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RITA M. GREEN  
14

15 **UNITED STATES DISTRICT COURT**  
16 **FOR THE CENTRAL DISTRICT OF CALIFORNIA**  
17 **WESTERN DIVISION**

18 JAMES M. GREEN, CECIL M. GREEN,  
and RITA M. GREEN,

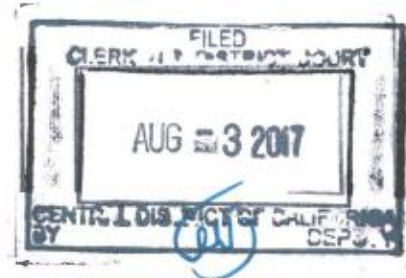
19 Plaintiffs,

20 v.

21 MONROVIA NURSERY COMPANY, a  
California corporation,

22 Defendant.  
23  
24  
25

REDACTED VERSION OF  
DOCUMENT PROPOSED  
TO BE FILED UNDER SEAL



LA CV 17 05761-JAK-SKx

Case No.

**COMPLAINT FOR:**  
**(1) BREACH OF CONTRACT;**  
**(2) PATENT**  
**INFRINGEMENT; AND**  
**(3) DECLARATORY**  
**JUDGMENT OF**  
**INVALIDITY**

**JURY TRIAL DEMANDED**

Dept:  
Judge:

Trial Date: None set

26  
27 **REDACTED VERSION OF DOCUMENT PROPOSED TO BE FILED UNDER SEAL**  
28

1 Plaintiffs James M. Green, Cecil M. Green, and Rita M. Green (collectively  
2 the “Greens”), by and through their attorneys, for their Complaint against Defendant  
3 Monrovia Nursery Company (“Monrovia”), allege as follows:

4 **PRELIMINARY STATEMENT**

5 1. This is an action for breach of a contract that is governed by California  
6 state law, and involves the payment of royalties and ownership of United States  
7 Patent No. 6,300,547 (the “‘547 Patent”) and United States Plant Patent No.  
8 PP11,787 (the “‘787 Patent”).

9 2. This is also an action for infringement of the ‘547 Patent under the  
10 Patent Act, 35 U.S.C. § 271, and the ‘787 Patent under 35 U.S.C. § 163, based on  
11 Monrovia’s unauthorized commercial and asexual reproduction, use, importation,  
12 offer for sale, and sale of double flowering mandevillas, or parts thereof, in the  
13 United States.

14 3. This is also an action for a declaratory judgment, arising under the  
15 Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202, that United States Plant Patent  
16 No. PP14,290, owned by Monrovia, is invalid.

17 **PARTIES**

18 4. Plaintiffs, the Greens, are individuals who have an address at 5000 S.R.  
19 544 East, Haines City, Florida, and are residents and citizens of the state of Florida.

20 5. Upon information and belief, Defendant, Monrovia, is a corporation that  
21 is incorporated in California, and has its principal place of business at 817 E.  
22 Monrovia Place, Azusa, California 91702.

23 **JURISDICTION**

24 6. This court has original jurisdiction over the subject matter of this action  
25 pursuant to 28 U.S.C. §1332, because the matter in controversy exceeds the sum or  
26 value of \$75,000, exclusive of interest and costs, and is between citizens of different  
27 states.

7. This court has original jurisdiction over the subject matter of counts 2-4 pursuant to 28 U.S.C. §§ 1331 and 1338(a).

8. This court has supplemental jurisdiction over the subject matter of count 1 pursuant to 28 U.S.C. § 1367.

9. This court has original jurisdiction over the subject matter of count 4 of this action pursuant to 28 U.S.C. § 2201 and 2202.

10. Personal jurisdiction over Defendant is proper in this District because it is incorporated in California, and has its principal business location in and systematic and continuous business contacts in this judicial district.

0	VENUE
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11. Venue is proper in this district under the choice of law and venue designated in the contract between the Greens and Monrovia for resolution for any disputes involving the contract. Ex. 1, p. 8, ¶18.

12. Venue is further proper in this district under 28 U.S.C. §§ 1391(b) and 1400(b) because Monrovia is a corporation of California subject to personal jurisdiction in this judicial district, and has directed its business activities at this judicial district, and a substantial part of the events giving rise to the claims occurred in this judicial district.

9 || **FACTS**

13. The Greens are citrus farmers in central Florida and have a nursery where they propagate and asexually reproduce (i.e. clone) plants for sales to other nurseries and the public.

14. In their nursery, the Greens propagate mandevilla vines, which are decorative plants. Mandevilla vines have flower blooms that are typically pink, but can appear in other colors. Prior to 1996, mandevillas bloomed flowers having a single corolla, or “ring” of petals.

15. In about 1996, the Greens recognized a double-flowering mandevilla trait in one of their plants and began to isolate and propagate it. They named the new



1 mandevilla plant variety 'Rita Marie Green,' which is a genetic variant of another  
2 mandevilla named Alice du Pont that never before exhibited double flowers--that is,  
3 where the vine bloomed flowers having double corollas of petals.

4 16. The Greens then stabilized the double-flowering trait in the Rita Marie  
5 Green variety by successive propagations of the plant and approached Monrovia,  
6 which is the largest plant nursery in the world, about selling the Rita Maria Green  
7 variety.

8 17. The negotiations between the Greens and Monrovia ultimately led to a  
9 licensing Agreement signed between the Greens and Monrovia on September 10,  
10 1998. Ex. 1 hereto [FILED UNDER SEAL].

11 18. [REDACTED]  
12 [REDACTED]  
13 [REDACTED]

Ex. 1, p. 2, ¶3.

14 19. The Agreement specifies that "Green[s] shall own all rights to the  
15 genetics of the [Rita Marie Green] Variety, including, but not limited to, any sport or  
16 genetic alteration propagated in any way from plants, sports, or otherwise from the  
17 Variety ("Sport") that is discovered by either party." Ex. 1, p. 5, ¶8.

18 20. The Agreement required that Monrovia assist the Greens in seeking  
19 both utility and plant patent protection for the Rita Marie Green variety, and once  
20 patent protection was obtained, that the patents would be assigned to Monrovia, and  
21 the Agreement would last for the term of any patent. Ex. 1, p. 3, ¶4.

22 21. The Rita Marie Green variety was subsequently patented and covered in  
23 Patent No. 6,300,547, (Ex. 2) which issued on October 9, 2001, and will expire on  
24 August 20, 2018; and US Plant Patent No. PP11,787, (Ex. 3) which will also expire  
25 on August 20, 2018.

26 22. Monrovia sells the Rita Marie Green variety as the "PINK  
27 PARFAIT®," which is a federally registered trademark, and commenced  
28 propagation and commercial sales thereof after execution of the Agreement.

1       23. Monrovia is the assignee of the '547 patent and '787 patent, but the  
2 Agreement contains a reverter such that ownership of the '547 patent and '787 patent  
3 transfers back to the Greens should Monrovia breach the Agreement. See Ex. 1, p. 5,  
4 ¶16.

5       24. Because of the in-force patent term, the Agreement remains in force  
6 until August 20, 2018, unless breached by one of the parties.

7       25. From 1997-1999, the Greens sent Rita Marie Green plant cuttings to the  
8 California nursery of Monrovia for propagation.

9       26. After receipt of the Rita Marie Green cuttings from the Greens, and  
10 patenting of the Rita Marie Green variety, Monrovia claimed that it identified a new  
11 variety of double-flowering mandevilla, called "Monrey," in 2001. Monrovia  
12 patented their Monrey variety as US Plant Patent No. PP14,290 (the "'290 patent")  
13 (Ex. 4).

14       27. In the patent application, Monrovia claimed that Monrey was  
15 discovered from another plant "Monite," which is a sport of "Alice du Pont." See Ex.  
16 4, Col. 1. Thus, Rita Marie Green would be an "aunt" to Monrey if this statement is  
17 true, and consequently, is highly genetically similar.

18       28. At some point thereafter, Monrovia started selling its Monrey variety  
19 under the name "TANGO TWIRL®."

20       29. Monrovia stated to the Greens that because the Monrey variety was  
21 independently discovered from its "Monite" variety, Monrey was not a plant that fell  
22 under the Agreement and no royalties were payable for Monrovia's sales of it.

23       30. Because the Rita Marie Green variety and the Monrey variety share the  
24 same unique trait of double flowers with two corollas of petals, the Greens have been  
25 suspicious that, as sold by Monrovia, PINK PARFAIT (Rita Marie Green) is  
26 genetically related to or the same as the TANGO TWIRL (Monrey).

27       31. The Greens consulted several experts in attempted to have a genetic  
28 comparison done between the Rita Marie Green variety and Monrey variety, but

1 learned from expert consultation that if the stated lineage of the mandevilla plants  
2 was correct and the varieties were cousins based on Alice du Pont, or if even closer  
3 related, a genetic comparison would be impossible without knowing the specific  
4 gene(s) responsible for the double flowering trait. The specific gene(s) for this trait  
5 are unknown.

6 32. Without direct genetic comparison to determine relatedness of the Rita  
7 Marie Green variety and Monrey variety, the Greens consulted a world-renowned  
8 plant developmental biologist as an expert to determine the possibility of relatedness  
9 here based upon mathematical analysis of trait expression of the double flower.

10 33. Based upon his review of the literature on mandevillas and trait  
11 expression, as well as other relevant scientific literature and the relevant patents  
12 themselves, the expert opines that it is almost mathematically certain that Monrey is  
13 either identical to Rita Marie Green or genetically derived therefrom.

14 34. Based upon the expert's opinion, the Greens invoked the notice of  
15 breach provision of the Agreement (Ex. 1, p. 7, ¶16) and sent a letter on April 12,  
16 2017, demanding that Monrovia pay the Greens a royalty for sales of Monrey as  
17 those sales fall under the Agreement. The Greens also demanded an inspection of  
18 the records for sales of both the Rita Marie Green variety and Monrey variety, which  
19 the Greens are entitled to under the Agreement. Ex. 1, p. 5, ¶9.

20 35. Monrovia did not respond to the notice of breach within 60 days, make  
21 any payment of past royalties, or permit the Greens to inspect the sales records.

22 36. The Agreement provides that "[i]n the event that a suit or action is  
23 instituted by either of the parties hereto to enforce the terms or on account of any  
24 breach of the terms of this Agreement, the prevailing party shall be entitled to  
25 reasonable attorney fees in such suit or action." Ex. 1, p. 8, ¶19.

## 26 **COUNT ONE**

### 27 **(Breach of Contract—California Law)**

28 37. Plaintiffs repeat and reallege Paragraphs 1 through 36 hereof, as if fully



1 set forth herein.

2 38. The Agreement is a valid and enforceable contract between the Greens  
3 and Monrovia.

4 39. The Greens have fully performed or tendered all performance required  
5 under the Agreement.

