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**(12) United States Plant Patent  
Joyce****(10) Patent No.: US PP27,320 P2****(45) Date of Patent: Nov. 1, 2016****(54) RED BAYBERRY PLANT NAMED 'N1MR07'**(50) Latin Name: *Myrica rubra*  
Varietal Denomination: N1MR07(71) Applicant: **The University of Queensland, St Lucia (AU)**(72) Inventor: **Daryl Clifford Joyce, Karalee (AU)**(73) Assignee: **The University of Queensland, St Lucia (AU)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 12 days.

(21) Appl. No.: **14/120,612**(22) Filed: **Jun. 9, 2014****Related U.S. Application Data**

(63) Continuation of application No. 13/506,794, filed on May 16, 2012, now abandoned.

(51) **Int. Cl.**  
*A01H 5/08* (2006.01)(52) **U.S. Cl.**  
USPC ..... **Plt./156**(58) **Field of Classification Search**  
USPC ..... Plt./156, 226  
See application file for complete search history.*Primary Examiner* — June Hwu(74) *Attorney, Agent, or Firm* — Klarquist Sparkman, LLP**(57) ABSTRACT**

A new and distinct cultivar of Red Bayberry, botanically known as *Myrica rubra*, and hereinafter referred to by the name 'N1MR07' is described. N1MR07 produces fruit having improved sweetness, a good sugar:acid ratio, a palatable low resin taste along with uniform fruit size and colour. N1MR07 has the following traits: mean fruit diameter is 22.3 mm; mean fruit weight is 7.15 g; fruit colour is red; mean fruit flesh total soluble solids (an indicator of sweetness) is 12.4° Brix; mean fruit flesh titratable acidity is 1.08%; and fruit harvest season in the southern hemisphere is mid-late November.

**1 Drawing Sheet****1**Botanical denomination: *Myrica rubra*.  
Variety designation: 'N1MR07'.**BACKGROUND TO THE INVENTION**

The present invention relates to a new and distinct cultivar of Red Bayberry, botanically known as *Myrica rubra*, and hereinafter referred to by the name 'N1MR07'.

'N1MR07' is the product of a selection program started by the inventor in 2002 in a cultivated area of Knoxfield, Victoria, Australia. The primary focus of the selection program is to produce new cultivars of Red Bayberry with fruit having improved sweetness, a good sugar:acid ratio, a palatable low resin taste along with uniform fruit size and colour.

'N1MR07' was selected in 2008 from a mature planting of twelve cutting-propagated genotypes which the inventor had originally grown from out-crossed seed collected from China. The inventor is unable to identify either the male or the female parent. A later planting comprising 141 seedlings from a second batch of seed were evaluated for fruit quality in 2010. The combination of traits displayed by 'N1MR07' was not found in any of the 141 seedlings. Hence, 'N1MR07' is considered to be a unique cultivar.

**SUMMARY OF THE INVENTION**

The cultivar 'N1MR07' was asexually reproduced by clonal propagation, using cuttings or by grafting onto rootstock in Gatton, Queensland, Australia. The original clonal propagation to produce the variety was conducted via vegetative tip cuttings.

The cultivar 'N1MR07' has not been tested under all possible conditions and phenotypic differences may be

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observed with variations in environmental, climatic and cultural conditions, without however any change in genotype.

The following traits have been observed and represent the characteristics of the new *Myrica rubra* cultivar 'N1MR07'. These traits in combination distinguish 'N1MR07' from all other varieties of *Myrica rubra* known to the inventor.

1. Mean fruit diameter is 22.3 mm.
2. Mean fruit weight is 7.15 g.
3. Fruit colour is red.
4. Mean fruit flesh total soluble solids (an indicator of sweetness) is 12.4° Brix.
5. Mean fruit flesh titratable acidity is 1.08%.
6. Fruit harvest season in the southern hemisphere is mid-late November.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a digital image showing representative fruit of 'N1MR06', 'N1MR07', and 'N1MR09' displaying the variation in fruit size, shape and colour; harvested November 2011 in Nambour, Queensland, Australia.

