



(12) **United States Plant Patent**
Aguilar Morán

(10) **Patent No.:** **US PP36,026 P2**
(45) **Date of Patent:** **Jul. 23, 2024**

(54) **DESSERT BANANA PLANT NAMED “NW02”**

(50) Latin Name: *M. acuminata*
Varietal Denomination: **NW02**

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

(21) Appl. No.: **18/469,776**

(22) Filed: **Sep. 19, 2023**

(51) **Int. Cl.**
A01H 5/08 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./160**

(58) **Field of Classification Search**
USPC Plt./160
CPC A01H 6/00; A01H 5/08
See application file for complete search history.

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(57) **ABSTRACT**

‘NW02’ is a hybrid dessert banana variety with a dwarf stature and produces small bunches with high-quality fruit.

6 Drawing Sheets

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Latin name of the genus and species of the plant claimed: This tetraploid plant has only *M. acuminata* in its pedigree. This tetraploid hybrid is a product of an inter-specific cross between two triploid (AAA) cultivars. Its Latin name is *M. acuminata* representing four genomes (AAAA) of this genus and species.

Variety denomination: ‘NW02’.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

Not applicable.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a new and distinctive hybrid banana variety named ‘NW02’. This new hybrid variety was the result of a field cross performed in 2016 in La Lima Cortés, Honduras, between ‘Novak’ used as a female and ‘Williams’ used as a male (Both unpatented). ‘Novak’ is a medium-sized triploid plant (AAA) cavendish type. ‘Williams’ is a medium to tall plant and is a cultivar of the Giant Cavendish type in the Cavendish Subgroup. It is one of the most widely grown cultivars in commercial plantations. Both parents are resistant to *Fusarium oxysporum* races one but susceptible to Race 4; furthermore, they are susceptible to the Black Sigatoka leaf spot (*Mycosphaerella fijiensis*).

Both parents were selected from a germplasm collection and are among the most traded bananas worldwide. ‘NW02’ is a Cavendish tetraploid (AAAA) created especially for the genetic improvement of the Cavendish group.

‘NW02’ was selected in 2018 from several first-generation seedlings from the cross between ‘Novak’ and ‘Williams’. It was chosen as a tetraploid hybrid different from the “Cavendish type” stature but maintaining the taste of its parental lines and producing bunches of 12 kilograms with fruits shaped differently from their Cavendish parents.

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‘NW02’ was asexually reproduced by corms by the breeder in La Lima Cortes, Honduras. All plants and fruit run true to the initially selected plant and are identical in all aspects.

The fruits of the ‘NW02’ variety have a flavor that is like that of its parent plants, ‘Novak’, and ‘Williams’. The leaves of ‘NW02’ also share the same shape, and the pseudostem has the same color as its parents. However, there are noticeable differences between them. For instance, ‘NW02’ is a short plant, unlike ‘Novak’ and ‘Williams’, which are medium-sized plants. Additionally, the bunch size and finger shape of the ‘NW02’ variety are smaller when compared to its parents. It’s important to note that these comparisons are made with reference to a standard variety, as one of the relatives of ‘NW02’ (‘Williams’) is the world’s most produced and marketed commercial variety.

BRIEF SUMMARY OF THE INVENTION

‘NW02’ is a hybrid dessert banana variety with a dwarf stature and produces small bunches with high-quality fruit.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The figures describe the characteristics of the ‘NW02’ hybrid banana variety. The color shown in the photographs is as nearly accurate as reasonably possible in this type’s color representation.

FIG. 1 shows the typical appearance of a plant at ten (10) months old;

FIG. 2A-B shows blotches at the petiole base (A) and a petiole canal leaf (B);

FIG. 3A-C shows the shape of a leaf blade base (A) and leaf upper (B) and lower (C) surfaces;

FIG. 4 shows typical suckers;

FIG. 5 shows a typical fruit bunch;

FIG. 6 shows a male bud;

FIG. 7A-C shows bracts of a male bud;

FIG. 8A-D shows free tepal (A) and compound tepals (B-D) lobes;

FIG. 9A-B shows style shape (A) and ovary (B);
 FIG. 10 shows a typical male flower;
 FIG. 11 shows rowed ovules; and
 FIG. 12 shows a typical second hand.

