

Fact sheet of reference DNA sequences of *Morinda officinalis* (巴戟天)

Summary	Information
Scientific name	<i>Morinda officinalis</i> F.C. How
Type of reference material used for data generation	<ul style="list-style-type: none"> <li>● Plant voucher specimen</li> <li>● Radix Morindae Officinalis (巴戟天)</li> </ul>
Plant voucher specimen (number / locality)	<ul style="list-style-type: none"> <li>● 1 / Yunan County, Guangdong Province, China</li> <li>● 1 / Nanjing County, Fujian Province, China</li> <li>● 1 / Deqing County, Guangdong Province, China</li> </ul>
Chinese Materia Medica (number / locality)	<ul style="list-style-type: none"> <li>● 13 / Yunan County, Guangdong Province, China</li> <li>● 2 / Nanjing County, Fujian Province, China</li> <li>● 2 / Deqing County, Guangdong Province, China</li> </ul>
Total number of specimen	<ul style="list-style-type: none"> <li>● 20</li> </ul>
Specimen source	<ul style="list-style-type: none"> <li>● GCMTI collection</li> <li>● Hong Kong Chinese Materia Medica Standards (HKCMMS) Project</li> </ul>
Method for data generation	<ul style="list-style-type: none"> <li>● GCMTI RD-5:2020</li> </ul>
Length of DNA barcode	<ul style="list-style-type: none"> <li>● Nuclear internal transcribed spacer 2 (ITS2) is 235 bp</li> <li>● Chloroplast <i>psbA-trnH</i> intergenic spacer (<i>psbA-</i></li> </ul>

<b>Summary</b>	<b>Information</b>
	<p><i>trnH</i>) is 371 bp</p> <ul style="list-style-type: none"><li>● Chloroplast ribulose biphosphate carboxylase large chain (<i>rbcL</i>) is 553 bp</li></ul>

# Reference DNA Sequence

## Plant Specimen

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI221021

>22RD110-1A ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGCTAAATGCGAGTCTCGG
CCCGGGACGTCACGACGAGTGGTGGTTGAACCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCC
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI221021

>22RD110-1A\_psbA-trnH

```
ATAATTTCCACTAGACTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTTATG
TATTTTACTATTTAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTTACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI221021

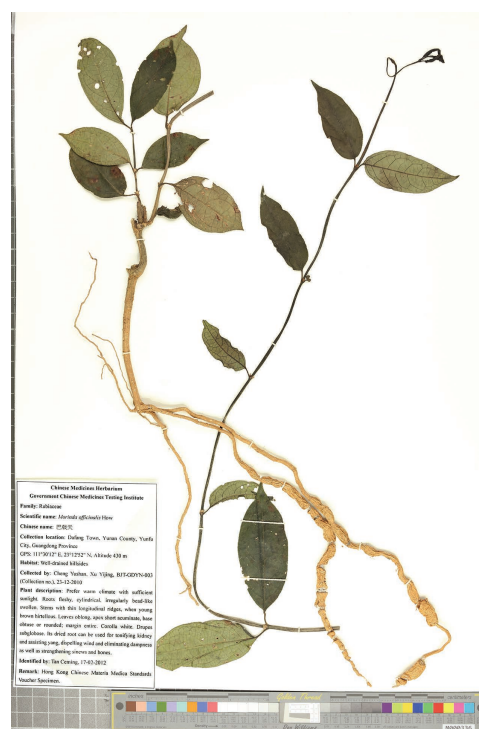
>22RD110-1A\_rbcL

```
AAGTGTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTGCCAAC
TGGAGTCCACCGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAGTCTTACTAGGTACATGGACAACATGTATGG
ACGGATGGACTTACCAGTCTTGATCGTTACAAAGGGC
GATGCTACCACATCGAGCCAGTTCCTGGAGAAGAAG
AGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCTT
TTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGATAGTAATGTATTTGGGTTCAAAGCCCTGCGCGCT
CTGCGTCTGGAAGATTTGCGAATTTCCATTTTATGT
TAAACCTTCAAAGGCCGCTCATGGCATTCAAGTC
GAGAGAGATAAAATGAAACAAGTATGGTCGTCCCTGT
TGGGATGTAATAAAACCTAAATTAGGTTTATCTGCT
AAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

### Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD110
Sample mark	22RD110-1A
Locality	Yunan County, Guangdong Province, China
Corresponding CMM specimen	22RD114
Authenticated	Yes
Remarks	-

### Image



# Reference DNA Sequence

## Plant Specimen

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI221021

>22RD111-1A ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGGACGTCACGACGAGTGGTGGTTGAACCTTCA
ACTCGAGAGCCGTCGAGACGACCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI221021

>22RD111-1A\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTCA
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATTCAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI221021

