



**APPLICATIONS UNDER EXAMINATION**

**ASTER**

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(*Aster*)

**Proposed denomination:** 'Synbul Henfirst'  
**Trade name:** Blue Henry the First  
**Application number:** 09-6775  
**Application date:** 2009/10/30  
**Applicant:** Syngenta Crop Protection AG, Basel, Switzerland  
**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario  
**Breeder:** Mark Smith, Syngenta Flowers, Inc., Alva, Florida, United States of America

**Varieties used for comparison:** 'Milka' and 'Synhen Thefirst' (Henry The First)

**Summary:** *The plants of 'Synbul Henfirst' are short while those of 'Milka' are tall to very tall and those of 'Synhen Thefirst' are medium height. The plants of 'Synbul Henfirst' are narrower than those of 'Milka'. The leaf of 'Synbul Henfirst' is shorter than that of 'Milka'. The ray floret of 'Synbul Henfirst' is longer than that of 'Milka'. The apex of the ray floret of 'Synbul Henfirst' is rounded while that of 'Milka' is acute. The upper side of the ray floret of 'Synbul Henfirst' is blue violet while that of 'Synhen Thefirst' is violet.*

**Description:**

PLANT: short

STEM: semi-erect branches, thin, many branches, medium hairiness, no anthocyanin colouration on internode or leaf axil

LEAF: elliptic and ovate, no dentations on margin, medium green, no anthocyanin colouration

FLOWER HEAD: distributed only on distal part of side branches of the first order, more than two whorls of ray florets, medium to many ray florets

RAY FLORET: narrow obovate, predominantly ligulate, straight tip, flat to weakly convex in cross section, rounded apex, dentation of apex present, blue violet (RHS N88B) on upper side

INVOLUCRE: funnel-shaped, medium to many bracts, adpressed position of bracts

DISC: none

**Origin and Breeding:** 'Synbul Henfirst' originated from a naturally occurring whole plant mutation of the variety 'Yohenry the First'. The new variety was discovered and developed by the breeder Mark Smith in April 2008 in Alva, Florida, USA. 'Synbul Henfirst' was selected based on flower colour and plant growth habit.

**Tests and Trials:** Trials for 'Synbul Henfirst' were conducted in an outdoor irrigated trial during the summer of 2010 in St. Thomas, Ontario. The trial included a total of 15 plants each of the candidate and reference varieties. All plants were grown from a single rooted cutting transplanted into a 20 cm standard pot on June 29, 2010. Observations and measurements were taken from 10 plants of each variety on September 14, 2010, with the exception of 'Milka' which was observed on September 29, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

**Comparison table for 'Synbul Henfirst'**

|                          | 'Synbul Henfirst' | 'Milka'* | 'Synhen Thefirst'* |
|--------------------------|-------------------|----------|--------------------|
| <i>Plant height (cm)</i> |                   |          |                    |
| mean                     | 19.0              | 58.9     | 25.9               |
| std. deviation           | 1.52              | 5.09     | 2.59               |
| <i>Plant width (cm)</i>  |                   |          |                    |
| mean                     | 39.7              | 46.3     | 42.4               |
| std. deviation           | 2.25              | 1.83     | 3.13               |

|                                   |                   |      |      |
|-----------------------------------|-------------------|------|------|
| <i>Leaf length (cm)</i>           |                   |      |      |
| mean                              | 2.1               | 4.8  | 2.2  |
| std. deviation                    | 0.24              | 0.45 | 0.14 |
| <i>Ray floret length (cm)</i>     |                   |      |      |
| mean                              | 1.7               | 1.4  | 1.7  |
| std. deviation                    | 0.04              | 0.08 | 0.07 |
| <i>Colour of ray floret (RHS)</i> |                   |      |      |
| upper side                        | lighter than N88B | N88C | N87A |

\*reference varieties



Aster: 'Synbul Henfirst' (left) with reference varieties 'Milka' (centre) and 'Synhen Thefirst' (right)



Aster: 'Synbul Henfirst' (left) with reference varieties 'Milka' (centre) and 'Synhen Thefirst' (right)



Aster: 'Synbul Henfirst' (left) with reference varieties 'Milka' (centre) and 'Synhen Thefirst' (right)

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**Proposed denomination:** 'Synfrost'  
**Trade name:** Frost  
**Application number:** 09-6776  
**Application date:** 2009/10/30  
**Applicant:** Syngenta Crop Protection AG, Basel, Switzerland  
**Agent in Canada:** BioFlora Inc., St. Thomas, Ontario  
**Breeder:** Mark Smith, Syngenta Flowers, Inc., Alva, Florida, United States of America