FIG. 2 is a digital image showing the whole plant of 'N1MR07' in Nambour, Queensland, Australia.

**DETAILED BOTANICAL DESCRIPTION**

The following description describes the *Myrica rubra* cultivar 'N1MR07' at 7 years. The vegetative propagule was observed in a test plot maintained with standard management practices for commercial bayberry production in Nambour, Queensland, Australia. Certain characteristics of this variety, such as growth and colour, may change with changing environmental conditions (e.g., light, temperature, mois-

ture, nutrient availability, or other factors). Colour descriptions and other terminology are used in accordance with their ordinary dictionary descriptions, unless the context clearly indicates otherwise. Colour designations are based on the CIE L.C.h colour model and were measured using a

Botanical classification: *Myrica rubra*.

Parentage:

*Female parent plant*.—Unknown.

*Male parent plant*.—Unknown.

Plant:

*Vigor*.—General observations of 'N1MR07' plantings indicate average plant vigor.

*Plant habit*.—Branched shrub, elongate in shape; can be limbed up into a multi-trunked small tree.

*Plant dimensions*.—Height 3.5 m; Width: 4.45 m.

*Plant hardiness*.—USDA Zone 9 (potentially ranging from 8 to 10).

*Type*.—Evergreen shrub.

*Disease resistance*.—No disease resistance data available for foliar or root pathogens.

Fruit:

*Shape*.—Spherical.

*Size*.—In Nambour, Queensland, Australia, average diameter was 22.3 mm.

*Skin*.—Knobby (papillate).

*Colour*.—Red. CIE L.C.h color measurements are as follows: Lightness (L)=19.15±0.26; Chroma (C)=18.62±0.43; Hue (h)=15.31±0.36.

*Weight*.—In Nambour, Queensland, Australia, average weight was 7.15 g.

*Number of seeds*.—One.

*Flesh*.—Pink-white.

*Fruit chemistry*.—Samples of fruit were harvested from test plots in Nambour, Queensland, Australia and evaluated for fruit chemistry. Average fruit flesh total soluble solids were 12.4° Brix and average fruit flesh titratable acidity was 1.08%.

*Fruit production*.—Mid-late November.

Leaf:

*Length (mm)*.—100.4±2.1.

*Width (mm)*.—29.87±0.62.

*Shape*.—Oblanceolate.

*Margin type*.—Entire.

*Texture (upper surface)*.—Glabrous.

*Texture (lower surface)*.—Glabrous.

*Fragrance*.—Mildly fragrant when bruised.

*Color (upper surface)*.—139A (Light=32; Chroma=16; hue=146).

*Color (lower surface)*.—147B (Light=47; Chroma=21; hue=112).

*Apex shape*.—Acute to obtuse, rarely retuse.

*Base shape*.—Cuneate.

Leaf bud:

*Axillary bud length (mm)*.—2.63±0.10.

*Axillary bud shape*.—Ovoid to ovoid-conical.

*Axillary bud number per axil*.—1.00±0.00.

*Axillary bud colour*.—153D (Light=72; Chroma=58; hue=88).

Petiole:

*Length (mm)*.—9.20±0.37.

*Surface texture*.—Glabrous.

*Color*.—152D (Light=62; Chroma=46; hue=88).

Stem:

*Shape*.—Round.

*Surface texture*.—Woody.

*Presence/absence of lenticel*.—Present.

*Color*.—N199A (Light=38; Chroma=15; Hue=76).

Flower:

*Monoecious or dioecious*.—Dioecious.

*Flower form*.—Incomplete, lacks petals and sepals.

*Flowering season*.—Late winter to early spring.

*Flower colour*.—None, flowers are apetalous.

*Average number of flowers per inflorescence*.—13.04±5.055.

*Average inflorescence length*.—14.13 mm±1.42.

*Size*.—Very small and inconspicuous.

Peduncle:

*Average peduncle length*.—3.621±1.402.

