## APPLICATIONS UNDER EXAMINATION

**BAPTISIA** 

BAPTISIA (Baptisia)

Proposed denomination: 'Dark Chocolate'

**Application number:** 18-9672 **Application date:** 2018/12/21

Applicant: Walters Gardens, Inc., Zeeland, Michigan, United States of America

Agent in Canada: Variety Rights Management, Oxford Station, Ontario

**Breeder:** Hans A. Hansen, Zeeland, Michigan, United States of America

Variety used for comparison: 'Dutch Chocolate'

**Summary:** The plants of 'Dark Chocolate' are taller than those of 'Dutch Chocolate'. The leaf blade of 'Dark Chocolate' is longer than that of 'Dutch Chocolate'. The plants of 'Dark Chocolate' flower during mid-season whereas they flower early in the season for those of 'Dutch Chocolate'. The inflorescences of 'Dark Chocolate' are longer than those of 'Dutch Chocolate'. The inner and outer side of the standard and wings of the corolla of 'Dark Chocolate' are between black and dark violet while they are black to purple grey for those of 'Dutch Chocolate'.

## **Description:**

PLANT: vegetatively propagated, perennial, upright-bushy growth habit, medium degree of branching

STEM: light green, absent or very weak intensity of anthocyanin colouration, weak to medium degree of glaucosity, absent or very sparse pubescence, medium thickness, smooth

LEAF: alternate arrangement, trifoliate type, oblanceolate, obtuse apex, attenuate base, entire margin, absent or very sparse pubescence on upper and lower side, weak glaucosity on upper side, light green on upper and lower side, no variegation, no petiole

PEDUNCLE: absent or very weak intensity of anthocyanin colouration, absent or very sparse pubescence

INFLORESCENCE: raceme type, terminally positioned, erect attitude

COROLLA: partially fused arrangement of lobes, medium length, medium width, papilionaceous, absent or very weak undulation of margin, absent or very sparse pubescence on inner and outer side

STANDARD: inner and outer side between black (RHS N186A) and dark violet (RHS N92A)

WING: inner and outer side between black (RHS N186A) and dark violet (RHS N92A)

KEEL: medium to light yellow green (RHS 1B-C)

FLOWERING PERIOD: flowers once during mid-season, short to medium length

**Origin and Breeding:** 'Dark Chocolate' originated as a result of a cross made between an unnamed hybrid of *Baptisia sphaerocarpa* x *Baptisia alba* 'Yellow Hornet', as the female parent, and an unnamed *Baptisia minor*, as the male parent, occurring in 2009 in Waseca, Minnesota, USA. Resulting seeds were sown in Zeeland, Michigan, USA in 2009. The breeding method was recurrent selection with initial plant selections made in spring 2014 based on plant growth habit. The variety was initially propagated by stem cuttings in spring 2014.

**Tests and Trials:** The comparative trial for 'Dark Chocolate' was conducted in a galvanized steel structure covered with black mesh shade fabric in June 2023 at Variety Rights Management in Oxford Station, Ontario. The trial included 12 plants each of the candidate and reference variety. The plants were grown in 23 cm round pots, one plant per pot with 45 cm spacing between the pots. Observations and measurements were taken from 10 plants, or 10 parts of plants of each variety. 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 'Dark Chocolate'

|                                   | 'Dark Chocolate'       | 'Dutch Chocolate'* |
|-----------------------------------|------------------------|--------------------|
| Plant height without flowers (cm) |                        |                    |
| mean<br>std. deviation            | 43.0<br>2.10           | 29.6<br>2.97       |
| Leaf blade length (cm)            |                        |                    |
| mean                              | 5.9                    | 4.3                |
| std. deviation                    | 0.89                   | 0.48               |
| Inflorescence length (cm)         |                        |                    |
| mean                              | 78.0                   | 53.0               |
| std. deviation                    | 2.76                   | 4.05               |
| Standard colour of corolla (RHS)  |                        |                    |
| inner                             | between N186A and N92A | N187A/B            |
| outer                             | between N186A and N92A | N187A/B            |
| Wings colour of corolla (RHS)     |                        |                    |
| inner                             | between N186A and N92A | N187A/B            |
| outer                             | between N186A and N92A | N187A/B            |
| *f                                |                        |                    |

<sup>\*</sup>reference variety



Baptisia: 'Dark Chocolate' (left) with reference variety 'Dutch Chocolate' (right)