6 40. Monrovia has breached its obligations to the Greens as set forth in the  
7 Agreement by failing to pay the Greens the requisite royalties for sales of the  
8 Monrey variety by Monrovia.

9 41. Monrovia has also breached its obligations to the Greens as set forth in  
10 the Agreement by failing to allow inspection by the Greens of all records and books  
11 regarding the sales of the Rita Marie Green variety and Monrey variety by Monrovia.

12 42. Monrovia has also breached the implied covenant of good faith and fair  
13 dealing by acting to deprive the Greens of the benefit of the royalties from sales of  
14 the Rita Marie Green variety by falsely claiming that the Monrey variety was not  
15 related to the Rita Marie Green variety and did not constitute sales under the  
16 Agreement for which royalties were payable.

17 43. As a result of Monrovia's breaches of the agreement, the Greens have  
18 incurred damages.

19 **COUNT TWO**

20 **(Infringement of the '547 Patent)**

21 44. Plaintiffs repeat and reallege paragraphs 1 through 43 hereof, as if fully  
22 set forth herein.

23 45. Due to Monrovia's breach of the Agreement, the ownership of the '547  
24 patent has reverted to the Greens.

25 46. Monrovia has been and is infringing the '547 Patent by commercially  
26 reproducing, using, selling, or offering for sale in the United States, or importing into  
27 the United States, including within this judicial district, double-flowering mandevilla  
28 plants sold under the names PINK PARFAIT and TANGO TWIRL, in violation of

1 35 U.S.C. § 271(a).

2 47. Monrovia's infringement has been, and continues to be knowing,  
3 intentional, and willful.

4 48. Monrovia's acts of infringement of the '547 Patent have caused and will  
5 continue to cause the Greens immediate and irreparable harm unless such infringing  
6 activities are enjoined by this Court.

7 **COUNT THREE**

8 **(Infringement of the '787 Patent)**

9 49. Plaintiffs repeat and reallege Paragraphs 1 through 48 hereof, as if fully  
10 set forth herein.

11 50. Due to Monrovia's breach of the Agreement, the ownership of the '787  
12 patent has reverted to the Greens.

13 51. Monrovia has been and is infringing the '787 Patent by asexually  
14 reproducing the plant, using, offering for sale, and selling the plant so reproduced,  
15 and/or any of its parts, in the United States, or importing into the United States,  
16 including within this judicial district, double-flowering mandevilla plants sold under  
17 the names PINK PARFAIT and TANGO TWIRL, and/or any parts thereof, in  
18 violation of 35 U.S.C. § 163.

19 52. Monrovia's infringement has been, and continues to be knowing,  
20 intentional, and willful.

21 53. Monrovia's acts of infringement of the '787 Patent have caused and will  
22 continue to cause the Greens immediate and irreparable harm unless such infringing  
23 activities are enjoined by this Court.

24 **COUNT FOUR**

25 **(Declaratory Judgment of Invalidity of the '290 Patent)**

26 54. Plaintiffs repeats and reallege Paragraphs 1 through 53 hereof, as if fully  
27 set forth herein.

28 55. Monrovia owns United States Plant Patent Number PP14,290, entitled



1 MANDEVILLA PLANT NAMED 'MONREY', names Bruce Usury as the inventor,  
2 with an issue date of November 11, 2003. Attached as Exhibit 4 is a copy of '290  
3 Patent.

4 56. The '290 Patent is directed to "a distinct cultivar of Mandevilla plant  
5 named 'Monrey', characterized by its vining growth habit; glossy, dark green leaves;  
6 and large double pink-colored flowers with 20 petals per flower." Ex. 4, Abstract.

7 57. On information and belief, Monrovia is the owner of all right, title and  
8 interest in the '290 Patent.

9 58. Monrovia sells a double flowering Mandevilla under the trademark  
10 TANGO TWIRL®, stating that the plant is of the varietal name of "Monrey," and  
11 that the plant is purportedly protected by the '290 Patent.

12 59. The '290 Patent states, with respect to its claimed plant, that "[t]he new  
13 Mandevilla is a naturally-occurring branch mutation of the Mandevilla×amabilis  
14 cultivar Monite, disclosed in U.S. Plant Pat. No. 12,123. The new Mandevilla was  
15 discovered and selected by the Inventor on Jun. 29, 2001 in a controlled environment  
16 in Azusa, Calif., within a population of plants of the cultivar Monite." Ex. 4, Col. 1,  
17 Lines 9-14.

18 60. At least in 1999, the Greens delivered cuttings of the Rita Marie Green  
19 variety to Monrovia at their California facility.

20 61. Upon information and belief, Monrovia was propagating the Rita Marie  
21 Green variety at its Azusa California facility when the Monrey variety was  
22 purportedly discovered by Usury.

23 62. Based upon the mathematical probability of a second appearance of a  
24 heritable and observable double flowering trait with known mutation rates of  
25 mandevillas, the Monrey variety is either derived from or the same as the Rita Marie  
26 Green variety.

27 63. The '290 Patent states an incorrect parentage of the claimed plant and is  
28 therefore invalid.



1 participation with it, be permanently enjoined from infringing the '547 Patent and  
2 '787 Patent;

3 G. That Monrovia account and pay damages adequate to compensate the  
4 Greens for Monrovia's infringement of the '547 Patent and '787 Patent, with pre-  
5 judgment and post-judgment interest and costs, pursuant to 35 U.S.C. § 284;

6 H. That the damages award for such infringement be increased up to three  
7 times the actual amount assessed, pursuant to 35 U.S.C. § 284;

8 I. That Monrovia's '290 Patent is invalid;

9 J. That this case exceptional and award the Greens their reasonable  
10 attorneys' fees, pursuant to 35 U.S.C. § 285; and

11 K. Such other and further relief as this Court deems just and proper.

12 Dated: August 3, 2017

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SAVITCH LLP

13  
14  
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Attorneys for Plaintiffs

JAMES M. GREEN, CECIL M.

GREEN, RITA M. GREEN



**DEMAND FOR JURY TRIAL**

Plaintiffs hereby demand a trial by jury on all issues so triable pursuant to Federal Rule of Civil Procedure 38.

Dated: August 3, 2017

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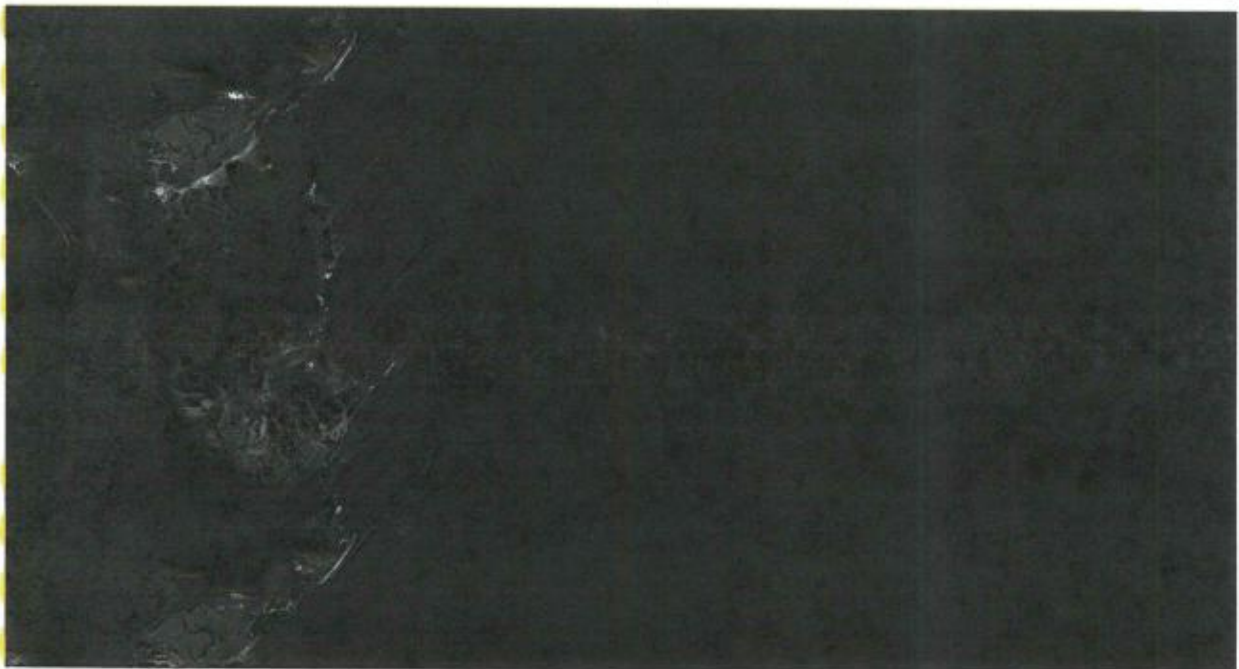
GREEN, RITA M. GREEN