DETAILED BOTANICAL DESCRIPTION

The following is a detailed botanical description of the new variety 'NW02'. The report is from plants located in La Lima, Cortés, Honduras, evaluated in 2023. The descriptions concord with the internationally standardized "Descriptors for Banana (*Musa spp.*)" elaborated by IPGRI/INIBAP/CIRAD, 1996, and the U.K.'s Royal Horticultural Society's Color Chart, 2001. The 'NW02' plant and its fruit may vary slightly from the detailed descriptors shown below due to cultural practices, soil types, and climatic conditions under which the variety may be cultivated.

Leaf habit	Intermediate
Dwarfism	Dwarf type
Pseudostem length	1.07 meters
Pseudostem diameter	0.47 meters
Pseudostem height	1.5 to 2 meters
Pseudostem aspect	Normal
Pseudostem color	Green (146D, RHS)
Pseudostem appearance	Dull
The predominant underlying color of the pseudostem	Orange (27D, RHS)
Pigmentation of the underlying pseudostem	Red (51B, RHS)
Sap color	Watery (157D, RHS)
Wax-on leaf sheaths	Moderately waxy
Number of suckers	3
Development of suckers	>1/4 and <3/4 of the height of the parent plant
Position of suckers	Close to parent (vertical growth)
Blotches at the petiole base	Sparse blotching
Blotches color	Greyed-Brown (N199A, RHS)
Petiole canal leaf III	Wide with erect margins
Petiole margins	Winged and clasping the pseudostem
Wing type	Dry
Petiole margin color	Without color
Edge of petiole margin	Colourless (Without a color line along)
Petiole margin width	1 to 3 cm
Leaf blade length	150 to 170 cm
Leaf blade width	50 to 70 cm
Petiole length	40 to 50 cm
Color of the leaf's upper surface	Green (137A, RHS)
Appearance of leaf upper surface	Dull
Color of the leaf's lower surface	Green (N138B, RHS)
The appearance of the leaf's lower surface	Dull
Wax on leaves	Very waxy
The insertion point of the leaf blade on the petiole	Symmetric
The shape of the leaf blade base	Both sides rounded
Leaf corrugation	Even, smooth
Color of midrib dorsal surface	Green (143B, RHS)
Color of midrib ventral surface	Green (136D, RHS)
Color of cigar leaf dorsal surface	Yellow-Green (147D, RHS)
Blotches on leaves of water suckers	Without blotches
Peduncle length	20 to 30 cm
Empty nodes on the peduncle	One
Peduncle width	4 to 6 cm
Peduncle color	Green (141B, RHS)
Peduncle hairiness	Very hairy, short hairs (similar to velvet touch)
Bunch length	51 cm
Bunch diameter	57 cm
Number of hands per bunch	8
Bunch position	Horizontal
Bunch shape	Cylindrical

