



US00PP23772P2

(12) **United States Plant Patent**
Heuger

(10) **Patent No.:** **US PP23,772 P2**

(45) **Date of Patent:** **Jul. 23, 2013**

(54) **HELLEBORUS PLANT NAMED ‘COSEH 940’**

(50) Latin Name: *Helleborus niger*×*Helleborus lividus*
Varietal Denomination: **COSEH 940**

(76) Inventor: **Josef Heuger**, Glandorf (DE)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/385,160**

(22) Filed: **Feb. 6, 2012**

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(52) **U.S. Cl.**
USPC **Plt./439**

(58) **Field of Classification Search**

USPC Plt./439

See application file for complete search history.

Primary Examiner — Annette Para

(74) *Attorney, Agent, or Firm* — C. A. Whealy

(57) **ABSTRACT**

A new and distinct cultivar of *Helleborus* plant named ‘COSEH 940’, characterized by its upright and uniformly mounded plant habit; uniform and freely flowering habit; dark green-colored leaves; long flowering period; Single white to light yellow green-colored flowers that are slightly tinged with greyed purple; and good garden performance.

2 Drawing Sheets

1

Botanical designation: *Helleborus niger*×*Helleborus lividus*.

Cultivar denomination: ‘COSEH 940’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Helleborus* plant, botanically known as *Helleborus niger*×*Helleborus lividus*, and hereinafter referred to by the name ‘COSEH 940’.

The new *Helleborus* plant is a product of a planned breeding program in Glandorf, Germany. The objective of the breeding program was to create new uniform *Helleborus* plants with unique and attractive plant habit, leaf and flower coloration and resistance to pests.

The new *Helleborus* plant originated from a cross-pollination conducted by the Inventor in Glandorf, Germany in December, 2006 of an unnamed proprietary seedling selection of *Helleborus niger*, not patented, as the female, or seed, parent with an unnamed proprietary seedling selection of *Helleborus lividus*, not patented, as the male, or pollen, parent. The new *Helleborus* plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination grown in a controlled greenhouse environment in Glandorf, Germany in November, 2008.

Asexual reproduction of the new *Helleborus* plant by divisions in a controlled greenhouse environment in Glandorf, Germany since February, 2009 has shown that the unique features of this new *Helleborus* plant are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the new *Helleborus* have not been observed under all possible environmental conditions and cultural practices. The phenotype may vary somewhat with variations in environmental conditions such as temperature and light intensity without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of ‘COSEH 940’.

2

These characteristics in combination distinguish ‘COSEH 940’ as a new and distinct *Helleborus* plant:

1. Upright and uniformly mounded plant habit.
2. Uniform and freely flowering habit.
3. Dark green-colored leaves.
4. Long flowering period.
5. Single white to light yellow green-colored flowers that are slightly tinged with greyed purple.
6. Good garden performance.

Compared to plants of the parent selections, plants of the new *Helleborus* are more uniformly mounded and are more uniformly and freely flowering.

Plants of the new *Helleborus* can be compared to plants of *Helleborus niger*×*Helleborus lividus* ‘COSEH 710’, disclosed in U.S. Plant Pat. No. 21,063. In side-by-side comparisons conducted in Glandorf, Germany, plants of the new *Helleborus* differed from plants of ‘COSEH 710’ in leaf and flower color.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new *Helleborus* plant showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new *Helleborus* plant.

The photograph on the first sheet comprises a side perspective view of a typical flowering plant of ‘COSEH 940’ grown in a container.

The photograph on the second sheet is a close-up view of a typical flowering plant of ‘COSEH 940’.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations, measurements and values describe plants grown during the winter in 15-cm containers in a glass-covered greenhouse in Glandorf, Germany and under environmental conditions and cultural practices which closely approximate commercial *Helleborus* production. During the production of the plants,

day temperatures ranged from 12° C. to 32° C. and night temperatures ranged from 3° C. to 18° C. Plants were 14 months old when the photographs and the description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Helleborus niger* × *Helleborus lividus* 'COSEH 940'.

Parentage:

Female, or seed, parent.—Unnamed proprietary seedling selection of *Helleborus niger*, not patented.

Male, or pollen, parent.—Unnamed proprietary seedling selection of *Helleborus lividus*, not patented.

Propagation:

Type.—By tissue culture.

Time to initiate roots.—About two months at 12° C.

Time to produce a rooted young plant.—About six months at 4° C. to 15° C.

Root description.—Thick to thin, fleshy; white to brown in color.

Rooting habit.—Sparse.

Plant description:

Plant form and growth habit.—Herbaceous perennial; upright and uniformly mounding plant habit with flowers held just above the foliar plane; plant shape is globular; moderately vigorous growth habit.