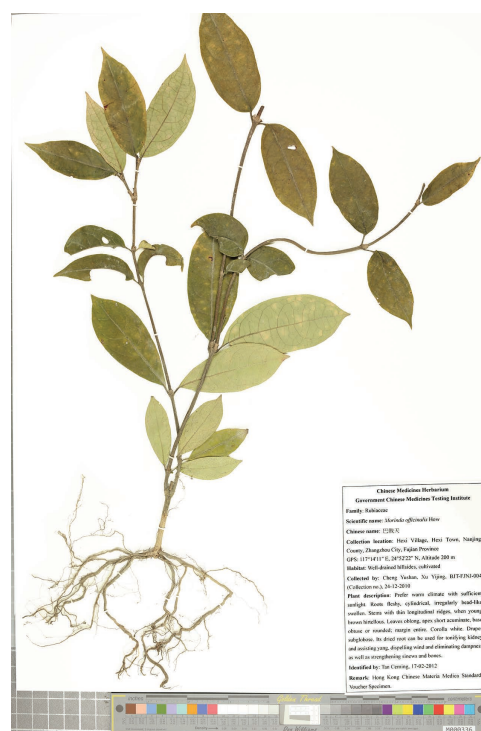
>22RD111-1A\_rbcL

```
AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTGCCAACCC
TGGAGTTCACCGGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAGTCTTCTACTGGTACATGGACAACCTGTATGG
ACGGATGGACTTACCAGTCTTGATCGTTACAAAGGGC
GATGCTACCACATCGAGCCAGTTCCTGGAGAAGAAG
AGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCTT
TTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGATAGGTAATGATTTGGGTTCAAAGCCCTGCGCGCT
CTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTATGT
TAAACCTTCCAAGGCCGCTCATGGCATTCAAGTC
GAGAGAGATAAATTGAACAAGTATGGTCGTCCTGCTGT
TGGGATGTAATAAACCCTAAATTAGGTTTATCTGCT
AAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

### Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD111
Sample mark	22RD111-1A
Locality	Nanjing County, Fujian Province, China
Corresponding CMM specimen	22RD116
Authenticated	Yes
Remarks	-

### Image



# Reference DNA Sequence

## Plant Specimen

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI221021

>22RD112-1A ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGCTAAATGCGAGTCTCGG
CCCGGGACGTCACGACGAGTGGTGGTTGAACCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI221021

>22RD112-1A\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTTATG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTCA
TAGAATTTCTATTTTTTATATTTATACTACTTTTATA
TACTAGACGTACCTAAAAATAGAGAATTCAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTTCAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI221021

>22RD112-1A\_rbcL

```
AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTGCCAACCC
TGGAGTTCACCGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAGTCTTACTAGTGTACATGGACAACCTGTATGG
ACGGATGGACTTACCAGTCTTGATCGTTACAAGAGGC
GATGCTACCACATTCGACCGAGTTCCTGGAGAAGAAG
AGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCTT
TTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGATAGGTAATGATTTGGGTTCAAAGCCCTGCGCGCT
CTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTATGT
TAAAACCTTCAAAGGCCCGCCTCATGGCATTCAAGTC
GAGAGAGATAAATTGAACAAGTATGGTCGTCGCCCTGT
TGGGATGTAATAAACCCTAAATTAGGTTTATCTGCT
AAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

### Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD112
Sample mark	22RD112-1A
Locality	Deqing County, Guangdong Province, China
Corresponding CMM specimen	22RD113, 22RD115
Authenticated	Yes
Remarks	-

### Image



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI230428

>22RD113-5C ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI230428

>22RD113-5C\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI230428

>22RD113-5C\_rbcL

```
AAGTGTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGGTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAGT
CGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD113
Sample mark	22RD113-5C
Locality	Deqing County, Guangdong Province, China
Corresponding plant voucher specimen	22RD112
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI221031

>22RD114-1A ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCC GGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI221031

>22RD114-1A\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI221031

>22RD114-1A\_rbcL

```
AAGTGTTGGATTCAAAGCWGGTGTTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TAAAACCTTCCARGGCCCGCCTCATGGCATTCAAGT
CGAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTG
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAACCTACGGTAGARCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 421, 536

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-1A
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 421R, 536R

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI221031

>22RD114-3A ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI221031

>22RD114-3A\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI221031

>22RD114-3A\_rbcL

```
AAGTGTTGGATTCAAAGCWGGTGTTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAT
ACTGATATCTTGGCAGCATTCCGAGTAACTGCCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGTTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TAAAACCTTCCARGGCCCGCCTCATGGCATTCAAGT
CGAGAGAGATAAATTGAACAAGTATGGTCGTCGCCCTG
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 196, 421

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-3A
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 196K, 421R

### Image

Front view



Back view





# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI221031

>22RD114-4A ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGCCGGCCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI221031

>22RD114-4A\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTTATG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATCTAGATTTTAA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI221031

>22RD114-4A\_rbcL

```
AAGTGTTGGATTCAAAGCWGGTGTTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAT
ACTGATATCTTGGCAGCATTCCGAGTAACTGCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGTTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TTAAAACCTTCAAAGGCCCTCATGGCATTCAAGT
CGAGAGAGATAAAATTGAACAAGTATGGTCGTCCTCC
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 196