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Bunch appearance	Lax
Flowers that form the fruit	Female
Fruits	Biseriate
5 Rachis type	Present and male buds may be degenerated or persistent
Rachis position	At an angle
Rachis appearance	Male flowers/bracts above the male bud
Male bud type	Normal (present)
10 Male bud shape	Like a top
Male bud size	21 to 30 cm
Bract base shape	Large shoulder
Bract apex shape	Intermediate
Bract imbrication	Young bracts considerably overlap.
15 Color of the bract external face	Red-Purple (59A, RHS)
Color of the bract internal ace	Red-Purple (59C, RHS)
Color of the bract apex	Tinted with yellow (discolored) (7C, RHS)
Color stripes on the bract	Without discolored lines (not ridges) on the external face
20 Bract scars on rachis	Very prominent
Persistence of the bracts of the rachis	Moderate
Fading of color on bract base	Color discontinuing towards the base.
Male bract shape	Ovate
25 Male bract lifting	Not Lifting from male bud (bracts are persistent)
Bract behavior before falling	Revolute (Rolling)
Wax on the bract	Very few waxes
Presence of grooves on the bract	Moderate
Male flower behavior	Neutral/male flowers are persistent.
30 Compound tepal basic color	Greyed-Orange (166A, RHS)
Compound tepal pigmentation	Rust-colored spots (79A, RHS)
Lobe color of compound tepal	Yellow (2B, RHS)
Lobe development of compound tepal	Developed
Free tepal color	Opaque White (155D, RHS)
35 Free tepal shape	Rectangular
Free tepal appearance	Simple folding under the apex
Free tepal apex development	Developed
Free tepal apex shape	Triangular
Anther exertion	Inserted
Filament color	Greyed-White (156D, RHS)
40 Anther color	Green-White (157C, RHS)
Pollen sac color	White-cream (1C, RHS)
Pollen vitality	Abundant
Style basic color	Green-White (157C, RHS)
Pigmentation on style	Without pigmentation
Style exertion	Inserted
45 Style shape	Curved under stigma
Stigma color	Greyed-Orange (167D, RHS)
Ovary shape	Straight
Ovary basic color	White (155C, RHS)
Ovary pigmentation	Very few or no visible signs of pigmentation
50 The dominant color of male flower	White 155C, RHS)
Irregular flowers	Absent
Arrangement of ovules	Two rowed
Fruit position	Perpendicular to the stalk
Number of fruits	9 to 12
55 Fruit length	12 to 15 cm
Fruit width (finger)	2.5 to 3 cm
Fruit shape (longitudinal curvature)	Straight in the distal part
Color of the flesh of the fruit	Creamy (158C, HRS)
60 Longitudinal ridges of the fruit	moderate
Transverse section of fruit	Rounded
Fruit apex	Bottle-necked
Remains of flower relicts at the fruit apex	Persistent style
Fruit pedicel length	7 to 10 mm
65 Fruit pedicel width	3 to 5 mm

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Pedicle surface	Hairless
Fusion of pedicel	Very partially or no visible sign of fusion
Immature fruit peel color	Yellow-Green (144C, RHS)
Mature fruit peel color	Yellow (9B, RHS)
Fruit peel thickness	1.5 to 2 mm
Adherence to the fruit peel	Fruit peels easily
Cracks in fruit peel	Without Cracks
Pulp in fruit	With pulp
Pulp color before maturity	White (155B, RHS)
Pulp color at maturity	Yellow-White (158A, RHS)
Fruits fall from hands.	Deciduous
Flesh texture	Soft

Predominant taste	Sweet (like Cavendish)
Presence of seed with the source of pollen	Without seeds
Seed surface	Without seeds
Seed shape	Without seeds
Growth habit of the plant	Spreading

10 The invention claimed is:
 1. A new and distinct variety of banana plant named 'NW02', substantially as illustrated and described herein.

