

#### (12) United States Plant Patent **US PP21,980 P3** (10) Patent No.: (45) **Date of Patent:** Jun. 14, 2011 Adam, Jr.

- TIARELLA PLANT NAMED 'DELAWARE' (54)
- Latin Name: *Tiarella cordifolia* (50)Varietal Denomination: **Delaware**
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- (65)**Prior Publication Data** US 2011/0107489 P1 May 5, 2011
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MD (US)

- Subject to any disclaimer, the term of this \*) Notice: patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
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#### ABSTRACT (57)

A new and distinct *Tiarella cordifolia* plant characterized by its large, rounded foliage with purple markings and white flowers and pink buds.

### **2 Drawing Sheets**

Botanical/commercial classification: *Tiarella cordifolia*. Varietal denomination: 'Delaware'.

#### BACKGROUND OF THE. INVENTION

The new *Tiarella cordifolia* was selected during 2007 as a seedling from the garden at the Nursery of Sinclair A. Adam Jr. at Coatesville, Pa., U.S.A. The exact parentage of the new variety is unknown. It resulted from seedlings grown from open-pollinated plants of *Tiarella cordifolia*, and *Tiarella* 10 *cordifolia* var. *collina*. Several hundred plants are grown for seed production, and some or all of these plants are likely included in the parentage of the new variety of the present invention. The new variety has been carefully preserved and studied 15 since the time of its discovery. Had such new variety not been discovered and preserved, it would have been lost to mankind. It was found that the new *Tiarella cordifolia*, variety of the present invention exhibits the following combination of characteristics: (a) exhibits a compact mounding clump growth 20 habit with substantial red runners, (b) forms attractive white, flowers with pink buds on branched flower stalks, (c) forms lobed ovate green leaves having a matte finish during the summer that bear maroon markings along the leaf veins maroon and in the center, and this pigment expands in the late 25 summer. In fall the leaves turn darker red of variable intensity during the fall, and (d) is particularly well suited for growing as a distinctive ornamental ground cover, creating a dense stand in a season.

The runners (stolons) and flower stems of clumps have been used to asexually propagate the new variety at Delhi, N.Y. (laboratory), and Coatesville, (breeder and Nursery) Pa., U.S.A. It has been found that the distinctive combination of characteristics of the new variety is firmly fixed and is reliably transmitted to succeeding generations. During observations to date, the new variety has been found to be readily amenable to such propagation.

The new variety 'Delaware' can be compared to 'Elizabeth' Oliver' (not patented), which differs from 'Delaware' in having shorter runners that are not as red in color and foliage that turns purple rather than red in fall. 'Delaware' can also be compared to cultivars from the same breeding program, 'Octoraro' (U.S. patent application Ser. No. 12/589,995), Lehigh' (U.S. patent application Ser. No. 12/589,998), and 'Susquehanna' (U.S. patent application Ser. No. 12/589,996). 'Octoraro' differs from 'Delaware' in having foliage that in spring has maroon markings that are localized on the veins only, and in having foliage that turns golden yellow with red veins in the fall. 'Lehigh' differs from 'Delaware' in lacking red colored runners. 'Susquehanna' differs from 'Delaware' in having foliage that in spring has maroon markings that are localized primarily on the veins, and in having foliage that turns red with green margins in fall.

The new variety of the present invention can be readily 30 distinguished from other previously known varieties of the species in view of the distinctive combination of characteristics discussed herein. The red, and green spring, summer, and fall color is considered to be particularly noteworthy. The new variety well meets the needs of the horticultural 35 industry and expands the choices of ornamental ground covers which fills in as a stand well. It performs well wherever a ground cover is desired, and is particularly well suited for use as a border planting, use in shaded areas, and for ecology and restoration casting open pollinated seedlings, and asexual 40 runners.

## BRIEF DESCRIPTION OF THE DRAWING

FIG. 1: shows a two-year-old plant of *Tiarella* 'Delaware' growing in the ground in full sun in August in Baltimore, Md. FIG. 2: shows inflorescences on the left (from bud on the left to full bloom on the right), a stolon in the middle, and various stage of leaf development on right.

### DETAILED PLANT DESCRIPTION.

The following is a detailed description of the new variety that was obtained while observing plants being grown outdoors, and in the greenhouse during 2007-2008 at Coatesville, Pa., U.S.A. The plants were approximately two years of age and were being grown on their own roots. The chart used in the identification of color is The R.H.S. Colour Chart of

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The Royal Horticultural Society, London, England. More common color terms are to be accorded their ordinary dictionary significance.