Plant height.—About 34.5 cm.

Plant diameter (area of spread).—About 41.2 cm.

Foliage description:

Arrangement.—Leaves arranged in a basal rosette; leaves palmately compound with five leaflets per leaf.

Leaf length.—About 12.4 cm.

Leaf width.—About 14.7 cm.

Leaflet length.—About 8.4 cm.

Leaflet width.—About 3.9 cm.

Leaf shape.—Palmate; orbicular in outline.

Leaflet shape.—Ovate to broadly ovate.

Leaflet apex.—Acute.

Leaflet base.—Attenuate.

Leaflet margin.—Sharply serrate; moderately undulate.

Leaflet texture, upper and lower surfaces.—Smooth, glabrous; leathery.

Leaflet venation pattern.—Pinnate.

Leaflet color.—Developing leaves, upper surface: Close to N137B. Developing leaves, lower surface: Between 148A and 197A. Fully developed leaves, upper surface: Between 147A and 189A; venation, close to 144A to 144B. Fully developed leaves, lower surface: Between 148B and 191A; venation, close to 152A.

Petiole.—Length: About 7.8 cm. Diameter: About 5 mm. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper and lower surfaces: Close to 146B to 146C heavily dotted with close to N199A to N199B.

Flower description:

Flower shape and habit.—Single rotate flowers arranged in terminal and axillary cymes; freely and uniform flowering habit with about 60 flowers and flower buds developing per terminal inflorescence; flowers facing outwardly to slightly nodding and slightly upright.

Fragrance.—None detected.

Natural flowering season.—Plants begin flowering about ten months after planting; long flowering period, plants flower from late winter to early spring in Germany.

Flower longevity on the plant.—About ten days; flowers not persistent.

Flower buds.—Length: About 1.7 cm. Diameter: About 1.3 cm. Shape: Ovate. Color: Close to 145C tinged with close to 182D.

Inflorescence height.—About 27.1 cm.

Inflorescence diameter.—About 36.5 cm.

Flower diameter.—About 6.3 cm.

Flower depth (height).—About 2.6 cm.

Petals.—Transformed into nectaries.

Sepals.—Quantity and arrangement: Five arranged in a single whorl. Length: About 3.1 cm. Width: About 2.4 cm. Shape: Broadly elliptic to obovate. Apex: Obtuse. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper surface: Between 145C to 145D and 150D; towards the base, close to 145C. When opening, lower surface: Close to 145B to 145C slightly tinged with close to 177D. Fully opened, upper surface: Close to 155A to 155C; center slightly tinged with close to 150D; towards the margins slightly tinged with lighter than 186D; towards the base, close to 145B; with development, color becoming closer to 144A. Fully opened, lower surface: Between 155C and 145D moderately tinged with between 177D and 182D.

Peduncles.—Strength: Moderately strong. Length: About 21.3 cm. Diameter: About 5 mm. Aspect: About 10° from vertical. Texture: Smooth, glabrous. Color: Close to 144A to 144B heavily dotted with close to 178A.

Pedicels.—Strength: Moderately strong. Length: About 2.7 cm. Diameter: About 2 mm. Aspect: Erect to about 30° from the peduncle axis. Texture: Smooth, glabrous. Color: Close to 145C moderately dotted with close to 182D.

Reproductive organs.—Stamens: Quantity per flower: About 60. Filament length: About 1.4 cm. Filament color: Close to 157D. Anther shape: Reniform. Anther length: About 2 mm. Anther color: Close to 154B to 154C. Pollen amount: Scarce. Pollen color: Close to 158D. Pistils: Quantity per flower: About five. Pistil length: About 1.1 cm. Stigma shape: Club-shaped. Stigma color: Close to 150D. Style length: About 9 mm. Style color: Close to 145D. Ovary color: Close to 145B to 145C. Nectaries (transformed petals): Quantity per flower: About 14. Length: About 9 mm. Diameter, apex: About 2 mm. Diameter, base: About 1 mm. Shape: Flattened triangular. Color: Close to 150B; towards the apex, close to N144A.

Seeds and fruits.—Seed and fruit development have not been observed on plants of the new *Helleborus*.

Garden performance.—Plants of the new *Helleborus* have been observed to have good garden performance and to tolerate rain and wind; plants of the new *Helleborus* have been observed to tolerate high temperatures of about 35° C. and are hardy to USDA Hardiness Zone 5.

Pathogen & pest resistance.—Plants of the new *Helleborus* have not been observed to be resistant to pathogens and pests common to *Helleborus* plants.

It is claimed:

1. A new and distinct *Helleborus* plant named 'COSEH 940' as illustrated and described.

* * * * *



