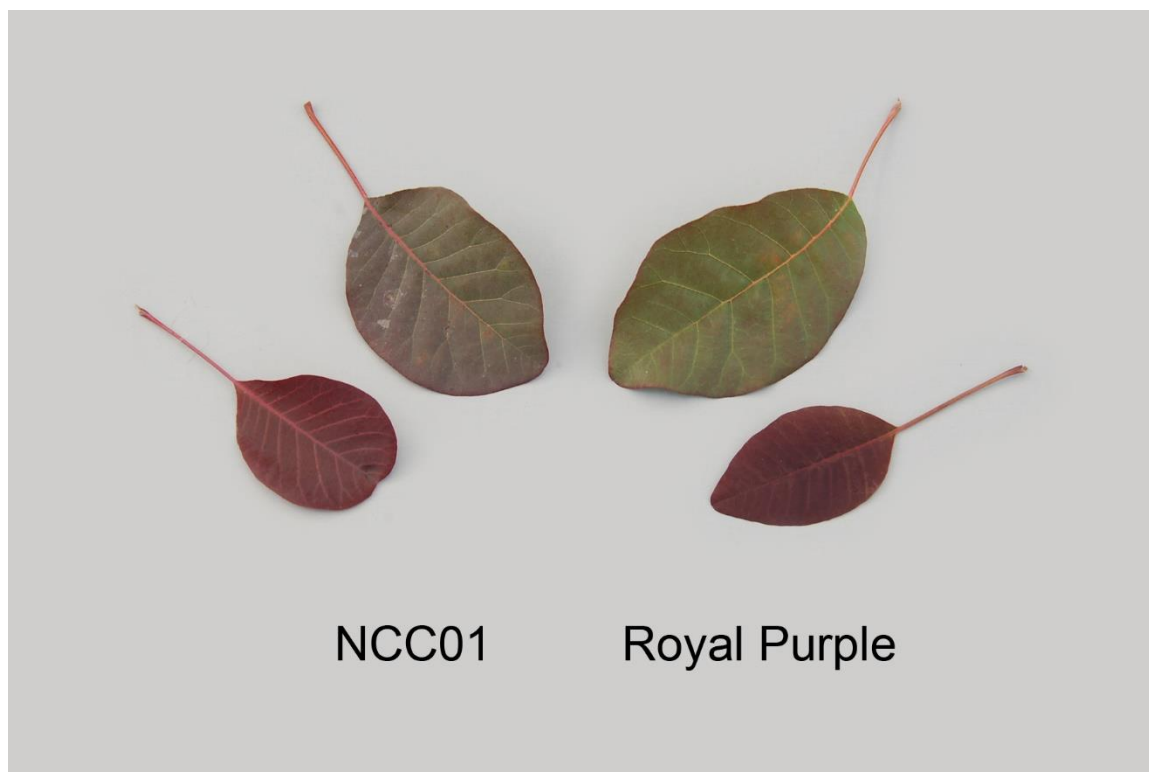
\*reference variety



Smokebush: 'NCCO1' (left) with reference variety 'Royal Purple' (right)



Smokebush: 'NCC01' (left) with reference variety 'Royal Purple' (right)



Smokebush: 'NCC01' (left) with reference variety 'Royal Purple' (right)