* * * * *



FIG. 1

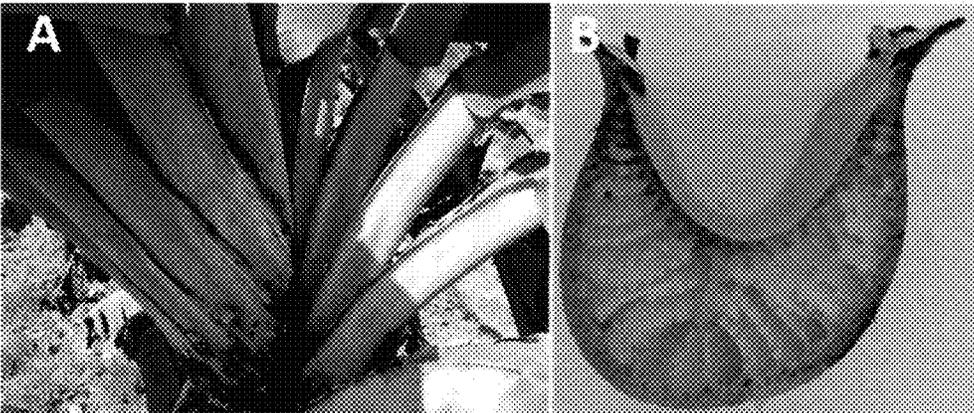


FIG. 2A & 2B

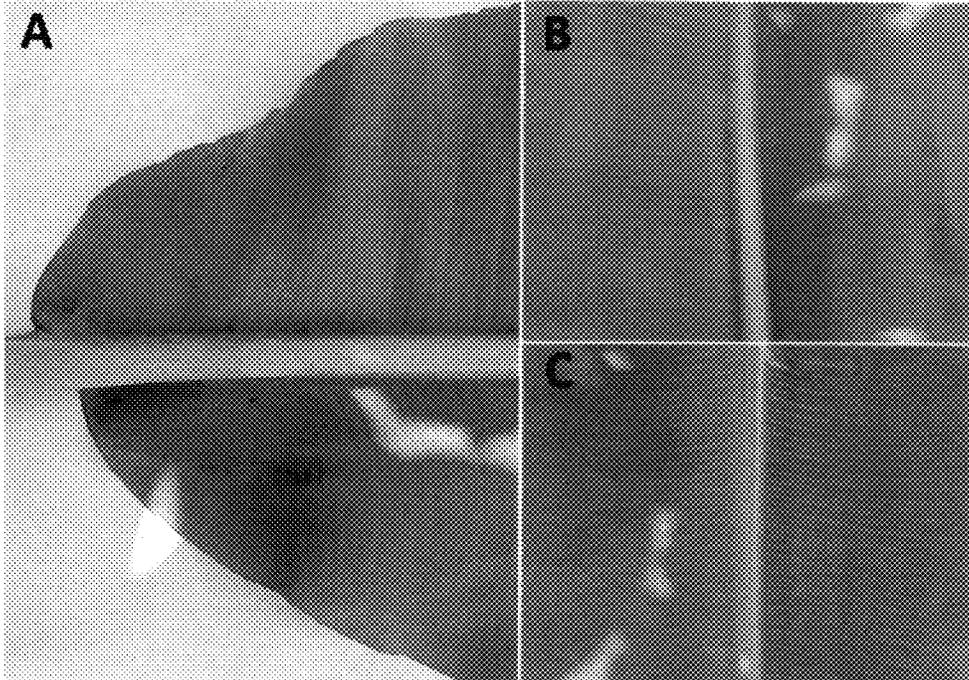


FIG. 3A, 3B, & 3C



FIG. 4