## AGREEMENT

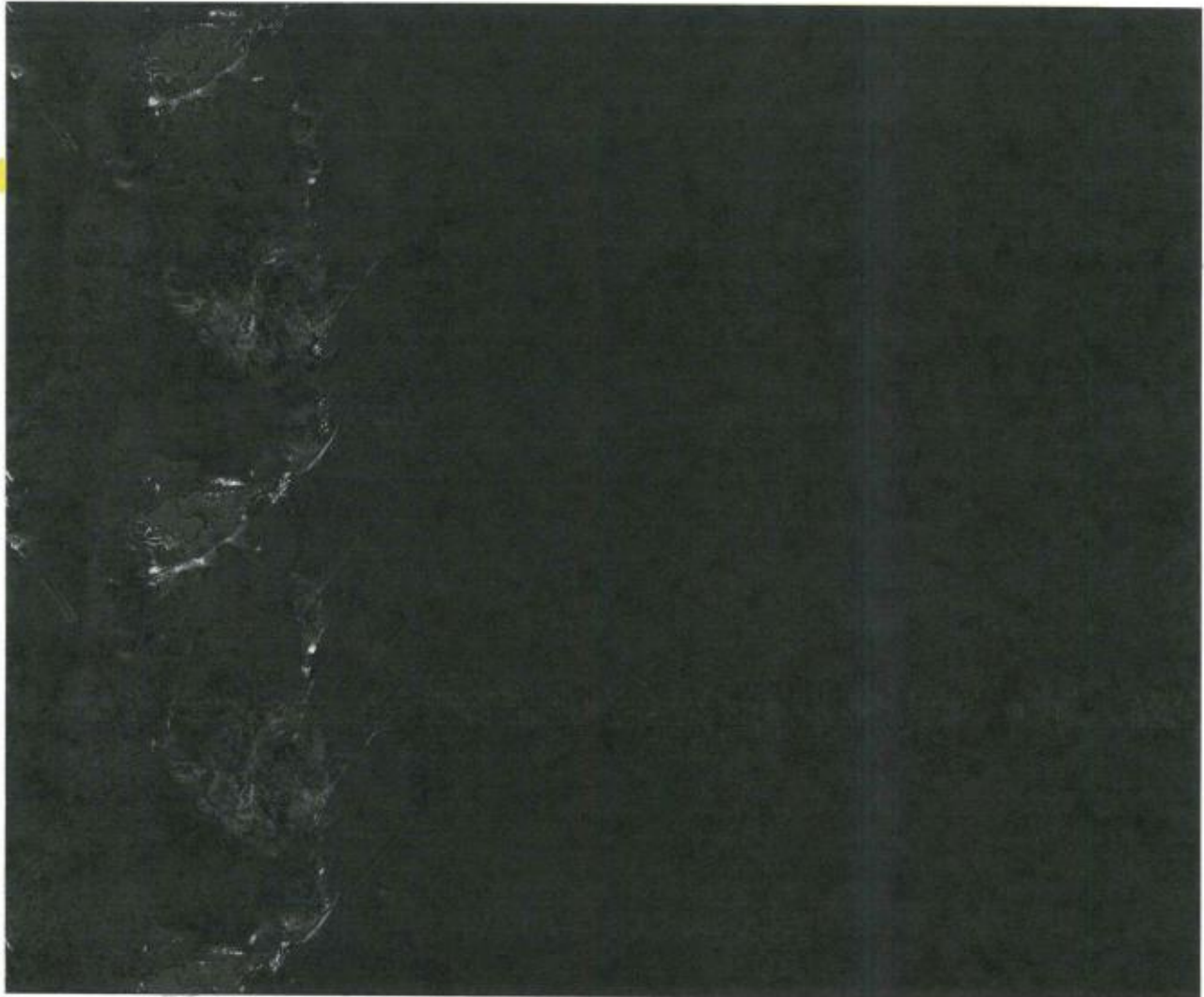
This Agreement is effective as of the date of signing by the last of the parties to sign below, and is by and between Monrovia Nursery Company, 18331 East Foothill Boulevard, Azusa, California 91702, a California corporation ("Monrovia"), and James Mitchell Green, Cecil Michael Green, Jr., and Rita Marie Green, all having a mailing address at 5000 S.R. 544 East, Haines City, Florida (hereinafter individually and collectively referred to as "Green"), as follows:

1. Green represents and warrants that (a) Green is the exclusive owner and is the sole inventor of a certain new and distinct double Mandevilla cultivar having the varietal name 'Alice du Pont Double' ("the Variety"); (b) the Variety originated as a sport on the growing grounds of Green Nursery; (c) the Variety can be reproduced only asexually; (d) the Variety is known by Green to exist only within the boundaries of Green Nursery and Monrovia Nursery; and (e) the Variety has not been offered for sale or publically used as defined under the U.S. patent laws in a manner that would bar the filing of a U.S. plant patent and/or a U.S. utility patent application on this variety. Green further represents and warrants that the Variety has double flowers which characteristic is fixed in the Variety through succeeding generations and is consistently reproducible. In the event of any breach of any of these representations and warranties, in addition to any other remedies it may have, at Monrovia's option:

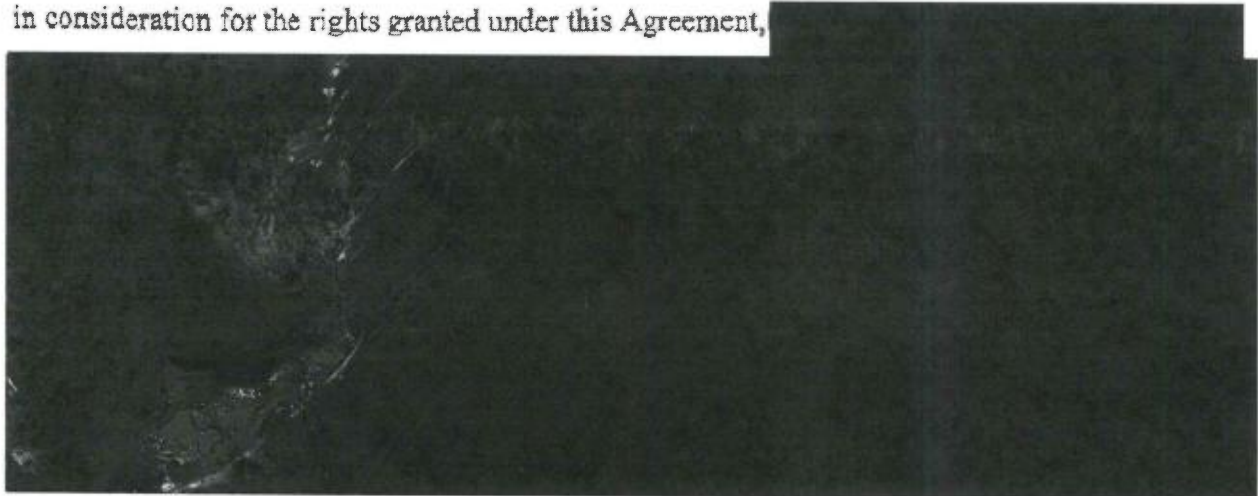




AGREEMENT  
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3. While this Agreement is in effect and subject to the other items of this Agreement,  
in consideration for the rights granted under this Agreement,



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4.



5. Notwithstanding paragraphs 3 and 4, above, the obligation by Monrovia to [REDACTED] shall end in the event any of the following occur:

(a) the Variety is no longer covered by the claim(s) of a pending U.S. Plant Patent Application, a pending U.S. utility patent application, a U.S. Plant Patent, or a U.S. Utility Patent; (b) all U.S. Plant Patent and U.S. Utility Patent protection for the Variety has expired or been held invalid; or (c) within four (4) years of the effective date of this Agreement if no U.S. patent has issued on the Variety. If the obligations to make payments end pursuant to paragraph 5(c), above, and a U.S. patent on the Variety thereafter issues, then, subject to paragraphs 1, 5(a) and 5(b), [REDACTED] shall be reinstated upon the date of issuance of the U.S. Patent.



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6. Monrovia may adopt or use one or more brand names for the Variety for marketing purposes. All use of any such brand names for the Variety shall inure solely to the benefit of Monrovia. Monrovia shall own all worldwide rights to such brand names associated with the Variety under common law or resulting from application(s) for trademark registration by Monrovia in the U.S. as well as any and all registrations in any country in the world for such brand names. This paragraph shall survive any termination or expiration of this Agreement. Monrovia shall not interfere with Green's offers for sale, propagation, trade names, advertising, or other distribution of the Variety as permitted under paragraph 2; provided, however, Green shall not use any Monrovia name or mark for any purpose.

7. Monrovia shall undertake the expenses of preparing and having filed a U.S. utility patent application covering the Variety using attorneys of its choice. Such expenses shall not be deducted as expenses from royalties payable to Green. At no further charge to Monrovia, Green shall cooperate in reviewing and filing any such plant patent application on the Variety and shall execute all documents reasonably required by Monrovia to accomplish any such filings and any assignments or other documents required by Monrovia to confirm its rights therein. Attached as Exhibit A is an assignment which is substantially in the form Green agrees to sign. The "other good and valuable consideration" set forth in the attached Exhibit A is provided by this Agreement. Green shall also provide any information reasonably requested by Monrovia, at no further charge, required to be disclosed to the U.S. Patent and Trademark Office under the duty of disclosure. Subject to this Agreement, Green shall assign this patent application and rights therein to Monrovia. If Green has already filed any such application, it shall be assigned to Monrovia and Green's reasonable expenses connected therewith shall be reimbursed to Green by Monrovia. Providing this Agreement is still in effect, Monrovia shall also pay for (except Monrovia is not obligated to pay any fees or other charges by Green's counsel) and control the prosecution of the U.S. utility patent application through and including the receipt of a final rejection thereof, at which time Monrovia shall have the option to discontinue prosecution of the application and incurring patent-related expenses, in which event Green has the option to assume further prosecution of the application at Green's expense. Monrovia shall provide to Green's counsel copies of all correspondence received from and filed with the United States Patent and



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Trademark Office relating to the Variety. Monrovia shall also have the option to, but is not required to, apply for a U.S. plant patent or a foreign plant patent, plant breeder's rights, or other forms of plant varietal protection at its sole discretion. While this Agreement is in force, Monrovia shall pay maintenance fees for any U.S. utility or plant patent that issues on the Variety. Monrovia shall also have the option, but is not required to, pay maintenance fees for any plant breeder's right or other plant varietal right that issues on the Variety in any country in the world. Such maintenance fees shall not be deducted as expenses from royalties payable to Green. Green shall execute all documents reasonably required by Monrovia to accomplish any such applications, including documents confirming Monrovia's ownership thereof.

8. Providing that a valid U.S. plant patent and/or U.S. utility patent is obtained for the Variety: (a) Green shall own all rights to the genetics of the Variety, including, but not limited to, any sport or genetic alteration propagated in any way from plants, sports or otherwise from the Variety ("Sport") that is discovered by either party; and (b) Monrovia shall have the right of first refusal to acquire an assignment of all worldwide rights in the Sport or plant, including, but not limited to, worldwide patent rights therein, under the terms of this Agreement, except that no minimum royalty shall apply to the Sport or plant and Monrovia shall not be obligated to apply for a utility or any other patent or protection on the Sport or plant. As between the parties, Monrovia shall own all rights in any plants not propagated or derived from plants of the Variety, including, but not limited to, Monrovia's existing *Mandevilla* variety (*Mandevilla x amabilis* 'Monte'), and sports of this plant, including (*Mandevilla x amabilis* 'Monite'), and in the brand name SUMMER SNOW® which Monrovia may be using in connection with this or other plants. In addition, Green covenants not to sue or otherwise interfere with Monrovia's offers for sale, propagation, licensing, sales or other distributions of any plants not propagated or derived from the Variety.

9. Monrovia shall keep books and records accurately showing all plants of the Variety propagated, sold, or used. The books and records shall be open during regular business hours to the inspection of Green or by an accountant who is duly authorized by Green.

10. Monrovia shall have the worldwide right to sublicense any rights to the Variety assigned or transferred to Monrovia under this Agreement, except that Monrovia agrees to not

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license any growers to grow the Variety in the states of Florida, Mississippi, Georgia, Alabama or Louisiana, United States of America. Monrovia, itself, is not restricted in where it may grow the Variety. Monrovia shall provide Green with a copy of any sublicense agreement it enters into with a third party. [REDACTED]

[REDACTED]

11. Monrovia and Green shall notify each other promptly upon discovery of any unauthorized propagation, sale, or use of the Variety or any other violation of rights granted under this Agreement. Monrovia shall have the right to, but is not obligated to, take action at its expense against any party violating its rights in the Variety. Any recovery in any such action, including any settlement thereof, shall belong to Monrovia. Green agrees to join Monrovia as a party to such actions, at Monrovia's expense, if reasonably required to do so by Monrovia in order for Monrovia to bring the action. Should Monrovia elect not to take any action against a party violating any patent rights in the variety, Green shall have the option, at Green's expense, of undertaking such action and shall be entitled to any recovery arising from such action, provided, however, Green is not authorized to resolve any such action by granting a license to the Variety.