Reproductive organs: The variety produces pistillate flowers only.

*Number of pistils per flower*.—2.

Seeds:

*Length (mm)*.—12.13±0.16.

*Width (mm)*.—9.30±0.13.

*Thickness (mm)*.—8.63±0.10.

*Shape*.—Broad elliptic to broad obovate.

*Color*.—165D (Light=78; Chroma=31; hue=71).

Shipping and storage characteristics:

*Fruit decay severity after 15 d storage at 5° C.*—

Severe (this data is preliminary (based on fruit harvested from a single location) and may have been affected by environmental conditions).

Pollination requirement:

*Dioecious*.—Cross-pollination by wind.

TABLE 1

Comparison of characteristics of 'N1MR06', 'N1MR07', and 'N1MR09'

Characteristic	'N1MR09'	'N1MR06'	'N1MR07'
Tree: habit	spreading	semi-upright	upright
Tree: compactness	standard	compact	standard
Tree: vigour	medium to strong	strong	strong
Leaf blade: length	medium	medium	medium
Leaf blade: width	broad	broad	medium
Leaf blade: ratio length/width	small	medium	medium
Leaf blade: shape of tip	blunt acute	blunt acute	blunt acute
Leaf blade: shape in cross section	concave	concave	concave
Leaf blade: green colour of upper side	medium	dark	medium
Leaf: attitude in relation to shoot	upwards	upwards	upwards
Fruit: size	medium	medium	large
Fruit: firmness of flesh	medium	firm	soft to medium
Fruit: total soluble solids of juice	high	high	medium
Fruit: acid content of juice	high	high	medium
Time of: beginning of flowering	early	medium	medium
Time of: fruit maturity	early	early	medium
Fruit: Skin protruberances	moderate	moderate	moderate
Fruit: Uniformity of protruberances	even	even	uneven
Fruit: Colour of flesh	pink-white	pink-red	pink-white
Fruit: Drop or shed before harvest	high	low	low
Shoot: internode length	medium	medium	long
Leaf: Colour - underside of leaf	light green	light green	very light green
Leaf: Undulating margin	slightly undulating	undulating	slightly undulating

TABLE 1-continued

Comparison of characteristics of 'N1MR06', 'N1MR07', and 'N1MR09'			
Characteristic	'N1MR09'	'N1MR06'	'N1MR07'
Shoot: Size of lenticels	large	medium	large
Shoot: Density of lenticels	sparse	dense	medium
Flower: Number of flowers per inflorescence	medium	high	high
Fruit: Colour of skin	light	dark	medium
Fruit: Yield	medium	medium	high
Leaf: Number of buds per leaf axil	multiple	mainly single	single
Leaf: Petiole length	medium	medium	medium
Fruit: Resinous taste	absent	absent	absent
Shoot: Colour of juvenile shoot	black red	black red	black red
Shoot: Colour of juvenile leaf tips	dark red	medium red	dark red
Flower: Peduncle length	medium	long	medium
Fruit: Seed weight	medium	low	medium