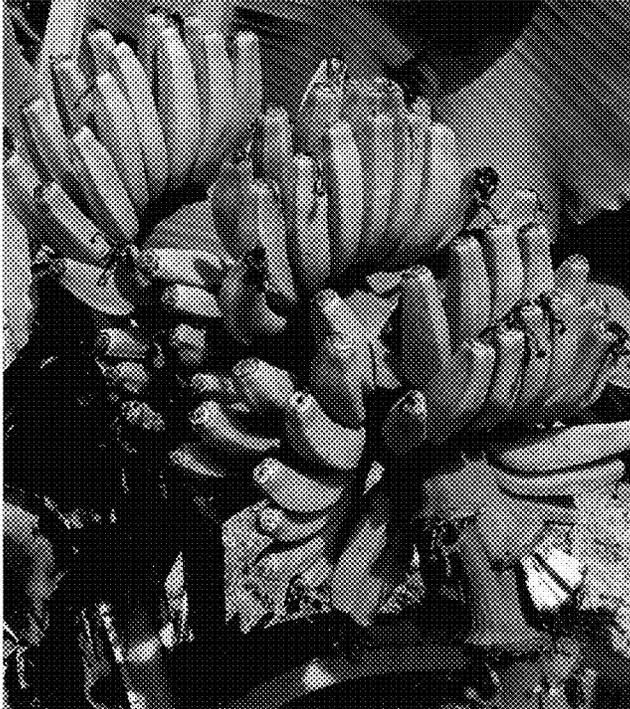


FIG. 5



FIG. 6

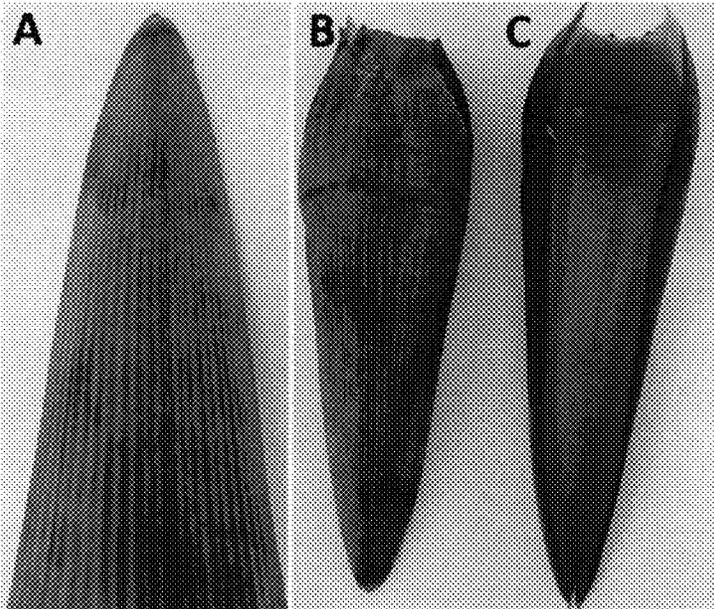


FIG. 7A, 7B, & 7C

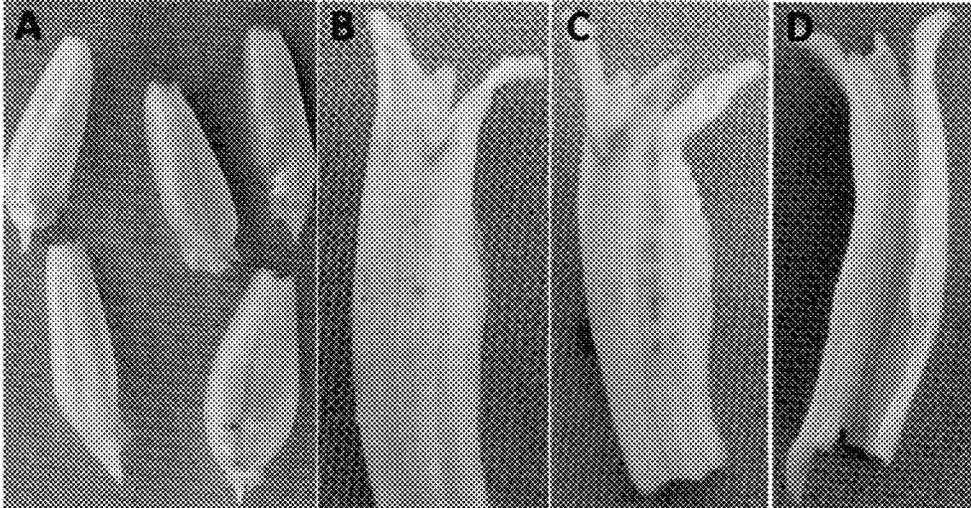


FIG. 8A, 8B, 8C, & 8D