12. This Agreement shall run from the date of the signing of this Agreement to the end of the full term of any U.S. plant patent or U.S. utility patent that issues on an application for the Variety.


13. This Agreement is subject to a two-year period of review running from the effective date of this Agreement to permit Monrovia to evaluate the prospects for commercial success of the Variety. At any time during this two-year period Monrovia may, at its sole discretion, terminate this Agreement upon sixty (60) days written notice to Green. [REDACTED]

[REDACTED]



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14. Green shall defend, indemnify, and hold Monrovia harmless against any damage, including attorney fees, before filing, at trial, and on appeal, suffered by Monrovia by reason of any claim or suit against Green, based upon Monrovia's propagation, sale or other distribution of the Variety. Green shall promptly notify Monrovia of any such claim or suit.

15. Any notice required or permitted to be given to the parties hereto shall be deemed to have been properly given in person or mailed by first class certified mail to the addresses of the parties as given above or other such address as may be designated in writing by the parties from time to time.

16. This Agreement may be terminated for breach of this Agreement by either party upon sixty (60) days written notice to the other party. Notice shall be effective upon receipt and shall be sent to the last known mailing address of the party. Unless otherwise provided by written notice by one party to the other, notice to Green shall be to the attention of: James Mitchell Green, Cecil Michael Green, Jr. and Rita Marie Green at 500 S.R. 544 East, Haines City, Florida, and notice to Monrovia shall be to the attention of the President, Monrovia Nursery at 18331 East Foothill Blvd., Azusa, California 91702. Termination shall not occur if the breach of this Agreement is cured within this sixty (60) day period and the Agreement shall continue in full force and effect until termination or expiration. This Agreement may also be terminated by Monrovia in the event that: (a) no U.S. utility or plant patent is obtained on the Variety within four (4) years of the date of this Agreement; (b) all U.S. utility or plant patents on the Variety, if obtained, are held invalid; or (c) at any time after seven years of the effective date of this Agreement upon six (6) months prior written notice from Monrovia to Green. If this Agreement is terminated due to a breach by Monrovia or after seven (7) years from the effective date of this Agreement, as set forth in this paragraph 16(c), above, then all patent rights in the Variety shall immediately revert to Green; provided, however, Monrovia shall have a license to grow and sell any inventory it may have of the Variety, subject to payment of the royalties as required by this Agreement.



## AGREEMENT

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17. [REDACTED]

18. This Agreement shall be governed by and shall be construed in accordance with the laws of Los Angeles County, State of California, which is hereby designated as the proper forum for any disputes involving this Agreement.

19. In the event that a suit or action is instituted by either of the parties hereto to enforce the terms or on account of any breach of the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney fees in such suit or action, including attorneys fees on any appeal therefrom.

20. Waiver of one or more breaches of this Agreement shall not constitute a waiver of any subsequent breach.

21. If any clause or provision of this Agreement is held invalid or unenforceable by a court or as a result of binding arbitration, the remaining clauses of this Agreement shall remain in effect.

22. Except as may be required by court order, the financial terms of this Agreement shall be maintained in confidence by the parties.

23. This Agreement is not assignable by either party without the written consent of the other party which shall not be unreasonably withheld.

24. This Agreement shall inure to the benefit of each of the parties hereto and their successors and assigns. All prior agreements respecting the subject matter of this Agreement, including, but not limited to, an Agreement of September 5, 1997, whether written or oral, express or implied, between the parties hereto are hereby terminated and are declared abrogated, canceled, and are null and void and have no effect, except that Green agrees to deliver, on or before March 1, 1999, three thousand two hundred fifty (3,250) cuttings of the Variety and guarantees that all of these cuttings will be of the Variety and have the double flowering characteristic. These three thousand two hundred fifty (3,250) cuttings and the three thousand (3,000) cuttings previously delivered by Green pursuant to the September 5, 1997 Agreement have previously been paid for by Monrovia. Any future sales of cuttings from Green to

## AGREEMENT

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Monrovia shall be by a separate agreement, if any, which is entered into by the parties. No modifications of this Agreement shall be effective unless in writing and signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate originals by their respective officers thereunto duly authorized the day and year first above written.

Executed at 31<sup>st</sup>, State of Florida, this August day of 1998.

Date: 8/31/98

James Mitchell Green

STATE OF Florida )  
COUNTY OF Polk ) ss.

This 31<sup>st</sup> day of August, 1998, before me personally came the above-named James Mitchell Green, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.

Notary Public for \_\_\_\_\_  
My commission expires: \_\_\_\_\_

[SEAL]

Date: 8-31-98

Cecil Michael Green, Jr.

STATE OF Florida )  
COUNTY OF Polk ) ss.

This 31<sup>st</sup> day of August, 1998, before me personally came the above-named Cecil Michael Green, Jr., who executed the foregoing instrument in my presence, and who produced FI Drivers License



TAMI B. DYE  
COMMISSION # CC 706429  
EXPIRES JAN 5, 2002  
BONDED THRU  
ATLANTIC BONDING CO., INC.

TAMI B. DYE  
Notary

Tami B. Dye

AGREEMENT  
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acknowledged to me that he executed the same of his own free will for the purposes set forth therein.

[SEAL]  TAMI B. DYE  
COMMISSION # CC 706429  
EXPIRES JAN 5, 2002  
BONDED THRU  
ATLANTIC BONDING CO., INC.

Tami B. Dye  
Notary Public for State of Florida  
My commission expires: \_\_\_\_\_

Date: 8/31/98

Rita Marie Green  
Rita Marie Green

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

This 31<sup>st</sup> day of August, 1998, before me personally came the above-named Rita Marie Green, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of her own free will for the purposes set forth therein.

[SEAL]

Notary Public for \_\_\_\_\_  
My commission expires: \_\_\_\_\_

MONROVIA NURSERY COMPANY

Date: 10 SEPT 98

By William B. Usrey  
Name: William B. Usrey  
Title: PRESIDENT

STATE OF OREGON )  
 ) ss.  
COUNTY OF Yamhill )

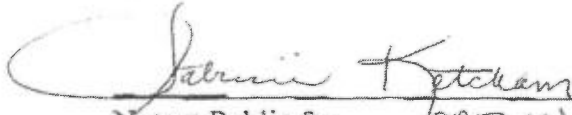
On this 10 day of Sept., 1998, before me personally appeared the above-named Bruce William Usrey, who being duly sworn did say that he/she is the President of Monrovia Nursery Company and that the foregoing instrument was signed in



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behalf of said Corporation by authority of its Board of Directors, and acknowledged that said instrument is the free act and deed of said Corporation.

  
Notary Public for OREGON  
My commission Expires 4-26-00

[SEAL]



POSTED

AGREEMENT

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Monrovia shall be by a separate agreement, if any, which is entered into by the parties. No modifications of this Agreement shall be effective unless in writing and signed by both parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate originals by their respective officers thereunto duly authorized the day and year first above written.

Executed at Dover, State of Florida, this 18 day of August 1998.

Date: 8/18/98


  
James Mitchell Green

STATE OF Floirda )  
 ) ss.  
COUNTY OF Hillsborough

This 18 day of Floirda, 1998, before me personally came the above-named James Mitchell Green, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.



"OFFICIAL SEAL"  
Judith E. Thompson  
My Commission Expires 4/8/2000  
Commission #CC 546313

  
Notary Public for Florida  
My commission expires: 4/8/2000

Date: \_\_\_\_\_

\_\_\_\_\_  
Cecil Michael Green, Jr.

STATE OF \_\_\_\_\_ )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

This \_\_\_\_ day of \_\_\_\_\_, 199\_\_, before me personally came the above-named Cecil Michael Green, Jr., who executed the foregoing instrument in my presence, and who





US006300547B1

(12) **United States Patent**  
**Green et al.**

(10) **Patent No.:** **US 6,300,547 B1**  
(45) **Date of Patent:** **\*Oct. 9, 2001**

(54) **MANDEVILLA PLANT WITH DOUBLE FLOWER**

(75) **Inventors:** **James Mitchell Green; Cecil Michael Green, Jr.; Rita Marie Green**, all of Haines City, FL (US)

(73) **Assignee:** **Monrovia Nursery Company**, Azusa, CA (US)

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

This patent is subject to a terminal disclaimer.

(21) **Appl No.:** **09/137,561**

(22) **Filed:** **Aug. 20, 1998**

(51) **Int. Cl.<sup>7</sup>** ..... **A01H 5/00; A01H 5/02; A01H 5/04; A01H 5/12; A01H 4/00**

(52) **U.S. Cl.** ..... **800/323; 800/298; 800/260**

(58) **Field of Search** ..... **800/298, 323, 800/232, 260, 270; Plt./232; 47/DIG. 3, 58.1**

(56) **References Cited**

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Memo entitled MN-AZUSA dated Sep. 4, 1996 (3 pages). J. Mitchell Green letter bearing the notation Jun. 21, 1997 (wrote) mailed Jul. 1, 1997 (8 pages).

Letter from Monrovia to Mitchell Green bearing facsimile notation of Aug. 21, 1997 (1 page).

\* cited by examiner

*Primary Examiner*—Paula Hutzell

*Assistant Examiner*—Melissa Kimball

(74) *Attorney, Agent, or Firm*—Klarquist Sparkman Campbell Leigh & Whinston LLP

(57) **ABSTRACT**

A new "Double Mandevilla" variety is characterized by double flowers which present an outer corolla and a ring of inner petaloids producing an enhanced decorative appearance for this evergreen vine-like climbing shrub.

**10 Claims, 3 Drawing Sheets**

**(3 of 3 Drawing Sheet(s) Filed in Color)**

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**Oct. 9, 2001**

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**FIG. 1**



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**FIG. 2**





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**FIG. 3**





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# MANDEVILLA PLANT WITH DOUBLE FLOWER

## FIELD OF THE INVENTION

The present invention relates to a new variety of Mandevilla plant with a double flower.

## BACKGROUND OF THE INVENTION

Mandevillas are woody, evergreen, vine-like climbing shrubs with funnel-shaped or trumpet-shaped flowers that grow in temperate climates. Common varieties of Mandevilla include *Mandevilla X amabilis* ('Alice du Pont') which exhibits red to red-purple, trumpet-like flowers; *Mandevilla sanderi* ('Red Riding Hood') which exhibits rose-pink, funnel-shaped blooms; *Mandevilla X amabilis* Summer Snow™ ('Monte'), U.S. Pat. No. 10,329, which exhibits pure white flowers which may become tinged with a pinkish blush; and *Mandevilla suaveolens* (*Mandevilla laxa*) which exhibits white to ivory trumpet shaped flowers. Mandevilla is native from Mexico to Argentina, and over 100 separate species of Mandevilla have been classified.