**Variety used for comparison:** 'Margrethe Viking'

**Summary:** *The plants of 'Synfrost' have a hemispherical growth habit while those of 'Margrethe Viking' have a semi-upright growth habit. The plants of 'Synfrost' are narrower than those of 'Margrethe Viking'. The flower head of 'Synfrost' has a smaller diameter than that of 'Margrethe Viking'. The upper side of the ray floret of 'Synfrost' develops violet tones towards the apex with age while that of 'Margrethe Viking' does not. The involucre of 'Synfrost' has a smaller diameter than that of 'Margrethe Viking'.*

**Description:**

PLANT: hemispherical growth habit, medium height

STEM: semi-erect branch attitude, thin, many branches, hairiness ranging from medium to dense, no anthocyanin colouration on internode or leaf axil

LEAF: elliptic and ovate, no dentations, medium green, absent to very weak anthocyanin

FLOWER HEAD: distributed on distal part of side branches of the first order, more than two whorls of ray florets, medium number of ray florets

RAY FLORET: narrow obovate, predominantly ligulate, straight tip, flat in cross section, rounded apex, dentation of apex present, white (RHS NN155D) on upper side, aging to white (RHS NN155D) with violet (RHS 75B-C) tones at apex on upper side

INVOLUCRE: funnel-shaped, many bracts, adpressed position of bracts

DISC: yellow

DISC FLORET: yellowish corolla lobe

**Origin and Breeding:** 'Synfrost' originated from an open pollinated cross between the female parent variety 'Patricia Viking' and pollen from an unknown male parent variety. The new variety was bred and developed by the breeder Mark Smith in August 2003 in Alva, Florida, USA. The resultant seed from the cross was sown in a greenhouse in April 2004 in Alva, Florida. The new variety was selected as a single plant from the progeny in October 2004 based on plant growth habit, flower colour, flower colour and flower longevity.

**Tests and Trials:** Trials for 'Synfrost' were conducted in an outdoor irrigated trial during the summer of 2010 in St. Thomas, Ontario. The trial included a total of 15 plants each of the candidate and reference variety. All plants were grown from a single rooted cutting transplanted into a 20 cm standard pot on June 29, 2010. Observations and measurements were taken from 10 plants of the candidate variety and reference variety on September 29, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

**Comparison table for 'Synfrost'**

|  | 'Synfrost'                      | 'Margrethe Viking'* |
|--|---------------------------------|---------------------|
| <i>Plant width (cm)</i>                |                                 |                     |
| mean                                   | 34.9                            | 45.6                |
| std. deviation                         | 1.07                            | 1.34                |
| <i>Flower head diameter (cm)</i>       |                                 |                     |
| mean                                   | 3.3                             | 3.7                 |
| std. deviation                         | 0.16                            | 0.21                |
| <i>Colour of aged ray floret (RHS)</i> |                                 |                     |
| upper side                             | NN155D with 75B-C tones at apex | NN155D              |
| <i>Involucre diameter (cm)</i>         |                                 |                     |
| mean                                   | 0.8                             | 1.2                 |
| std. deviation                         | 0.02                            | 0.08                |

\*reference variety



Aster: 'Synfrost' (left) with reference variety 'Margrethe Viking' (right)



Aster: 'Synfrost' (left) with reference variety 'Margrethe Viking' (right)



Aster: 'Synfrost' (left) with reference variety 'Margrethe Viking' (right)

|                               |   |
|-------------------------------|---|
| <b>Proposed denomination:</b> | <b>'Synhen Thefirst'</b>  |
| <b>Trade name:</b>            | Henry The First   |
| <b>Application number:</b>    | 09-6777   |
| <b>Application date:</b>      | 2009/10/30  |
| <b>Applicant:</b>             | Syngenta Crop Protection AG, Basel, Switzerland                             |
| <b>Agent in Canada:</b>       | BioFlora Inc., St. Thomas, Ontario  |
| <b>Breeder:</b>               | Mark Smith, Syngenta Flowers, Inc., Alva, Florida, United States of America |

**Varieties used for comparison:** 'Victoria Fanny' and 'Synbul Henfirst' (Blue Henry the First)

**Summary:** *The plants of 'Synhen Thefirst' are medium height while those of 'Victoria Fanny' are tall and those of 'Synbul Henfirst' are short. The plants of 'Synhen Thefirst' are narrower than those of 'Victoria Fanny'. The stem of 'Synhen Thefirst' is thin while that of 'Victoria Fanny' is thick. The stem of 'Synhen Thefirst' has medium hairiness and no anthocyanin colouration on the internode while that of 'Victoria Fanny' has absent to very weak hairiness and medium anthocyanin colouration on the internode. The leaf of 'Synhen Thefirst' is smaller than that of 'Victoria Fanny'. The flower head of 'Synhen Thefirst' has a smaller diameter than that of 'Victoria Fanny'. The upper side of the ray floret of 'Synhen Thefirst' is violet while that of 'Synbul Henfirst' is blue violet. The involucre of 'Synhen Thefirst' has a larger diameter than that of 'Victoria Fanny'.*