TABLE 2

Comparison of characteristics of 'N1MR06', 'N1MR07', and 'N1MR09'			
Morphological	Genotype		
characteristic	N1MR06	N1MR07	N1MR09
Leaf length (mm)	95.6 ± 1.5	100.4 ± 2.1	91.1 ± 1.5
Leaf width (mm)	29.50 ± 0.5	29.87 ± 0.62	27.97 ± 0.56
Leaf shape	oblanceolate	oblanceolate	oblanceolate
Leaf margin type	entire	entire	entire
Leaf texture (upper surface)	glabrous	glabrous	glabrous
Leaf texture (lower surface)	glabrous	glabrous	glabrous
Leaf fragrance	mildly fragrant when bruised	mildly fragrant when bruised	mildly fragrant when bruised
Leaf colour (upper surface)	139A (Light = 32; Chroma = 16; hue = 146)	139A (Light = 32; Chroma = 16; hue = 146)	139A (Light = 32; Chroma = 16; hue = 146)
Leaf colour (lower surface)	147B (Light = 47; Chroma = 21; hue = 112)	147B (Light = 47; Chroma = 21; hue = 112)	147B (Light = 47; Chroma = 21; hue = 112)
Leaf apex shape	acute to obtuse, rarely retuse	acute to obtuse, rarely retuse	acute to obtuse, rarely retuse
Leaf base shape	cuneate	cuneate	cuneate
Axillary bud length (mm)	3.13 ± 0.09	2.63 ± 0.10	4.50 ± 0.12
Axillary bud shape	ovoid to ovoid-conical	ovoid to ovoid-conical	ovoid to ovoid-conical
Axillary bud number per axil	1.10 ± 0.07	1.00 ± 0.00	5.20 ± 0.22
Axillary bud colour	165C (Light = 67; Chroma = 38; hue = 65)	153D (Light = 72; Chroma = 58; hue = 88)	165C (Light = 67; Chroma = 38; hue = 65)
Number of scales per leaf bud	could not be determined	could not be determined	could not be determined
Petiole length	9.07 ± 0.23	9.20 ± 0.37	10.27 ± 0.24
Petiole surface texture	glabrous	glabrous	glabrous
Petiole colour	152D (Light = 62; Chroma = 46; hue = 88)	152D (Light = 62; Chroma = 46; hue = 88)	152D (Light = 62; Chroma = 46; hue = 88)

TABLE 2-continued

Comparison of characteristics of 'N1MR06', 'N1MR07', and 'N1MR09'			
Morphological	Genotype		
	N1MR06	N1MR07	N1MR09
characteristic			
Stem shape	round	round	round
Stem surface	woody	woody	woody
texture			
Presence/absence of lenticel on stem	present	present	present
Stem colour	N199A (Light = 38; Chroma = 15; Hue = 76)	N199A (Light = 38; Chroma = 15; Hue = 76)	199B (Light = 54; Chroma = 20; hue = 74)
Monoecious or dioecious	dioecious	dioecious	dioecious
Flower form	incomplete, lacks petals and sepals	incomplete, lacks petals and sepals	incomplete, lacks petals and sepals
Flowering season	late winter to early spring	late winter to early spring	late winter to early spring
Flower colour	none, flowers are apetalous	none, flowers are apetalous	none, flowers are apetalous
Number of stamens per flower	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only
Number of pistils per flower	2	2	2
Stamen size	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only
Stamen colour	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only
Pollen colour	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only	species is dioecious, variety produces pistillate flowers only
Seed length (mm)	10.60 ± 0.14	12.13 ± 0.16	12.23 ± 0.13
Seed width (mm)	8.63 ± 0.12	9.30 ± 0.13	10.03 ± 0.14
Seed thickness (mm)	7.27 ± 0.12	8.63 ± 0.10	8.63 ± 0.10
Seed shape	broad elliptic to broad obovate	broad elliptic to broad obovate	broad elliptic to broad obovate
Seed colour	165D (Light = 78; Chroma = 31; hue = 71)	165D (Light = 78; Chroma = 31; hue = 71)	165D (Light = 78; Chroma = 31; hue = 71)
Fruit decay severity after 15 d storage at 5° C.	slight	severe	moderate

Quantitative data are provided as means ± standard error of the mean for n = 30 samples. Leaf and petiole measurements were conducted on mature, fully expanded leaves harvested at shoulder height. Vegetative and floral axillary buds are identical in appearance until bud burst or leaf expansion becomes evident. Hence, no distinction is made between the type of axillary bud. Colour measurements were made using the Royal Horticultural Society Colour Chart (5th edition) and converted to CIE LCh values using online tables at <http://rhscf.orgfree.com/> (accessed 10 Mar. 2016). Seed measurements were conducted on seed with intact endocarp (i.e., the stone)

The invention claimed is:

1. A new and distinct variety of red bayberry plant, substantially as illustrated and described herein.

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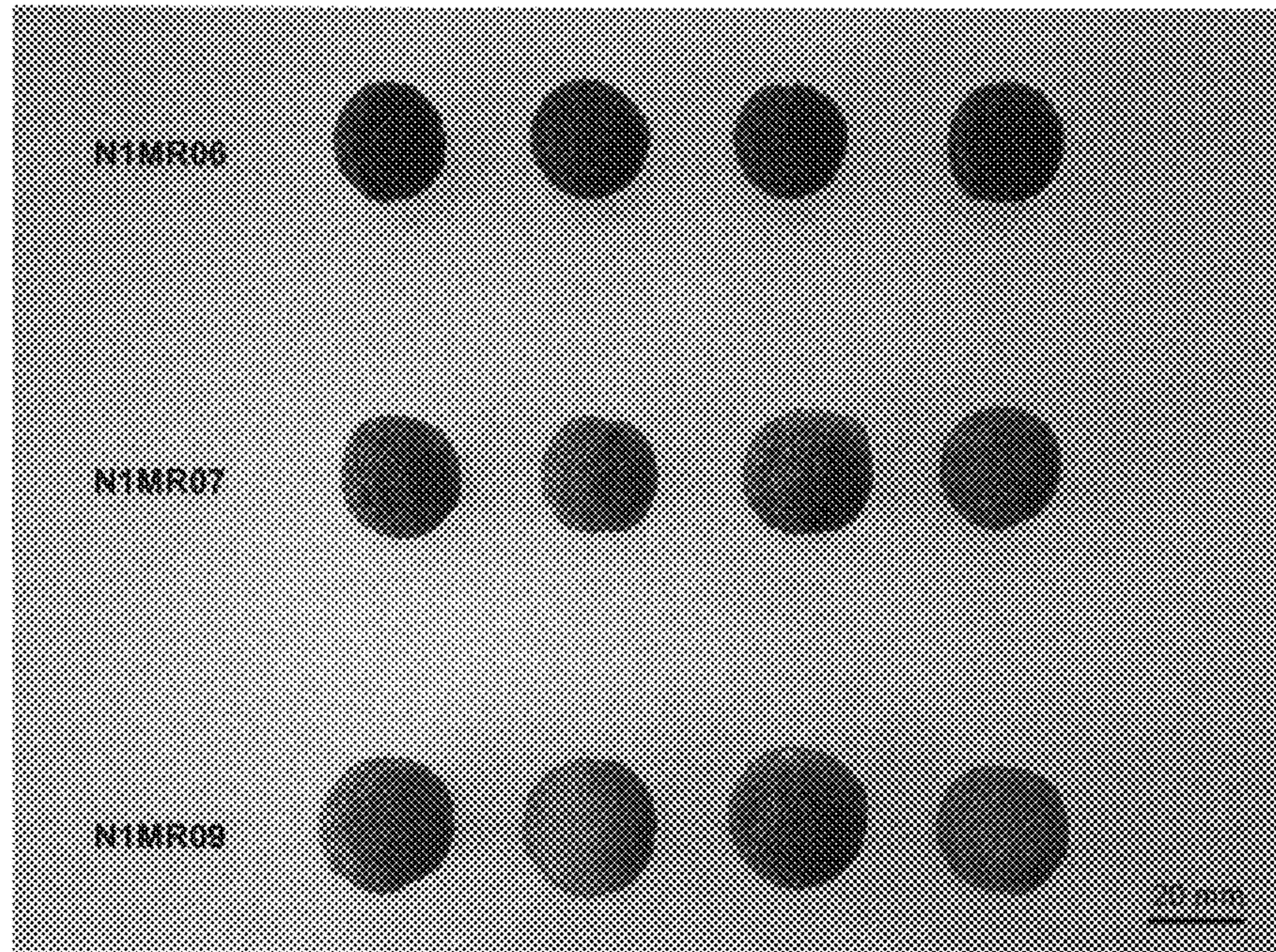


FIG. 1



FIG. 2