A Mandevilla generally has the following characteristics. Leaves are opposite or verticillate. Flowers are funnel-form, displayed in axillary or terminal racemes, the calyx is five-parted with scales at the base inside, the corolla is five-parted, the stamens have very short filaments and anthers and unite and adhere to the stigma, there is a dish of two to five lobes or scales and there are two ovaries with many ovules in each. The fruit consists of two terete follicles with the seeds having a tuft of hairs at the apex.

Mandevillas are popular garden and greenhouse plants, growing well in full sun and partial shade in temperate areas, providing year-round foliage and decorative blooms.

The presently known Mandevillas possess single funnel shaped flowers and it is believed that none of the presently known species or varieties possess double flowers, except the new variety 'Monite'.

It would be commercially desirable to produce a Mandevilla that has double flowers and which, therefore, have enhanced decorative qualities compared to currently available Mandevilla plants.

## SUMMARY OF THE INVENTION

The present invention is a Mandevilla plant (referred to hereafter as "Double Mandevilla") that is different from previous Mandevilla plants in that it possesses double flowers. Particularly, Double Mandevilla plants possess both an outer corolla of petals and a generally concentric inner ring of petaloids (converted stamens). Due to the conversion of stamens to petaloids, it is likely that reproductive structures will be sterile. Double Mandevilla plants are useful as woody vines that produce decorative double blossoms. The double flowers of Double Mandevilla plants enhance appearance and make the plants especially marketable, and therefore, useful.

The present invention encompasses whole plant specimens and parts of Double Mandevilla plants including seeds, pollen, cut flowers, blooms, meristem tissue, cultured cells, rootstock, tissue that is propagatable by sexual or asexual methods, and also grafted shrubs that include Double Mandevilla rootstock or shrub or stems or parts thereof and plants that are "essentially derived" from Double Mandevilla plants.

The present invention also includes methods of producing double-flowering Mandevilla plants by sexual propagation

of any non-sterile Double Mandevilla plants, whether by self-crossing Double Mandevilla or by crossing Double Mandevilla with another Mandevilla plant or other plant. The present invention also includes Mandevilla plants that are produced by such methods.

The present invention also includes methods of producing Double Mandevilla plants by asexual methods such as by cutting and somatic cell culture.

The present invention also includes the new and distinct specific variety of Double Mandevilla plant called 'Rita Marie Green'. The present invention includes whole plants of Rita Marie Green as well as parts of this variety including any seeds, any pollen, cut flowers, blooms, meristem tissue, cultured cells, rootstock, and any tissue propagatable by sexual or asexual methods, and grafted shrubs that include Rita Marie Green rootstock or shrubs or stems or parts thereof that are "essentially derived" from Rita Marie Green.

The present invention also includes methods of producing Rita Marie Green by propagation.

The present invention also includes methods of producing Rita Marie Green by asexual methods such as by cutting or by somatic cell culture.

The foregoing and other features and advantages of the invention will become more apparent from the following detailed description and accompanying photographs and figures.

## BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawings will be provided by the Patent and Trademark Office upon request and payment of the necessary fee.

The following drawings are photographs of 'Rita Marie Green' taken in Azusa, Calif. between May and Jul. 1998.

FIG. 1 is an anterior view of the double flower bloom of Rita Marie Green showing the double flower structure made up of outer five-parted corolla limbs and inner five-parted petaloids.

FIG. 2 is an posterior view of the double flower bloom of Rita Marie Green showing the outer five-parted corolla attached to the stem.

FIG. 3 is a view of the foliage of Rita Marie Green showing elliptic evergreen leaves.

## DETAILED DESCRIPTION OF THE INVENTION

The present invention provides a Mandevilla plant (herein referred to as Double Mandevilla) having a double-flower consisting of an outer corolla of petals and an inner ring of petaloids (converted stamens). One embodiment of the present invention is the new and distinct variety of Mandevilla having double flowers called 'Rita Marie Green'.

### Definitions

The following definitions are provided to better define the present invention. Terms not defined herein are to be understood according to their ordinary significance as employed by persons of ordinary skill in the relevant art.

The term "plant" or "variety" refers to whole plant specimens, sexually-reproduced progeny thereof, and any part of such a plant, including rootstock, budwood, hardwood or softwood cuttings, seeds, pollen, tissue culture cells, somatic embryos, or any other plant part that can be propagated (i.e., that is "propagable") by conventional methods.

"Sexual propagation" includes self-crossing and non-self-crossing of plants, for instance, self-crossing of Double



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Mandevilla (for example, any non-sterile Rita Marie Green) or crossing Double Mandevilla (for example, any non-sterile Rita Marie Green) with another Mandevilla variety that possess the essential characteristics of Double Mandevilla plants, in particular, double flowers.

The phrase "plant structure" as used herein refers to any part of a plant, including any tissue or organ, from a single cell to a complex multi-tissue organ such as a flower, root, shoot, leaf, stem, pollen cell, ovary, stamen, anther, carpel, pistil, bud, meristem, seed or cell culture.

The term "original stamens" means the number of stamens in the progenitor plant (the plant from which the Double Mandevilla was desired, not having double flowers). In the present invention, one or more of these original stamens and most preferably all of the original stamens have been converted to a petaloid.

The term "essentially derived" is used herein as defined in the International Convention for the Protection of New Varieties of Plants of Dec. 2, 1961, as revised on Mar. 19, 1991 (UPOV), according to which (Chap. V, Art. 14, par. (5)(b)) a variety is "essentially derived" from another variety ("the initial variety") when: (i) it is predominantly derived from the initial variety, or from a variety that is itself predominantly derived from the initial variety, while retaining the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety; (ii) it is clearly distinguishable from the initial variety; and (iii) except for the differences which result from the act of derivation, it conforms to the initial variety in the expression of the essential characteristics that result from the genotype or combination of genotypes of the initial variety. Such essentially-derived varieties may be obtained for example by the selection of a natural or induced mutant, or of a somaclonal variant, the selection of a variant individual from plants of the initial variety, backcrossing, or transformation by genetic engineering (see UPOV, Chap. V, Art. 14, par. (5)(c)).

The 'Rita Marie Green', insofar as the applicant has been able to observe them, has consistently displayed the characteristics described herein. Double Mandevilla plants described herein also would be those that consistently have these double flowers.

#### Phenotypic Characteristics

The following is a detailed description of the invention based on plants grown at Haines City, Fla., and in Azusa, Calif. Color descriptions are according to the Royal Horticultural Society color charts. Other terminology is used herein in accordance with ordinary dictionary significance or as commonly used by those of ordinary skill in the relevant art, unless otherwise noted.

The parent plant of Rita Marie Green was found in a cultivated area (in a greenhouse) in Haines, City, Fla.

The Rita Marie Green has not been observed under all possible environmental conditions and its phenotype may vary significantly with variations in environment such as temperature, light intensity, and day length, without any variation in genotype. However, the essential characteristic, unique to the Double Mandevilla of the invention is double flowers, that is a Mandevilla flower having an outer corolla of petals and at least one and most preferably a plurality of petaloids within the outer corolla of petals. Most preferably, the double flowers have a generally concentric and complete (e.g. substantially encompassing three hundred sixty degrees) inner ring of petaloids.

In one embodiment, the inner petaloids are converted stamens. In one embodiment, all stamens may have been converted into petaloids, rendering the flower lacking in

stamens and, therefore, sterile. It is also possible for some, but not all of the stamens to have been converted into petaloids such that the flower possesses an inner ring (which may be less than complete) of petaloids but also possess at least one stamen. In this case, the at least one stamen may be fertile so as to permit sexual reproduction of the plant.

One specific embodiment of the invention includes an inner ring of petaloids that are presented as being generally flattened and opened lying against the outer corolla, resembling the outer corolla, the petaloids having a length approximately equal to the petals of the outer corolla.

Another specific embodiment of the invention includes an inner ring of petaloids that are shorter than the petals of the outer corolla and that remain in a cluster forming a tight cluster habit of petaloids generally prohibiting a view of the inner throat and forming a "flower-within-flower" cluster. In one such embodiment, the petaloids may be fused or partially fused to form a tube or partial tube of petaloids. One embodiment of the invention includes a five-parted outer corolla and inner five-parted petaloids.

One embodiment of the invention includes Double Mandevilla plants having a double flower where the color of the corolla petals and the petaloids is primarily red to red-purple.

One specific embodiment of the invention is the variety 'Rita Marie Green'. This variety stably produces several forms of double flowers, which thus display the double-flower characteristics of all Double Mandevilla flowers of the invention. In one form, the 'Rita Marie Green' plants have double flowers with outer five parted corolla limbs and inner five parted petaloids which overlay the corolla limbs, exposing the inner base of the tube. In a second form, the double flowers have outer five parted corolla limbs and inner five parted petaloids which are shorter than the corolla and remain in a cluster within outer corolla, forming a tight cluster habit of petaloids generally prohibiting a view of the inner throat and forming a "flower-within-flower" cluster. In rarer forms, the inner petaloids have been observed to have a folded almost rose-like appearance and alternatively a windmill-like appearance. In Rita Marie Green, these essential double-flower characteristics are present throughout successive generations. The petaloids are converted stamens and the plants of the invention observed to date thus exhibit no stamens and are, therefore, sterile. The essential characteristic of the Double Mandevilla plants of the invention is, therefore, double flowers.

Essential characteristics for all plants of the invention, would be established and transmitted through succeeding propagations.

Other characteristics exhibited by Double Mandevilla include the following (characteristics specifically exhibited by the Rita Marie Green are denoted by the phrase for Rita Marie Green):

#### FOLIAGE

Type: Evergreen.

Shape: Elliptic (linear to oblong).

Apex: Long to short acuminate tip.

Base: Cordate.

Length: about 9.5 cm to 15 cm.

Width: about 4.6 cm to 8.2 cm.

Color:

Mature upperfoliage: Green, like RHS 139A to RHS 137A.

Mature lower foliage: Green to yellow-green, like RHS 146B.

Arrangement on stem: Opposite.

Margins: Entire.



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## FLOWERS

Arrangement: Axillary racemes.

Structure: Double flower with outer corolla of petals and inner petaloids which is most preferably in the form of a complete ring of inner petaloids. Likely reproductive structures are sterile due to "double" flowers with typical five-numbered stamens converted to petaloids.

Reproductive structures for 'Rita Marie Green':

Style: Generally present, about 8 mm to 11 mm in length.

Stamens: Absent, developed into showy petaloids.