**Description:**

**PLANT:** medium height

**STEM:** semi-erect branch attitude, thin, many branches, medium hairiness, no anthocyanin colouration on internodes, anthocyanin colouration on leaf axil ranging from absent to weak

**LEAF:** ovate, no dentations, medium green, absent or very weak anthocyanin colouration

**FLOWER HEAD:** distributed only on the distal part of a side branch of the first order, more than two whorls of ray florets, many ray florets

**RAY FLORET:** narrow obovate, predominantly ligulate, weakly incurved to straight tip, flat in cross section, rounded apex, dentation of apex present, violet (RHS N87A) on upper side

**INVOLUCRE:** funnel-shaped, many bracts, adpressed position of bracts

**DISC:** none

**Origin and Breeding:** ‘Synhen Thefirst’ originated from an open pollinated cross between the female parent variety ‘AS04-036’ and pollen from an unknown male parent variety. The new variety was bred and developed by the breeder Mark Smith in March 2006 in Alva, Florida, USA. The resultant seed from the cross was sown in a greenhouse in May 2006 in Alva, Florida. The new variety was selected as a single plant from the progeny in October 2006 based on flower colour and plant growth habit.

**Tests and Trials:** Trials for ‘Synhen Thefirst’ were conducted in an outdoor irrigated trial during the summer of 2010 in St. Thomas, Ontario. The trial included a total of 15 plants each of the candidate and reference variety. All plants were grown from a single rooted cutting transplanted into a 20 cm standard pot on June 29, 2010. Observations and measurements were taken from 10 plants of the candidate variety and reference variety on September 14, 2010, except the variety ‘Victoria Fanny’ which was observed on September 29, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

**Comparison table for ‘Synhen Thefirst’**

|                                   | ‘Synhen Thefirst’ | ‘Victoria Fanny’* | ‘Synbul Henfirst’* |
|-----------------------------------|-------------------|-------------------|--------------------|
| <i>Plant height (cm)</i>          |                   |                   |                    |
| mean                              | 25.9              | 43.6              | 19.0               |
| std. deviation                    | 2.59              | 3.37              | 1.52               |
| <i>Plant width (cm)</i>           |                   |                   |                    |
| mean                              | 42.4              | 64.2              | 39.7               |
| std. deviation                    | 3.13              | 4.57              | 2.25               |
| <i>Leaf length (cm)</i>           |                   |                   |                    |
| mean                              | 2.2               | 3.3               | 2.1                |
| std. deviation                    | 0.14              | 0.31              | 0.24               |
| <i>Leaf width (cm)</i>            |                   |                   |                    |
| mean                              | 0.5               | 0.7               | 0.5                |
| std. deviation                    | 0.06              | 0.04              | 0.04               |
| <i>Flower head diameter (cm)</i>  |                   |                   |                    |
| mean                              | 3.3               | 3.9               | 3.2                |
| std. deviation                    | 0.16              | 0.21              | 0.13               |
| <i>Colour of ray floret (RHS)</i> |                   |                   |                    |
| upper side                        | N87A              | N87A              | lighter than N88B  |
| <i>Involucre diameter (cm)</i>    |                   |                   |                    |
| mean                              | 1.7               | 1.2               | 1.5                |
| std. deviation                    | 0.14              | 0.12              | 0.14               |

\*reference varieties



Aster: 'Synhen Thefirst' (left) with reference varieties 'Victoria Fanny' (centre) and 'Synbul Henfirst' (right)



Aster: 'Synhen Thefirst' (left) with reference varieties 'Victoria Fanny' (centre) and 'Synbul Henfirst' (right)





Aster: 'Synhen Thefirst' (left) with reference varieties 'Victoria Fanny' (centre) and 'Synbul Henfirst' (right)

|                               |   |
|-------------------------------|---|
| <b>Proposed denomination:</b> | <b>'Synpin Henfirst'</b>  |
| <b>Trade name:</b>            | Pink Henry the First  |
| <b>Application number:</b>    | 09-6778   |
| <b>Application date:</b>      | 2009/10/30  |
| <b>Applicant:</b>             | Syngenta Crop Protection AG, Basel, Switzerland                             |
| <b>Agent in Canada:</b>       | BioFlora Inc., St. Thomas, Ontario  |
| <b>Breeder:</b>               | Mark Smith, Syngenta Flowers, Inc., Alva, Florida, United States of America |

