



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

(10) **Patent No.:** **US PP22,424 P2**  
(45) **Date of Patent:** **Dec. 27, 2011**

- (54) **HELLEBORUS PLANT NAMED ‘COSEH 790’**
- (50) Latin Name: *Helleborus niger*×*Helleborus*×*sternii*  
Varietal Denomination: **COSEH 790**
- (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.: **13/068,373**
- (22) Filed: **May 9, 2011**
- (51) **Int. Cl.**  
**A01H 5/00** (2006.01)
- (52) **U.S. Cl.** ..... **Plt./439**
- (58) **Field of Classification Search** ..... **Plt./439**  
See application file for complete search history.

- (56) **References Cited**
- U.S. PATENT DOCUMENTS
- |          |      |        |        |       |          |
|----------|------|--------|--------|-------|----------|
| PP21,003 | P2 * | 5/2010 | Heuger | ..... | Plt./439 |
| PP21,063 | P2 * | 6/2010 | Heuger | ..... | Plt./439 |
- \* cited by examiner
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- (57) **ABSTRACT**
- A new and distinct cultivar of *Helleborus* plant named ‘COSEH 790’, characterized by its upright and uniformly mounded plant habit; uniform and freely flowering habit; dark green-colored leaves; long flowering period; single white-colored flowers tinged with light green; and good garden performance.

**2 Drawing Sheets**

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Botanical designation: *Helleborus niger*×*Helleborus*×*sternii*.  
Cultivar denomination: ‘COSEH 790’.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar of *Helleborus* plant, botanically known as *Helleborus niger*×*Helleborus*×*sternii*, and hereinafter referred to by the name ‘COSEH 790’.

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 November, 2003 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*×*sternii*, 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 February, 2006.

Asexual reproduction of the new *Helleborus* plant by divisions in a controlled greenhouse environment in Glandorf, Germany since March, 2006, 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.

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The following traits have been repeatedly observed and are determined to be the unique characteristics of ‘COSEH 790’. These characteristics in combination distinguish ‘COSEH 790’ 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-colored flowers tinged with light green.
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 primarily from plants of ‘COSEH 710’ in flower color as plants of ‘COSEH 710’ had light green-colored flowers with reddish pink overtones. In addition, plants of the new *Helleborus* and ‘COSEH 710’ differed slightly in leaf 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 790’ grown in a container.

- The photograph on the second sheet is a close-up view of a typical flowering plant of ‘COSEH 790’.

**DETAILED BOTANICAL DESCRIPTION**

The aforementioned photographs and following observations, measurements and values describe plants grown in



15-cm containers during the winter in a glass-covered greenhouse in Glandorf, Germany and under conditions 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 sternii* 'COSEH 790'.

Parentage:

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

*Male, or pollen, parent.*—Unnamed proprietary seedling selection of *Helleborus sternii*, 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; and moderately vigorous growth habit.

*Plant height.*—About 37.9 cm.

*Plant diameter (area of spread).*—About 50.8 cm.

Foliage description:

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

*Leaf length.*—About 13.7 cm.

*Leaf width.*—About 14.5 cm.

*Leaflet length.*—About 8.9 cm.

*Leaflet width.*—About 4.3 cm.

*Leaf shape.*—Palmate; orbicular in outline.

*Leaflet shape.*—Broadly ovate to elliptic.

*Leaflet apex.*—Acute.

*Leaflet base.*—Attenuate.

*Leaflet margin.*—Sharply and coarsely serrate.

*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: Close to 148A to 148B. Fully developed leaves, upper surface: Close to 147A; venation, close to 144A. Fully developed leaves, lower surface: Close to 147B; venation, close to 187A.

*Petiole.*—Length: About 11.7 cm. Diameter: About 6 mm. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper and lower surfaces: Close to 146C; moderately to heavily tinged and dotted with close to between 187A and 200B.

Flower description:

*Flower shape and habit.*—Single rotate flowers arranged in terminal and axillary cymes; freely and uniform flowering habit with about 80 flowers and flower buds per plant; 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 1.9 cm. Diameter: About 1.1 cm. Shape: Ovate. Color: Close to 150D tinged with close to 177C to 177D.

*Inflorescence height.*—About 31.3 cm.

*Inflorescence diameter.*—About 23.2 cm.

*Flower diameter.*—About 6.2 cm.

*Flower depth (height).*—About 2.8 cm.

*Petals.*—Transformed into nectaries.

*Sepals.*—Quantity and arrangement: Five arranged in a single whorl. Length: About 3.2 cm. Width: About 2.5 cm. Shape: Ovate to broadly obovate. Apex: Rounded. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper surface: Close to 145D; towards the base, close to 145B. When opening, lower surface: Close to 145C; towards the base, close to 146D. Fully opened, upper surface: Close to 157D tinged with close to 145C to 145D and 150D; towards the base, close to 146D; with development, color becoming closer to between 144B and 145A. Fully opened, lower surface: Close to between 150D and 157A; center and base moderately tinged with close to between 184C.

*Peduncles.*—Strength: Moderately strong. Length: About 20.8 cm. Diameter: About 7 mm. Aspect: About 10° from vertical. Texture: Smooth, glabrous. Color: Close to 145C moderately to heavily dotted with close to 182A to 182B.

*Pedicels.*—Strength: Moderately strong. Length: About 3.5 cm. Diameter: About 2 mm. Aspect: Erect to about 20° from the peduncle axis. Texture: Smooth, glabrous. Color: Close to 145C tinged with close to 176D.

*Reproductive organs.*—Stamens: Quantity per flower: About 70. Filament length: About 1.5 cm. Filament color: Close to 157D. Anther shape: Reniform. Anther length: About 1.5 mm. Anther color: Close to 150B to 150C. Pollen amount: Scarce. Pollen color: Close to 158D. Pistils: Quantity per flower: About six. Pistil length: About 1.1 cm. Stigma shape: Club-shaped. Stigma color: Close to 157A. Style length: About 1 cm. Style color: Close to 157D. Ovary color: Close to 157C. Nectaries (transformed petals): Quantity per flower: About 13. Length: About 9 mm. Diameter, apex: About 2 mm. Diameter, base: About 1 mm. Shape: Flattened triangular. Color: Close to 145C; towards the base, close to 150B.

*Seeds/fruits.*—Seed and fruit development have not been observed.

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 shown to be resistant to pathogens and pests common to *Helleborus*.

It is claimed:

1. A new and distinct *Helleborus* plant named 'COSEH 790' as illustrated and described.