For 'Rita Marie Green' there are several double flower forms that have been observed, as follows:

Form 1:

Overall structure: Funnel-shaped. Outer five parted corolla limbs.

Inner five parted petaloids. Petaloids overlay the corolla limbs exposing inner base of tube.

Corolla:

Color for 'Rita Marie Green':

Corolla and petaloids: Red to red-purple, like RHS 58B and 58C.

Petaloids (within throat): Slight striations of white, like RHS 155A and 155B, and yellow, like RHS 2 within 1 cm of base of inner throat.

Corolla (within throat): Yellow, like RHS 2 within 2.5 cm of base of inner throat.

Width: About 10.5 cm to 11.0 cm.

Length of throat from calyx to corolla limb attachment: About 4.4 cm to 4.9 cm.

Length of corolla from calyx to top of corolla: About 5.5 cm to 6.5 cm.

Individual corolla limbs: 4.0 cm to 5.0 cm long, 3.5 cm to 5.5 cm wide. Asymmetrical in shape, ending in a short, abrupt tip.

Petaloids (converted stamens):

Individual petaloid length: About 4.0 cm to 4.5 cm.

Individual petaloid width: About 3.5 cm to 5.0 cm.

Petaloid attachment: About 1.5 cm above top of calyx.

Petaloid fusion: Fused about 1.5 cm to 2.0 cm at base.

Shape: Symmetrical short, abrupt tip. Petaloids are flattened and opened, resembling outer corolla.

Length approximately equal to outer corolla, exhibiting a fully double appearance.

Form 2:

Overall structure: Funnel-shaped. Outer five parted corolla limbs. Inner five parted petaloids. Petaloids have defined difference, shorter than corolla and remaining in a cluster within outer corolla, not opening flat as in Form 1. Tight cluster habit of petaloids generally prohibits view of inner throat. Cluster of flower within flower.

Corolla:

Color:

Corolla and petaloids: Red-purple group 62B, 62C and 62D, and red-purple group 58B and 58C.

Petaloids (within throat): Exhibit white blotches and streaks of white group 155A and 155B, and yellow group 2 within 1 cm of base of inner throat.

Corolla (within throat): Yellow group 2 within 1.5 cm of base of inner throat.

Reproductive structure:

Style: Generally present 8–11 cm in length.

Stamens: Absent, developed into long petaloids.

Width: About 9.0 cm to 10.5 cm.

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Length of throat from calyx to corolla limb attachment: About 4.3 cm to 4.8 cm.

Length of corolla from calyx to top of corolla: About 6.0 cm to 7.0 cm.

Individual corolla limbs: About 4.0 cm to 5.0 cm long, 3.6 cm to 4.6 cm wide. Asymmetrical in shape, ending in an abrupt tip.

Petaloids (converted stamens):

Individual petaloid length: About 3.5 cm to 5.0 cm.

Individual petaloid width: About 4.0 cm to 5.2 cm.

Petaloid attachment: About 1.5 cm above top of calyx.

Petaloid fusion: Fused, sometimes separated about 2.0 cm at base.

Shape: Somewhat symmetrical, undulate.

Form 3. Rarely observed, inner five petaloids folded to provide a rose flower-like appearance.

Overall Structure:

Outer five parted corolla limbs, inner five parted petaloids.

Width of corolla: 9–10.5 cm.

Length of corolla throat from calyx to corolla limb attachment: 4.3–4.8 cm.

Length of corolla from calyx to top of corolla: 6–7 cm.

Outer corolla limbs: 4.5 cm. long.

Inner petaloids: 4 cm long.

Reproductive Structures:

Style: Absent.

Stamens: Absent.

Shape: Inner petaloids flattened and opened, resembling outer corolla. Similar to Form #1.

Color: Corolla and petaloids Red-purple group 58B and red-purple group 62B, 62C and 62D, with slight striations of white group 155A and 155B.

Form 4: Rarely observed, inner five petaloids assume a windmill-like appearance.

Overall structure: Outer five parted corolla limbs, inner five parted petaloids.

Width of corolla: 9 cm.

Length of corolla throat from calyx to corolla limb attachment: 4.5 cm.

Length of corolla from calyx to top of corolla: 6 cm.

Outer corolla limbs: 4 cm.

Inner petaloids: 3 cm.

Reproductive structures.

Style: Absent

Stamens: Absent

Color:

Corolla and petaloids: Red-purple group 58B and 58C and red-purple group 62A, 62B, 62C and 62D, interspersed with mottled white blotches on petaloids green-yellow at base 3 mm by 2 mm.

These additional characteristics are established in 'Rita Marie Green' and are transmitted through succeeding asexual propagations.

Asexual reproduction of 'Rita Marie Green' was performed by cuttings. Other conventional methods for propagation of Mandevilla varieties may also be used.

The above detailed description is in no way meant to narrow the scope of the invention which is to be interpreted in light of the claims. Having illustrated and described the principles of the present invention, it should be apparent to persons skilled in the art that the methods of the present invention can be modified in arrangement and detail without departing from such principles. Applicant claims all modifications that are within the spirit and scope of the appended claims.

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What is claimed is:

1. A plant of a Mandevilla variety "Rita Marie Green" having at least one double flower.
2. The plant of claim 1 wherein said flowers have outer five parted corolla limbs and inner five parted petaloids, said petaloids overlaying the corolla limbs.
3. The plant of claim 1 wherein said flowers have outer five parted corolla limbs and inner five parted petaloids, said petaloids being shorter than the corolla and remaining in a cluster within outer corolla, forming a tight cluster habit of petaloids generally prohibiting a view of the inner throat.
4. A plant structure derived from the plant of claim 1.
5. A plant produced by propagating the Mandevilla variety 'Rita Marie Green' of claim 2.

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6. A Mandevilla variety essentially derived from the plant of claim 1, wherein the essentially derived plant displays at least one double flower.

7. A plant part from the plant of claim 1.

8. Plant material from a plant of claim 1 which is capable of reproducing a double flowering Mandevilla plant.

9. A method of producing a double-flowering Mandevilla plant comprising propagating a double-flowering Mandevilla plant of the Rita Marie Green variety to produce a plurality of plants and selecting at least one double-flowering Mandevilla plant from said plurality of plants.

10. Asexually produced progeny of the double-flowering Mandevilla plant according to claim 1.

\* \* \* \* \*





US00PP11787P2

**(12) United States Plant Patent**  
**Green et al.****(10) Patent No.: US PP11,787 P2**  
**(45) Date of Patent: \*Feb. 27, 2001****(54) MANDEVILLA PLANT WITH DOUBLE  
FLOWER CALLED 'RITA MARIE GREEN'****(75) Inventors:** James Mitchell Green; Cecil Michael  
Green, Jr.; Rita Marie Green, all of  
Haines City, FL (US)**(73) Assignee:** Monrovia Nursery Company, Azusa,  
CA (US)**(\*) Notice:** Under 35 U.S.C. 154(b), the term of this  
patent shall be extended for 0 days.This patent is subject to a terminal dis-  
claimer.**(21) Appl. No.: 09/137,554****(22) Filed:** Aug. 20, 1998**(51) Int. Cl.<sup>7</sup>** ..... **A01H 5/00****(52) U.S. Cl.** ..... **Plt./232****(58) Field of Search** ..... **Plt./232; 800/298,**  
800/323**(56) References Cited****PUBLICATIONS**Color photograph of Mandevilla plant 'Monite' (1 page).  
Letter bearing a date of Aug. 22, 1996 from Mike C. Green  
(11 pages).Memo entitled MN-AZUSA dated Sep. 4, 1996 (3 pages).  
J. Mitchell Green letter bearing the notation Jun. 21, 1997  
(wrote) mailed Jul. 1, 1997 (8 pages).Letter from Monrovia to Mitchell Green bearing facsimile  
notation of Aug. 21, '97 (1 page).*Primary Examiner*—Lynette R. F. Smith*Assistant Examiner*—Melissa L. Kimball**(74) Attorney, Agent, or Firm**—Klarquist Sparkman  
Campbell Leigh & Winston LLP**(57) ABSTRACT**A new and distinct Mandevilla variety characterized by red  
to red-purple double flowers having five parted outer corolla  
and inner five parted ring of petaloids.**3 Drawing Sheets****1****BACKGROUND OF THE INVENTION**

The present invention relates to a new variety of Mandevilla plant, called 'Rita Marie Green'. This plant is believed to be different from all previous known Mandevilla plants in that it possesses double flowers. 'Rita Marie Green' is useful as a woody vine that produces decorative double blossoms. The double flowers of 'Rita Marie Green' enhance its appearance and make it especially marketable, and therefore, useful. The botanical name for my new variety is *Mandevilla x amabilis* 'Rita Marie Green'.

The progenitor plant of 'Rita Marie Green' was a Mandevilla of the variety 'Alice du Pont', which does not have double flowers. 'Alice DuPont' is botanically known as *Mandevilla x amabilis* (an interspecific hybrid of *M. splendens* and an undefined parent), and therefore has the complete botanical name *Mandevilla x amabilis* 'Alice DuPont'.

The parent plant of the new variety was found in a group of 'Alice du Pont' Mandevilla plants growing in a cultivated area (in a greenhouse) in Haines City, Fla. Thus, the new plant is understood to be a mutation of the 'Alice du Pont' variety of Mandevilla plant. The new plant has been propagated from cuttings taken from the parent plant and from progeny produced from such cuttings. My new variety, 'Rita Marie Green,' has been grown from at least five successive generations of cuttings and each generation has only generated plants that express double flowers (i.e. a first cutting has been taken grown to maturity and then used to provide the cutting for the next generation). In addition, culturing of the 'Rita Marie Green' variety axillary bud tissue has also only produced plants with double flowers. Hence, the double flower phenotype is stable.

'Rita Marie Green' has not been observed under all possible environmental conditions and its phenotype may vary significantly with variations in environment such as temperature, light intensity, and day length, without any

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variation in genotype. However, the following unique characteristic has been repeatedly observed in asexually propagated progeny of 'Rita Marie Green' and distinguish it from all other Mandevilla varieties: double flowers which are red to red-purple and comprise an outer corolla of five petals or limbs and an inner flower comprising a ring of petaloids. This double flower structure is unique among Mandevilla plants and is a characteristic of all 'Rita Marie Green' variety plants, including the variety 'Monite'. The inner petaloids comprise five inner petaloids in a cluster within the outer corolla limbs. In some cases, the inner petaloids assume an upright or trumpet-like configuration generally prohibiting a view of the inner throat and forming a "flower-within-flower" cluster; in other cases, the inner petaloids are more laid back against the outer petals, exposing the throat of the plant; in relatively rare instances, the inner petaloids assume a folded, almost rose-like appearance or, alternatively, a windmill-like appearance. However, in all cases, the flower within a flower characteristic of this new Mandevilla variety is outstanding.