**Varieties used for comparison:** 'Victoria Celeste' and 'Synhen Thefirst' (Henry The First)

**Summary:** *The plants of 'Synpin Henfirst' are smaller than those of 'Victoria Celeste'. The leaf of 'Synpin Henfirst' is longer than that of 'Synhen Thefirst'. The flower head and involucre of 'Synpin Henfirst' are smaller in diameter than those of both reference varieties. The ray floret of 'Synpin Henfirst' is shorter than that of both reference varieties. The upper side of the ray floret of 'Synpin Henfirst' is a different violet colour from that of both reference varieties.*

**Description:**

**PLANT:** medium height

**STEM:** semi-erect branch attitude, thin to medium thickness, many branches, medium hairiness, anthocyanin colouration on leaf axil ranging from absent to weak

**LEAF:** elliptic, no dentations, medium green, absent or very weak anthocyanin colouration

**FLOWER HEAD:** distributed only on the distal part of a side branch of the first order, more than two whorls of ray florets, many ray florets

**RAY FLORET:** narrow obovate, predominantly ligulate, straight tip, flat to weakly convex in cross section, rounded apex, dentation of apex present, violet (RHS N80A) on upper side

**INVOLUCRE:** funnel-shaped, many bracts, adpressed position of bracts

**DISC:** none

**Origin and Breeding:** ‘Synpin Henfirst’ originated from a naturally occurring whole plant mutation of the variety ‘Yohenny the First’. The new variety was discovered and developed by the breeder Mark Smith in April 2008 in Alva, Florida, USA. ‘Synpin Henfirst’ was selected based on flower colour and plant growth habit.

**Tests and Trials:** Trials for ‘Synpin Henfirst’ were conducted in an outdoor irrigated trial during the summer of 2010 in St. Thomas, Ontario. The trial included a total of 15 plants each of the candidate and reference varieties. All plants were grown from a single rooted cutting transplanted into a 20 cm standard pot on June 29, 2010. Observations and measurements were taken from 10 plants of the candidate variety on September 23, 2010, ‘Synhen Thefirst’ on September 14, 2010 and ‘Victoria Celeste’ on October 6, 2010. All colour determinations were made using the 2007 Royal Horticultural Society (RHS) Colour Chart.

**Comparison table for ‘Synpin Henfirst’**

|                                   | ‘Synpin Henfirst’ | ‘Victoria Celeste’* | ‘Synhen Thefirst’* |
|-----------------------------------|-------------------|---------------------|--------------------|
| <i>Plant height (cm)</i>          |                   |                     |                    |
| mean                              | 28.2              | 34.1                | 25.9               |
| std. deviation                    | 2.06              | 1.14                | 2.59               |
| <i>Plant width (cm)</i>           |                   |                     |                    |
| mean                              | 44.3              | 51.4                | 42.4               |
| std. deviation                    | 2.90              | 1.73                | 3.13               |
| <i>Leaf length (cm)</i>           |                   |                     |                    |
| mean                              | 3.1               | 3.0                 | 2.2                |
| std. deviation                    | 0.32              | 0.22                | 0.14               |
| <i>Flower head diameter (cm)</i>  |                   |                     |                    |
| mean                              | 2.8               | 3.9                 | 3.3                |
| std. deviation                    | 0.13              | 0.17                | 0.16               |
| <i>Ray floret length (cm)</i>     |                   |                     |                    |
| mean                              | 1.2               | 1.7                 | 1.7                |
| std. deviation                    | 0.04              | 0.04                | 0.07               |
| <i>Colour of ray floret (RHS)</i> |                   |                     |                    |
| upper side                        | N80A              | N78A-B              | N87A               |
| <i>Involucre diameter (cm)</i>    |                   |                     |                    |
| mean                              | 1.1               | 1.3                 | 1.7                |
| std. deviation                    | 0.14              | 0.10                | 0.14               |

\*reference varieties



Aster: 'Synpin Henfirst' (left) with reference varieties 'Victoria Celeste' (centre) and 'Synhen Thefirst' (right)



Aster: 'Synpin Henfirst' (left) with reference varieties 'Victoria Celeste' (centre) and 'Synhen Thefirst' (right)



Aster: 'Synpin Henfirst' (left) with reference varieties 'Victoria Celeste' (centre) and 'Synhen Thefirst' (right)