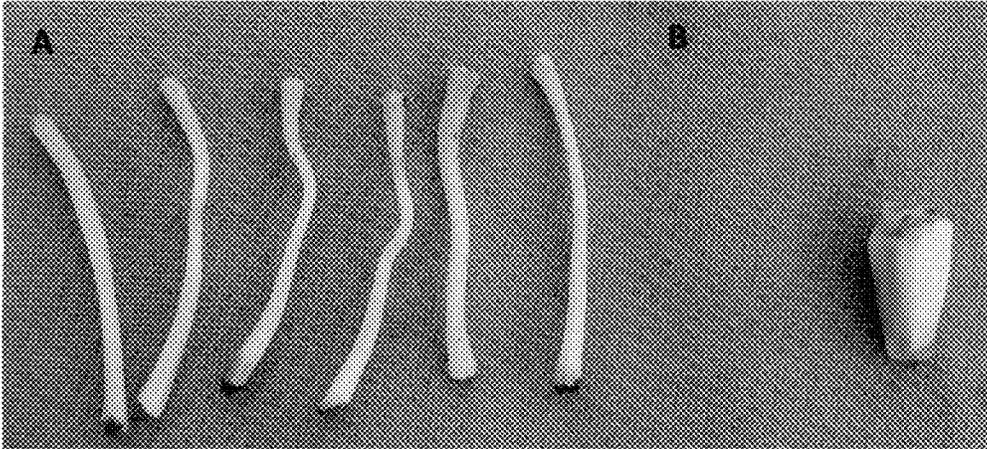


FIG. 9A & 9B

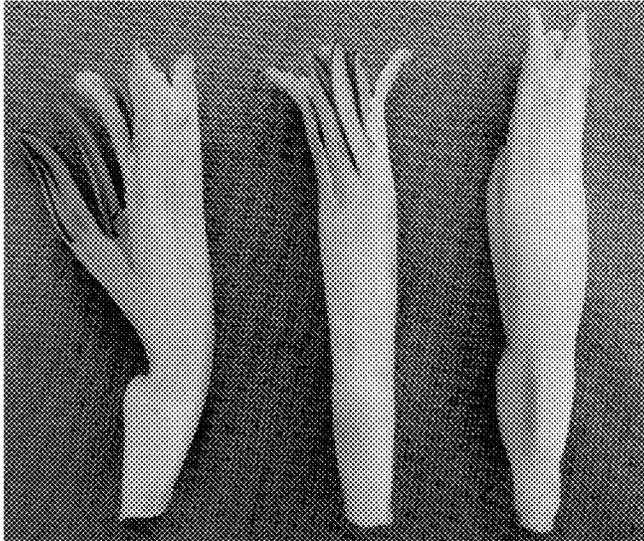


FIG. 10



FIG. 11

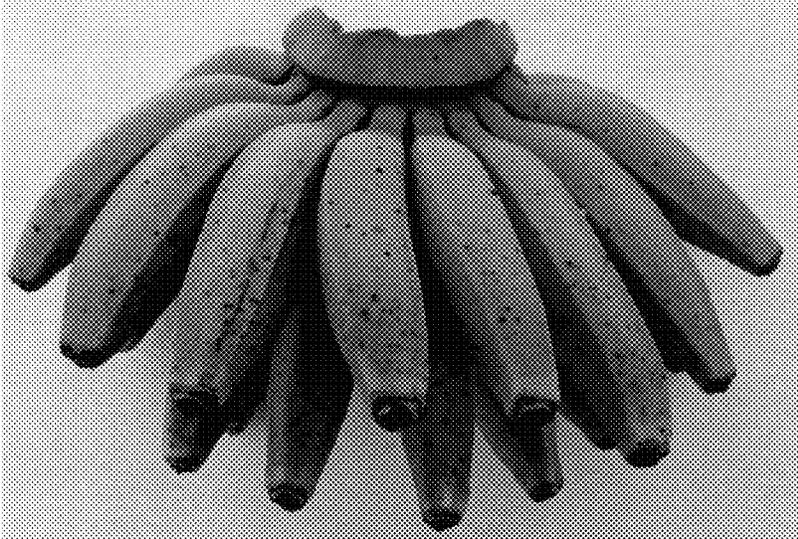


FIG. 12