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(54) **THUJA OCCIDENTALIS PLANT NAMED TRIPLE G TREE**

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(57) **ABSTRACT**

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Related U.S. Application Data

A distinct *Thuja occidentalis* cultivar having a shorter maximum height at maturity with a less elongate crown, more piriform shape, and overall bright green coloration all year round. The branchlets are slightly curved and ascend in more compacted sprays requiring less trimming to maintain shape.

(63) Continuation of application No. 15/699,198, filed on Sep. 8, 2017, now Pat. No. 10,213,910.

[0001] Botanical designation: *Thuja occidentalis* cultivar Triple G.

[0009] FIG. 4 is a photographic print in full color showing the form of a mature Triple G tree (right) adjacent a mature specimen of the typical *Thuja* variety.

BACKGROUND OF THE INVENTION

DETAILED BOTANICAL DESCRIPTION

[0002] The present invention relates to a new and distinct cultivar of *Thuja* plant, botanically known as *Thuja occidentalis* L. var. *pyramidalis* (Zederb.), commonly known as arborvitae or the "Green Giant", and hereinafter referred to by the name 'Triple G'.

[0010] The following traits have been repeatedly observed and are believed to be characteristics of the Triple G cultivar. The below observations, measurements and values describe the new cultivar as grown in North Carolina and distinguish this arborvitae as a new and distinct cultivar.

[0003] The new *Thuja* plant was discovered by the inventors in a commercial stand of *Thuja occidentalis* in a nursery in Lenoir, N.C. Cuttings were prepared and continued asexual reproduction has shown that the unique features of the new *Thuja* cultivar are stable and reproduced true to type in successive generations.

[0011] Type: Native, perennial conifer tree of the Cupressaceae family.

SUMMARY OF THE INVENTION

[0012] Appearance: Grows to a maximum height of 7 to 10 meters at maturity. The crown is narrowly conic and less pyramidal than other *Thuja* cultivars. Densely crowded branches with flattened branchlets are slightly curled into tautly arrayed, fan-shaped sprays.

[0004] The cultivar Triple G maintains its bright green color throughout the year and does not bronze like typical *Thuja occidentalis* cultivars or other arborvitae in colder weather. The Triple G cultivar extends branching more compactly relative the *Thuja occidentalis* and requires less trimming. The Triple G further displays a less acute axil between its needles and surculi comprising its fascicles, and likewise between its surculi and branchlets, resulting in a more curved habit, tightly spaced phyllotaxis pattern, and an overall more piriform appearance. In more mature specimens, the Triple G cultivar's crown is less elongate than other *Thuja* cultivars. It's maximum height at maturity is generally less than 10 meters.

[0013] Origin: Propagated from cuttings collected from a variant specimen discovered in a commercial stand of *Thuja occidentalis* L. in Lenoir, N.C.

DESCRIPTION OF THE DRAWINGS

[0014] Parentage: Variant cultivar discovered in a cultivated area.

[0005] This new variety of the *Thuja* tree is illustrated by the accompanying photographic drawings.

[0015] Classification: *Thuja occidentalis* L. cultivar Triple G.

[0006] FIG. 1 is a photographic print in full color showing the form of the mature Triple G tree at ten years of age.

[0016] Height: Shorter and more compact than other *Thuja occidentalis* cultivars. Maximum height at maturity tops out under 10 meters.

[0007] FIG. 2 is a photographic print in full color showing a branchlet of the Triple G (left) adjacent a branchlet of a typical *Thuja* variety (right).

[0017] Leaves: Small flattened, green twigs bearing paired, evergreen, scale-like decussate leaves, approximately 2 to 3 mm long and abruptly pointed. Tips are blunt to sharply pointed and slanted toward the sprout. Surface leaves have a broad keel that narrows sharply at the tip. Marginal leaves scaffold pressed against the flanks of the surface leaves or the keels of the next higher marginal leaves.

[0008] FIG. 3 is a photographic print in full color showing a seedling of the Triple G (left) relative a seedling of a typical *Thuja* variety (right).

[0018] Branchlets: Flattened, bright green on the upper side and pale green on the base. Perceptibly lighter green than other *Thuja* cultivars, and slightly curled. Do not turn yellow-brown in winter like other *Thuja* cultivars.

[0019] Odor: Camphoraceous.

[0020] Bark: Gray to reddish-brown, 6 to 9 mm thick, fibrous, separated into flat, connected ridges.

[0021] Seeds: Seed cones are ellipsoid 6 to 14 mm long, brown. Seeds ca. 8 per cone, 4 to 7 mm long, with lateral wings about as wide as the body.

Group	Constituents
Essential oil	Borneol Camphene Fenchone Limonene Myricene α -Terpine Terpinolene Thujone (0.76-2.4% of essential oil, 85% α -thujone, 15% β -thujone) Thujylalcohol
Coumarins	p-Coumaric acid Umbelliferone
Flavonoids	(+/-)-Catechine (-)-Gallocatechine Kaempferol Kaempferol-3-O- α -rhamnoside Meamsitrin

-continued

Group	Constituents
	Myricetine Myricitrin Procyanidin B-3 Prodelphinidin Quercetin Quercitrin
Other	Tannic acid Thuja polysaccharides and proteins

Source: "*Thuja occidentalis* (Arbor vitae): A review of its Pharmaceutical, Pharmacological and Clinical Properties" by Naser et al. Evidence Based Complementary Alternative Medicine, pp. 69-78 (Mar, 2005).

We claim:

1. A new and distinct *Thuja occidentalis* cultivar substantially as shown and described and particularly characterized by a more compact growth, smaller mature height, less elongated crown, more piriform shape, and a more vibrant bright green coloration all year round, with slight curling of the branchlets.

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FIG. 1



FIG. 2



FIG. 3



FIG. 4