## APPLICATIONS UNDER EXAMINATION

WITCH ALDER

## WITCH ALDER (Fothergilla)

Proposed denomination: 'Alice'

**Trade name:** Legend of the Fall

**Application number:** 19-9911 **Application date:** 2019/05/24

Applicant: Spring Meadow Nursery, Inc., Grand Haven, Michigan, United States of America

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

**Breeder:** Bernard J. McGowan, Egremont, Massachusetts, United States of America

Variety used for comparison: 'Mount Airy'

Summary: The plants of 'Alice' are wider than those of 'Mount Airy'. The stem of 'Alice' is light brown to red brown whereas it is grey brown for that of 'Mount Airy'. The leaf blade of 'Alice' is longer than that of 'Mount Airy'. During the fall, the upper side of the leaf blade of 'Alice' is dark brown purple while it is brown red for that of 'Mount Airy'. During the fall, the lower side of the leaf blade of 'Alice' is light grey green while it is light orange pink for that of 'Mount Airy'. The leaf of 'Alice' has a medium degree of rugosity whereas that of 'Mount Airy' has a weak degree of rugosity. The flower of 'Alice' is wider and has a longer stamen than that of 'Mount Airy'. The plants of 'Alice' have more flowers per plant than those of 'Mount Airy'. The plants of 'Alice' begin flowering later than those of 'Mount Airy'.

## **Description:**

PLANT: shrub type, globose shape, upright to bushy growth habit, sparse to medium density of branching

STEM: light brown to red brown, thin, absent or very sparse pubescence, round in cross-section, smooth bark, weak to medium glaucosity, few to medium number of lenticels, no thorns

LEAF: simple type, alternate arrangement on stem

LEAF BLADE: elliptic to obovate, acute to obtuse apex, obtuse base, crenate margin, no lobing, no variegation, medium rugosity, weak waviness of margin

LEAF BLADE (UPPER SIDE): sparse pubescence, dark brown green (closest to RHS NN137A) at mid-season, dark brown purple (closest to RHS N186C) during fall

LEAF BLADE (LOWER SIDE): sparse pubescence, light green (closest to RHS 138D) at mid-season, light grey green (closest to RHS 190D) during fall, absent or very weak anthocyanin colouration on the veins

INFLORESCENCE: spike type

FLOWER: apetalous, bottle-brush shaped corolla, flowering begins mid-season

FILAMENT: light yellow green (RHS 154D) when newly opened, white (RHS NN155D) when aged ANTHER: medium yellow green (RHS 154C) when newly opened, light yellow (RHS 8C) when aged

**Origin and Breeding:** 'Alice' originated from an open pollinated cross conducted in June 2001 in Montague, Massachusetts, USA between an unnamed female parent variety and an unknown male parent variety. The new variety was selected in May 2004 based on plant vigour, plant growth habit and fall foliage colour. Asexual reproduction of 'Alice' was first conducted by softwood cuttings in 2004 in Montague, Massachusetts, USA.

Tests and Trials: The comparative trial for 'Alice' was conducted in an outdoor container trial during the summer of 2023 in St. Thomas, Ontario. The trial included 10 plants of the candidate variety and 6 plants of the reference variety. All plants were grown from rooted cuttings and transplanted into 7.6-liter containers in the spring of 2021. Trials were arranged in outdoors in rows with 1 meter spacing between plants. Observations and measurements were taken from 10 plants, or 10 parts of plants of the candidate variety and 6 plants or 6 parts of plants of the reference variety on April 17, 2023 for spring characteristics and on August 18, 2023 for summer characteristics. Mean differences were significant at the 5% confidence probability level based on a paired Student's t-test. All colour determinations were made using the 2015 Royal Horticultural Society (RHS) Colour Chart.



Comparison table for 'Alice'

	'Alice'	'Mount Airy'*
Plant width (cm) mean std. deviation	32.1 4.74	22.1 3.18
sid. deviation	4.74	3.10
Leaf blade length mean std. deviation	n <i>(cm)</i> 3.6 0.30	2.9 0.26
<i>Leaf colour durin</i> upper side lower side	g fall (RHS) closest to N186C closest to 190D	closest to 180A closest to 29D
Flower width (cm mean std. deviation	2.8 0.32	2.1 0.24
Stamen length (c mean std. deviation	cm) 1.1 0.11	0.8 0.13
Number of flower mean std. deviation	rs per plant 18.9 5.55	6.4 0.80
*reference variet	V	



Witch Alder: 'Alice' (left) with reference variety 'Mount Airy' (right)



Witch Alder: 'Alice' (left) with reference variety 'Mount Airy' (right)