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

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(54) **HYDRANGEA MACROPHYLLA PLANT**  
**NAMED 'HYMMAD III'**

(50) Latin Name: *Hydrangea macrophylla*  
Varietal Denomination: **HYMMAD III**

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patent is extended or adjusted under 35  
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(51) **Int. Cl.**  
**A01H 5/00** (2006.01)

(52) **U.S. Cl.** ..... **Plt./250**

(58) **Field of Classification Search** ..... **Plt./250**  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

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(57) **ABSTRACT**

*Hydrangea macrophylla*, 'HYMMAD III' has large, pure  
white lacecap inflorescences that respond slightly with  
maturation to the absence and presence of aluminum becom-  
ing pink or blue, respectively. The habit is upright and strong  
stems that hold the inflorescences erect. The large, lustrous,  
dark green leaves are highly mildew and Cercospora  
resistant, as well as frost resistant.

**2 Drawing Sheets**

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Botanical classification: *Hydrangea macrophylla*.  
Varietal denomination: 'HYMMAD III'.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar  
of *Hydrangea macrophylla*, a member of the Hydrangeaceae  
family, hereinafter referred to as 'HYMMAD III'. This  
cultivar is grown primarily as an ornamental for landscape  
use and for use as a potted plant, fresh cut and dried flowers.  
The cultivar originated from open-pollination of *Hydrangea*  
*macrophylla* 'Veitchii' (non-patented), the pollen donor  
being unknown. It was selected at the University of Georgia,  
Athens, Ga. in 2001, from the progeny seedlings of this open  
pollination by continued evaluation for white lacecap flow-  
ers that mature to light pink or blue in the absence or  
presence of aluminum (Al), respectively, increased resis-  
tance to mildew, and improved habit, leaf, and stem char-  
acteristics.

'HYMMAD III' is distinguished from its female parent  
'Veitchii' by its pure white, larger lacecap inflorescence that  
turns light pink or blue in the absence or presence,  
respectively, of Al. The sepals always open white and  
latently respond to Al. 'HYMMAD III' has lustrous dark  
green leaves, up to 26 cm long, much larger than 'Veitchii'  
(16 cm). 'HYMMAD III', like 'Veitchii', is highly mildew  
and Cercospora resistant, but it grows faster, has stronger  
stems, and larger, showier inflorescences. The flattened  
lacecap inflorescence averages 12 to 15 cm in diameter,  
about 25% larger than those of 'Veitchii'.

'HYMMAD III' is distinguished from lacecaps such as  
'White Wave' (unpatented) and 'Lanarth White'  
(unpatented) by its larger inflorescence, its larger and darker  
green leaves and its high resistance to mildew.

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**SUMMARY OF THE INVENTION**

The following traits have been observed and represent the  
characteristics of the new Cultivar. In combination these  
characteristics distinguish 'HYMMAD III' from all other  
varieties in commerce known to the inventor:

- 1) Pure white flowers (sepals) that are slightly affected by  
the absence or presence of Al, turning pink or light  
blue, respectively, unlike 'Veitchii' which never devel-  
ops the blue coloration.
- 2) Large, up to 15 cm lacecap inflorescences with 2.5 cm  
diameter sepalous ray florets and mauve to purple  
fertile flowers in the center.
- 3) Upright habit with strong stems that hold the inflores-  
cences erect.
- 4) Lustrous, dark green leaves.
- 5) Mildew and Cercospora resistant foliage similar to its  
parent, 'Veitchii'. 'HYMMAD III' is essentially  
immune to mildew and Cercospora leaf diseases.
- 6) Superior vigor and disease resistance allow commercial  
production of an 11 liter container plant in a single  
growing season.
- 7) Foliage is more frost resistant than standard cultivars  
like 'Nikko Blue' (non-patented), 'Bailmer' (PP  
15,298) and 'Lilacina' (non-patented). 'HYMMAD III'  
tolerated 26° F. in November in Athens, Ga.

'HYMMAD III' has been asexually propagated in Athens,  
Ga. since 2001. The characteristics of the cultivar have been  
stable and reproduced true-to-type in successive vegetative  
generations.

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

FIG. 1 shows a 3 year-old plant growing in the ground in  
Dearing, Ga., taken on May 27, 2004 showing the habit with



lace cap inflorescence with white sepals and purple fertile flowers and lustrous, dark green leaves.

FIG. 2 shows an inflorescence aging to pink on plant grown in the absence of Al.