This double flowering characteristic is established and transmitted through succeeding asexual propagations. There are several double flower forms that have been exhibited by this plant, as described below.

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

The following drawings are photographs of 'Rita Marie Green.'

**FIG. 1** is an anterior view of the double flower bloom of 'Rita Marie Green' showing the double flower structure made up of outer five-parted corolla limbs and inner five-parted petaloids.

**FIG. 2** is a posterior view of the double flower bloom of 'Rita Marie Green' showing the outer five-parted corolla attached to the stem.

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FIG. 3 is a view of the foliage of 'Rita Marie Green' showing its elliptic green leaves.

## DETAILED DESCRIPTION

The following is a detailed description of the invention based on plants grown at the inventors' nursery in Haines City, Fla., and at a nursery in Azusa, Calif. All four of the double flower forms disclosed herein were obtained by growing plants of 'Rita Marie Green' in the same environmental conditions. Color descriptions are according to The Royal Horticultural Society Colour Chart. Other terminology is used herein in accordance with ordinary dictionary significance or as commonly used by those of ordinary skill in the relevant art, unless otherwise noted.

## THE PLANT

## Foliage:

*Type*.—Evergreen.

*Shape*.—Elliptic (linear to oblong). Apex: Long to short acuminate tip. Base: Cordate.

*Length*.—Variable from about 9.5 cm to 15 cm.

*Width*.—Variable from about 4.6 cm to 8.2 cm.

*Color*.—Upper foliage: Green group R.H.S. 139A to green group R.H.S. 137A. Lower foliage: Yellow-green group R.H.S. 146B. Arrangement on stem: Opposite. Margins: Entire. Habit: The 'Rita Marie Green' variety has a vigorous twining habit and is an ideal semi-tropical creeper. A mature plant of the variety 'Rita Marie Green' has twining stems 15 to 20 feet long and produces leaves that are large and glossy. Disease Resistance: The 'Rita Marie Green' variety is not known to be unusually tolerant to any pathogens. Frost Tolerance: The 'Rita Marie Green' variety is tolerant to temperatures as low as approximately 30° F. Fragrance: Flowers of the 'Rita Marie Green' variety have a slight sweet fragrance.

## Flowers:

*Form 1*.—Arrangement: Axillary racemes. Color: Upper surface of petals: Corolla and petaloids: Red-purple group R.H.S. 58B and 58C. Petaloids (within throat): Slight striations of white group R.H.S. 155A and 155B and yellow group R.H.S. 2 within 1 cm of base of inner throat. Corolla (within throat): Yellow group R.H.S. 2 within 2 cm of base of inner throat. Underside of petals: Red-purple group R.H.S. 58B and 58C, mixed with red-purple R.H.S. group 62A, 62B, 62C, and 62D and white group R.H.S. 155D. Reproductive structures: Style: Generally present, about 8 mm to 11 mm in length. Stamens: Absent, developed into showy petals. Structure: Overall, funnel shaped. Likely reproductive structures are sterile due to "double" flowers with typical five-numbered stamens converted to petaloids. Outer five parted funnel-shaped corolla limbs. Inner five parted petaloids. Petaloids within the corolla to form a double flower. Corolla: Width: about 10.5 cm to 11.0 cm. Length of throat from calyx to corolla limb attachment: about 4.4 cm to 4.9 cm. Length of corolla from calyx to top of corolla: about 5.5 cm to 6.5 cm. Individual corolla limbs: 4.0 cm to 5.0 cm long, 3.5 cm to 5.5 cm wide. Asymmetrical in shape, ending in a short, abrupt tip. Petaloids (converted stamens): Individual petaloid length: about 4.0 cm to 4.5 cm. Individual petaloid width: about 3.5 cm to 5.0 cm. Petaloid attachment: about 1.5 cm above top of calyx. Petaloid fusion: Fused about 1.5 cm to 2.0 cm at base. Shape: Symmetrical short, abrupt tip. Petaloids are flattened and opened, resembling outer

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corolla. Length approximately equal to outer corolla, exhibiting a fully double appearance. Petaloids overlay corolla limbs exposing yellow inner base of tube.

*Form 2*.—Overall Structure: Funnel shaped. Outer five parted corolla limbs. Inner five parted petaloids. Petaloids have defined difference; shorter than corolla and remain in a cluster within center of corolla, not opening flat as in Form 1. Tight cluster habit of petaloids generally prohibits view of inner throat. Cluster of flower within flower. Corolla: Width: about 9.0 cm to 10.5 cm. Length of throat from calyx to corolla limb attachment: about 4.3 cm to 4.8 cm. Length of corolla from calyx to top of corolla: about 6.0 cm to 7.0 cm. Individual corolla limbs: about 4.0 cm to 5.0 cm long, 3.6 cm to 4.6 cm wide. Asymmetrical in shape, ending in an abrupt tip. Petaloids (converted stamens): Individual petaloid length: about 3.5 cm to 5.0 cm. Individual petaloid width: about 4.0 cm to 5.2 cm. Petaloid attachment: about 1.5 cm above top of calyx. Petaloid fusion: Fused, sometimes separated 2.0 cm at base. Shape: Somewhat symmetrical, undulate. Petaloids have defined distance, shorter than corolla and remaining in a cluster within outer corolla, not opening flat as in Form 1. Tight cluster habit of petaloids generally prohibits view of inner throat. Cluster of flower within flower.

*Form 3*.—Rarely observed, inner five petaloids folded to provide a rose flower-like appearance. Overall Structure: Outer five parted corolla limbs, inner five parted petaloids. Width of corolla: 9–10.5 cm. Length of corolla throat from calyx to corolla limb attachment: 4.3–4.8 cm. Length of corolla from calyx to top of corolla: 6–7 cm. Outer corolla limbs: 4.5 cm long. Inner petaloids: 4 cm long. Reproductive Structures: Style: Absent. Stamens: Absent. Shape: Inner petaloids flattened and opened, resembling outer corolla. Similar to Form #1. Color: Corolla and petaloids: Red-purple group 58B and 58C, and red-purple group 62B, 62C and 62D. Petaloids within throat exhibit white blotches and streaks of white group 155A and 155B, and yellow group 2 within one centimeter of inner throat. Corolla within throat: Yellow group 2 within 1.5 cm of base of inner throat.

*Form 4*.—Rarely observed, inner five petaloids assume a windmill-like appearance. Overall structure: Outer five parted corolla limbs, inner five parted petaloids. Width of corolla: 9 cm. Length of corolla from calyx to top of corolla: 6 cm. Outer corolla limbs: 4 cm. Inner petaloids: 3 cm. Reproductive structures: Style: Absent. Stamens: Absent. Color: Corolla and petaloids: Red-purple group 58B and 58C, and red-purple group 62A, 62B, 62C and 62D, interspersed with mottled white blotches on petaloids green-yellow at base 3 mm by 2 mm.

The reason for the varied appearance of the double flowers has yet to be determined. However, the red to red-purple double flower characteristics are established and transmitted through succeeding asexual propagations.

Asexual reproduction of 'Rita Marie Green' has been performed from cuttings. Other conventional methods for propagation of Mandevilla varieties may also be used.

What is claimed is:

1. A new and distinct variety of Mandevilla plant having red to red-purple double flowers substantially as shown and described herein.

\* \* \* \* \*



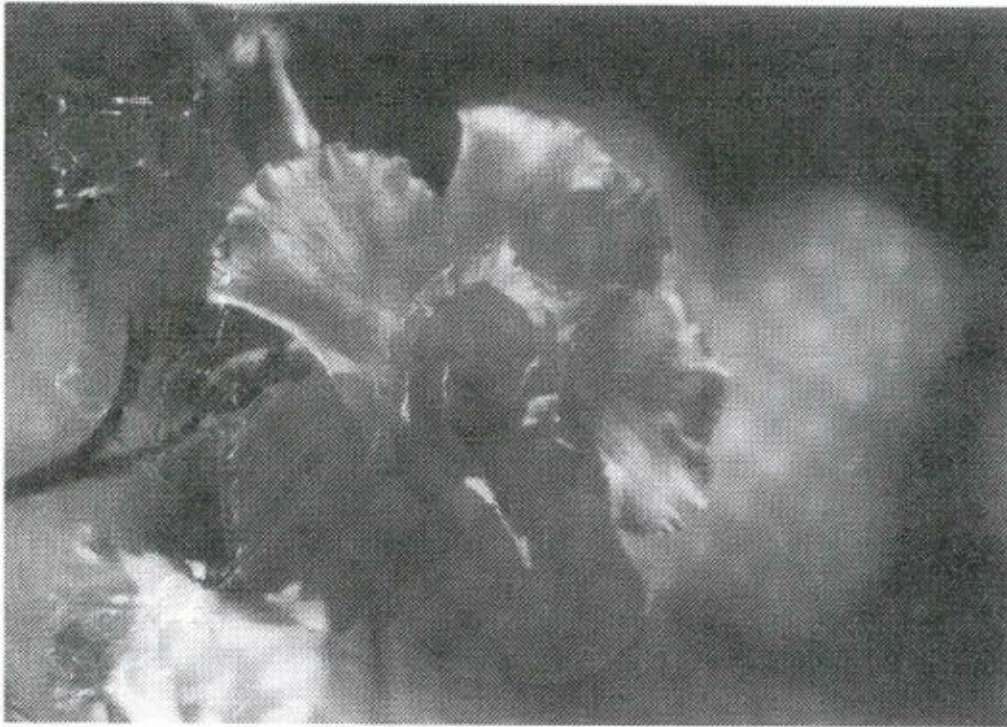
**U.S. Patent**

**Feb. 27, 2001**

**Sheet 1 of 3**

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**FIG. 1**





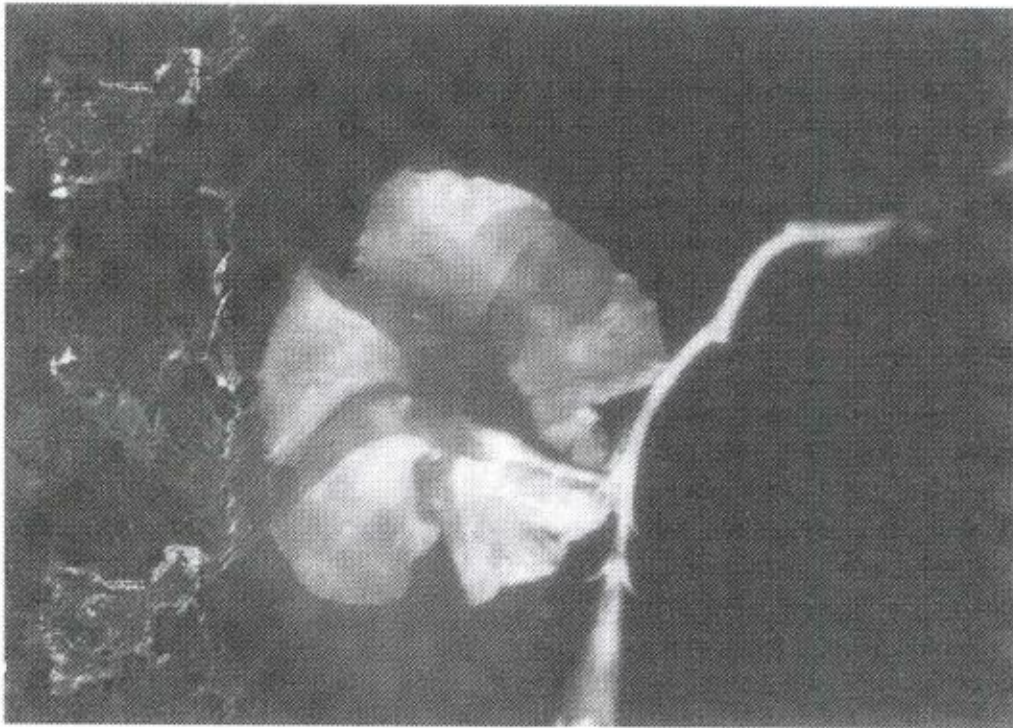
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**FIG. 2**



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**FIG. 3**





UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : PP 11,787 P2  
DATED : February 27, 2001  
INVENTOR(S) : Green et al.

Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1,

Line 13, "Pont", which" should read -- Pont' (unpatented), which --.  
Line 18, "The parent plant" should read -- The original plant --.  
Line 22, "a mutation" should read -- a limb mutation --.  
Line 24, "parent" should read -- original --.

Column 2,

Line 9, "the variety" should read -- the proprietary variety --.

Column 3,

Line 44, "R.H.S. 2" should read -- R.H.S. 2A --.  
Line 46, "R.H.S. 2" should read -- R.H.S. 2A --.  
Line 52, "petals" should read -- petaloids --.

Column 4,

Line 43, "group 2" should read -- group R.H.S. 2A --.  
Line 44, "Yellow group 2" should read -- Yellow group R.H.S. 2A --.

Signed and Sealed this

Third Day of December, 2002



JAMES E. ROGAN  
*Director of the United States Patent and Trademark Office*





USPP14290P29

(12) **United States Plant Patent**  
**Usrey**(10) **Patent No.:** **US PP14,290 P2**  
(45) **Date of Patent:** **Nov. 11, 2003**(54) **MANDEVILLA PLANT NAMED 'MONREY'**(51) **Int. Cl.<sup>7</sup>** ..... **A01H 5/00**(50) Latin Name: *Mandevilla X amabilis*  
Varietal Denomination: **Monrey**(52) **U.S. Cl.** ..... **Plt./232**(58) **Field of Search** ..... **Plt./232**(75) Inventor: **Bruce Usrey, Dayton, OR (US)***Primary Examiner*—Kent Bell(73) Assignee: **Monrovia Nursery Company, Azusa, CA (US)***Assistant Examiner*—Louanne Krawczewicz Myers(74) *Attorney, Agent, or Firm*—C. A. Whealy

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

(57) **ABSTRACT**

A distinct cultivar of Mandevilla plant named 'Monrey', characterized by its vining growth habit; glossy, dark green leaves; and large double pink-colored flowers with 20 petals per flower.

(21) Appl. No.: **10/162,987**(22) Filed: **Jun. 5, 2002****1 Drawing Sheet****1**

Botanical classification/cultivar designation: *Mandevilla x amabilis* cultivar Monrey.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct cultivar of Mandevilla plant, botanically known as *Mandevilla x amabilis*, and hereinafter referred to by the name 'Monrey'.

The new Mandevilla is a naturally-occurring branch mutation of the *Mandevilla x amabilis* cultivar Monite, disclosed in U.S. Plant Pat. No. 12,123. The new Mandevilla was discovered and selected by the inventor on Jun. 29, 2001 in a controlled environment in Azusa, Calif., within a population of plants of the cultivar Monite.

Asexual reproduction of the new cultivar by tissue culture in a laboratory in Azusa, Calif., since August, 2001, has shown that the unique features of this new Mandevilla are stable and reproduced true to type in successive generations.

**SUMMARY OF THE INVENTION**

Plants of the cultivar Monrey have not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment 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 'Monrey'. These characteristics in combination distinguish 'Monrey' as a new and distinct cultivar of Mandevilla:

1. Vining growth habit.
2. Glossy, dark green leaves.
3. Large double pink-colored flowers with 20 petals per flower.

Plants of the new Mandevilla differ from plants of the parent, the cultivar Monite, primarily in flower form as plants of the cultivar Monite have single flowers with five petals.

Plants of the new Mandevilla can be compared to plants of the double flower Mandevilla cultivar Rita Marie Green, disclosed in U.S. Plant Pat. No. 11,787. In side-by-side comparisons conducted in Azusa, Calif., plants of the new

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cultivar differed from plants of the cultivar Rita Marie Green in the following characteristics:

1. Plants of the new Mandevilla had about 20 petals per flower whereas plants of the cultivar Rita Marie Green had about 10 petals per flower.
2. Flower petals of plants of the new Mandevilla were not fused whereas flower petals of plants of the cultivar Rita Marie Green were fused.

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

The accompanying colored photographs illustrate the overall appearance of the new cultivar, 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 Mandevilla.

The photograph at the left of the sheet comprises a side perspective view of typical plants of 'Monrey' grown in a five-gallon container.

The photograph at the right of the sheet comprises a close-up view of typical flowers, flower buds and leaves of 'Monrey'.

**DETAILED BOTANICAL DESCRIPTION**

In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. Plants used for the above-mentioned photographs and description were about ten months old when the photographs and description were taken. Five-gallon containers with three plants each were grown under commercial production conditions in a clear polyethylene-covered greenhouse in Azusa, Calif. during the spring. During the production of the plants, day temperatures ranged from 27 to 32° C. and night temperatures ranged from 4 to 16° C.

Botanical classification: *Mandevilla x amabilis* cultivar Monrey.

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Parentage: Naturally-occurring branch mutation of *Mandevilla xamabilis* cultivar Monite, disclosed in U.S. Plant Pat. No. 12,123.

**Propagation:**

*Type*.—By tissue culture.

*Time to initiate roots on a micro-propagated plant*.—About 30 days.

*Time to produce a rooted micro-propagated plant*.—About 200 days.

*Root description*.—Numerous, fibrous and freely branching.

**Plant description:**

*Form*.—Perennial evergreen flowering plant; twining vine. Plants initially upright, then vining and requiring support to maintain upright habit. Plants are typically pinched to enhance lateral branch development; potentially two lateral branches form at every node.

*Plant height (length)*.—About 120 cm.

*Plant diameter, single plant*.—About 22 cm.

*Vigor*.—Vigorous.

*Lateral branches*.—Length: About 32 cm. Diameter: About 3 mm. Internode length: About 9 cm. Shape in cross-section: Round. Strength: Flexible, strong. Texture: Pubescent. Color: Young stems: 144A. Mature stems: 199A.

*Foliage description*.—Arrangement: Opposite, simple. Length: About 13 cm. Width: About 6.2 cm. Shape: Elliptic. Apex: Acuminate. Base: Cordate. Margin: Entire. Texture, upper and lower surfaces: Rugose, leathery, durable; upper surface, glabrous; lower surface, pubescence on veins. Luster: Upper surface, glossy; lower surface, dull. Venation pattern: Pinnate, arcuate. Petiole length: About 1.2 cm. Petiole diameter: About 5 mm. Color: Young foliage, upper and lower surfaces: 146A. Fully expanded foliage, upper surface: 147A. Fully expanded foliage, lower surface: 147B. Venation, upper surface: 145B. Venation, lower surface: 145C. Petiole: 144A to 144B.

**Flower description:**

*Flower type and habit*.—Large double flowers arranged in loose elongated racemes, racemes axillary. About 14 flowers and flower buds per raceme; at full flower, about two or three developing racemes per plant. Flowers face mostly outward and droop from their weight. Flowers persistent. Flowers not fragrant.

*Natural flowering season*.—Spring until frost in the autumn; flowering continuous.

*Flower longevity on the plant*.—About 10 to 14 days.

*Inflorescence length*.—About 28 cm.

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*Inflorescence width*.—About 12.5 cm.

*Flowers*.—Appearance: Double flower form; flowers rounded. Diameter: About 11 cm. Depth (length): About 6 cm.

*Flower buds (just showing color)*.—Length: About 2.4 cm. Diameter: About 1 cm. Shape: Ovoid. Color: 155A; towards apex, 155A tinged with 56A.

*Petals*.—Quantity per flower: About 20 arranged in multiple whorls; overlapping; petals not fused at base. Length: About 6.5 cm. Width: About 6 cm. Shape: Obovate to roughly spatulate. Apex: Rounded, occasionally emarginate. Base: Obtuse. Margin: Entire, sinuate; undulate. Texture, upper and lower surfaces: Smooth, velvety, slightly ruffled. Color: When opening, upper surface: 62B. When opening, lower surface: 62C to 62D; towards base, 155A. Fully opened, upper surface: Towards margin, 62A; center, 62B; towards base, 62C; at base, 17A. Color becomes closer to 62C to 62D with subsequent development. Fully opened, lower surface: 62D; towards base, 155A.

*Sepals*.—Quantity: Five per flower in a single whorl; star-shaped calyx. Length: About 8 mm. Width: About 3 mm. Shape: Triangular. Apex: Acuminate. Base: Truncate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color, upper and lower surfaces: 144A; towards apex, tinged with 60B.

*Peduncles*.—Length: About 18 cm. Diameter: About 3 mm. Angle: About 30° from stem. Strength: Flexible, moderately strong. Color: 144A.

*Pedicles*.—Length: About 5 cm. Diameter: About 2.5 mm. Angle: About 30 to 40° from stem. Strength: Flexible, moderately strong. Color: 144A.

*Reproductive organs*.—Stamens: Quantity per flower: No true stamens, about five to seven sterile stamens. Anther shape: Spatulate, elongated. Anther length: About 7 mm. Anther color: 16C. Pollen: None observed. Pistils: None observed.

*Seed/fruit*.—Seed and fruit production has not been observed.

**Disease/pest resistance:** Plants of the new *Mandevilla* have not been noted to be resistant to pathogens and pests common to *Mandevilla*.

**Weather tolerance:** Plants of the new *mandevilla* have been observed to be tolerant to rain and wind and tolerant to temperatures from 0 to 43° C.

It is claimed:

1. A new and distinct cultivar of *Mandevilla* plant named 'Monrey', as illustrated and described.

\* \* \* \* \*



**U.S. Patent**

**Nov. 11, 2003**

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