Botanical classification: *Tiarella cordifolia* 'Delaware'. Plant:

*Habit.*—Compact mounding clump, with runners.

*Type*.—Evergreen.

*Height*.—Approximately 10 to 15 cm without blooms, and approximately 28 to 40 cm with blooms.

Width.—Approximately 24 to 28 cm.

Stolons.—Surface texture; pubescent with hairs 1 mm in length or less, color; Greyed-Purple group 186A, internode length; 3 to 5 cm. ance when compared to the more matte appearance of the ventral leaf surface that commonly is increased in expression in the autumn foliage.

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*Petiole.*—The length commonly varies from approximately 9 to 15 cm, and the diameter commonly is approximately 2 to 3 mm, color; slightly lighter than Greyed-Orange group 166A, texture; pubescent with hairs 0.5 to 2 mm in length.

Inflorescence:

*Type*.—Raceme and perfect (bisexual). Number.—Approximately 40 to 60 blooms per raceme. *Bearing*.—On a branched stalk commonly having a height of approximately 28 to 30 cm, with up to 2 to 3 short side branches. Side branches are 5 to 10 cm in length, bearing 10-20 blooms. Lastingness of inflorescence.—About 3 weeks. Flower buds.—Ellipsoid in shape, perigynous, 4 to 5 mm in depth and 3 mm in width, 65C in color. *Calyx.*—Five-lobed, about 2 mm in length and 1 cm in width, 62D in color. *Petals.*—Five, 4 to 5 mm in length and 1 mm in width. *Petal shape*.—Triangular. *Stamens.*—Ten, about 4 to 5 mm in length. Anthers coral color Red group 37B. *Pistil.*—One, about 5 mm in length. *Flower size.*—Approximately 6 to 8 mm in depth on average per floret. *Color.*—On the dorsal surface White Group 155B and on the ventral surface White Group 155A. *Fragrance*.—Slight and sweet. *Pedicel.*—Approximately 6 to 7 mm in length on average, color Red-Purple group 64A. Development:

Foliage:

*Type*.—Simple.

*Shape.*—Ovate to broadly ovate, slightly lobed, with 5 lobes the central one being pronounced, and irregularly crenate margins on all lobes having mucronate teeth. Each tooth has a small point which, which is relatively firm with a leaf vein extending to the end of <sup>20</sup> the tip.

Length.—Approximately 7 to 8 cm.

*Width.*—Approximately 6-7 cm.

Margins.—Crenate.

*Apex.*—The lobes are broadly obtuse to rounded and <sup>2</sup> cuspidate.

Base.—Cordate.

*Texture.*—Upper surface; Slightly rugose with a velvet matte finish, slightly pubescent with hairs 1 to 2 mm in length about 1 to 2 mm apart, lower surface; glabrous with pubescence along veins with hairs about 1 mm in length.

Arrangement.—Basal clump, with branched runners 8-12 in number, usually 20-40 cm in length. *Venation.*—Palmately reticulate.

Vegetation.—Clump-forming, with runners (stolons). Bloom period.—Abundantly when initially blooms during May/June and sporadically thereafter during the summer and fall.

- *Color.*—Young Foliage: On the upper surface Yellow-Green Group 144A to 144B, and Greyed-Purple Group 187A at the center and along the main vein, and on the lower surface Yellow-Green Group 146B to 146C.
- Adult foliage: On the upper surface Green Group 137B to 137D, and Brown Group 200B at the center and along the main vein, and on the lower surface Yellow-Green Group 146B to Greyed-Green Group 191A.
- Fall foliage: Both the ventral leaf surface (upper) and the dorsal leaf surface (lower) are characterized by areas of light red and darker reddish-purple that are near and through the following colors: Red Group 49D and Red-Purple Group 62D in the lighter areas to Red Group 53D and Greyed-Purple Group 186B in the mid-tones to Greyed-Purple Group 187A and 187B in the darker areas. The dorsal leaf surface exhibits a slightly glossier appear-

*Resistance to disease.*—No susceptibility to diseases has been noted during observations to date.

Hardiness.—Has proven to grow well in U.S.D.A. Hardiness Zones No. 4 to 7.

Propensity to form fruit/seeds.—Approx 0.2 grams per (1 year-old) plant (about 600 seeds).

Plants of the new 'Delaware' variety have not been 45 observed under all possible environmental conditions to date. Accordingly, it is possible that the phenotype expression may vary somewhat with changes in light intensity and duration, cultural practices, and other environmental conditions. I claim:

**1.** A new and distinct *Tiarella* plant as herein illustrated and described.

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