#### BOTANICAL DESCRIPTION OF THE PLANT

A detailed description of *Hydrangea macrophylla* 'HYM-MAD III' follows. Colors are based on The Royal Horticultural Colour Chart (1995). All measurements/characteristics were taken from 2 year-old plants growing in 11.8 liter containers under 50% shade at Athens, Ga., USDA Zone 7. Measurements of leaf/stems and floral characteristics are based on 10 to 20 samples. The presence of Al means that the plant was treated with aluminum sulphate (42 g per 3.8 liter of water) applied as a soil drench when flower buds were visible.

#### Plant:

The plant has an upright growth habit, with many upright branches from the base, attaining a size of 80 cm high by 100 cm wide after 2 years.

#### Stems:

Current year stems are round, averaging 5.3 mm in diameter, with no pubescence and smooth. They are Greyed-Orange 164A in color. The average internode length is 8.3 cm. Two year-old stems average 9 mm in diameter, with no pubescence but flaky texture. They are Greyed-Brown 199D/Greyed-Brown N199D in color with Brown 200A flakes.

#### Vegetative buds:

The conical, lateral vegetative buds are in an opposite arrangement, 2 per node at a 45° angle to the stem. They are 7 mm by 3 mm, and have 2 scales which are Greyed-Yellow 161A to Greyed-Orange 165B in color.

#### Flower buds:

The flower buds are round in shape with no pubescence, 3 mm by 3 mm by 3 mm and are Purple 77D with Violet-Blue 96A along suture lines in the absence of Al, and Blue 101C in the presence of Al. They develop in the early summer.

#### Leaf:

The leaves, in opposite arrangement, are ovate in shape with acute base and acuminate apex, and serrate margin. The mature leaf averages 12.8 cm long by 6.8 cm wide, very thick and leathery and very waxy. The surfaces have no pubescence. The color of the emerging leaf is Yellow-Green 144A, shiny, to Green 141B, shiny, on the upper surface, and Yellow-Green 146C to Yellow-Green 144A, shiny on the lower surface, maturing to Green 139A on the upper surface and Green 137B on the lower.

The venation is pinnate, with Green 143C veins.

The petioles average 2 cm long and 3 mm in diameter, are grooved above and rounded below, and are Yellow-Green 144A in color.

#### Inflorescence:

The bloom period is from mid May to the end of June in Athens, Ga.

The lacecap inflorescence, containing an average of 423 fertile flowers, averages 14 cm in diameter and 6 cm in depth.

There are an average 8 inflorescences per plant, one per terminal branch.

#### Sterile florets:

There is an average of 10 florets per inflorescence, each with 4 sepals. The sepals are ovoid in shape with rounded apex and acute base and entire margin with occasional undulation. The texture is smooth with no pubescence. They are 25.0 mm long by 20.0 mm wide. At peak of bloom the upper surface is White N155B with touches of Purple 75C in the absence of Al, and Blue-Green 111D in the presence of Al. The lower surface is White N155B in the absence of Al, and White N155A/Blue-Green 111D in the presence of Al.

The peduncle is 5 to 10 mm long, and Greyed-Red 182D in the absence of Al, and Violet-Blue 97A in the presence of Al.

#### Fertile flowers:

There are 5 petals per flower. The petals are ovate in shape, with acute apex, truncate base and an entire margin. They are 3 mm in length by 2 mm wide, with a smooth texture and no pubescence. The color of the upper surface is Violet 84B with Violet-Blue 90D at the base and Violet-Blue 91A at the tip in the absence of Al, and Blue 101C with Blue 100A along the margins and at the base in the presence of Al. The lower surface is Purple 76A in the absence of Al, and Blue 101C in the presence of Al.

The pedicel is 4 mm long, finely pubescence, and Violet 85A in the absence of Al, and Violet-Blue 98C in the presence of Al.

There are 6 stamens per flower. The anther is 1 mm long by 1 mm wide and Violet-Blue 93C in the absence of Al, and Blue 102B in the presence of Al.

The filament is 2.5 mm long by 0.3 mm wide and Violet-Blue 93B in the absence of Al, and Blue 99C in the presence of Al.

The superior pistil is 3 mm long by 1 mm wide with no pubescence.

There are 3 stigmas per pistil, with no pubescence, colored Violet N87A in the absence of Al, and Violet-Blue 98A in the presence of Al.

The style is tubular in shape, 1 mm long with no pubescence and Violet 84B in the absence of Al, and Violet-Blue 97B in the presence of Al.

#### Fruit:

The fruit is a capsule, ovoid in shape, 4 mm long by 3 mm wide, and Green 143C in color.

#### Seed:

The seeds are 0.5 mm long by 0.25 mm wide and Greyed-Orange 164C in color.

#### I claim:

1. A new and distinct variety of *Hydrangea macrophylla* plant substantially as herein described and illustrated.

\* \* \* \* \*



Fig. 1





Fig. 2