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-4A
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 196K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

>22RD114-5C ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGCCGGCCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

>22RD114-5C\_psbA-trnH

```
ATAATTTCCMCTAGATCTAGCTAGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATACT
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

Remarks: observation at nucleotide position 11

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

>22RD114-5C\_rbcL

```
AAGTGTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTTACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTAGACCT
TTTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTTCAAAGCCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTCCTATTCTTATG
TTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAGT
CGAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTG
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 421

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-5C
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	psbA-trnH: 11M; rbcL: 19W, 40K, 73K, 104S, 421R

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

>22RD114-6D ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

>22RD114-6D\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

>22RD114-6D\_rbcL

```
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCACTTGTATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGTTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAGT
CGAGAGAGATAAATTGAACAAGTATGGTCGTCGCCCTG
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 421

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-6D
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 421R

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

>22RD114-9C ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

>22RD114-9C\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

>22RD114-9C\_rbcL

```
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGC CG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTAT
GTTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCCT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-9C
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

```
>22RD114-10D ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGCCGGCCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

```
>22RD114-10D_psbA-trnH
ATAATTTCCCMCTAGATCTAGCTAGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

Remarks: observation at nucleotide position 11

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

```
>22RD114-10D_rbcL
AAGTGTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTTGAAGAAGTTCTGTACTAACATGTTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCCTGCGCG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTAT
GTTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAATTGAACAAGTATGGTCGTCCTT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-10D
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	psbA-trnH: 11M; rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

```
>22RD114-11D ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGCCGGCCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

```
>22RD114-11D_psbA-trnH
ATAATTTCCCMCTAGATCTAGCTAGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

Remarks: observation at nucleotide position 11

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

```
>22RD114-11D_rbcL
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTTGAAGAAGTTCTGTACTAACATGTTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCCTGCGCG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTAT
GTTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAATTGAACAAGTATGGTCGTCCTT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-11D
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	psbA-trnH: 11M; rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

```
>22RD114-12D ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGCCGGCCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

```
>22RD114-12D_psbA-trnH
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

```
>22RD114-12D_rbcL
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGC CG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTAT
GTTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCCT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-12D
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730

```
>22RD114-14D ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGCCGGCCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730

```
>22RD114-14D_psbA-trnH
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTCGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730

```
>22RD114-14D_rbcL
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGC CG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTAT
GTTAAAACCTTCCARGGCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAATTTGAACAAGTATGGTCGTCCCCT
GTTGGGATGTACTATTAACCTAAATAGGTTTATCT
GCTAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-14D
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view





# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730-2

```
>22RD114-17C ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730-2

```
>22RD114-17C_psbA-trnH
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730-2

```
>22RD114-17C_rbcL
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGC CG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTAT
GTTAAAACCTTCCARGGCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCCT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-17C
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730-2

```
>22RD114-18C ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730-2

```
>22RD114-18C_psbA-trnH
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTCA
TAGAATTTCTATTTTTTATATTTATACTACTTTTATA
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730-2

```
>22RD114-18C_rbcL
AAGTGTTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCACTTGTATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTAT
GTTAAAACCTTCCARGGCCCTCATGGCATTCAAG
TCGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCT
GTTGGGATGTACTATTAACCTAAATAGGTTTATCT
GCTAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-18C
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BIC240730-2

```
>22RD114-20D ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BIC240730-2

```
>22RD114-20D_psbA-trnH
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTTATG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTTCAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC240730-2

```
>22RD114-20D_rbcL
AAGTGTTGGATTCAAAGCWGGTGTTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCACTTGTGATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAGT
CGAGAGAGATAAAATTGAACAAGTATGGTCGTCGCCCTG
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 421

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD114
Sample mark	22RD114-20D
Locality	Yunan County, Guangdong Province, China
Corresponding plant voucher specimen	22RD110
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 421R

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI230111

>22RD115-6B ITS2

```
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI230111

>22RD115-6B\_psbA-trnH

```
ATAATTTCCCACTAGATCTAGCTGCTATAGATGTCC
ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
GAGTTATTGAAAAATAAAGTAGCAATAAGGACCTCTT
ATTGCTACTTATTTTTATTTCTTTTTATTTGTTAG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTGAAATGGAA
TTTTATGAATGAAATATTAACATTAATAAATTAGAG
TAGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI230111

>22RD115-6B\_rbcL

```
AAGTGTTGGATTCAAAGCWGGTGTTAAAGAGTACAA
ATTGACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTGCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCACTTGTATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCT
TTTTGAAGAAGTTCTGTTACTAACATGTTTACTTCCA
TTGTAGGTAATGTATTTGGGTCAAAGCCCTGCGCGC
TCTGCGTCTGGAAGATTTGCGAATTTCCATTCTTATG
TAAAACCTTCAAAGGCCCTCATGGCATTCAAGT
CGAGAGAGATAAATTGAACAAGTATGGTTCGTCCTCC
TTGGGATGTACTATTAACCTAAATTAGGTTTATCTGC
TAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 73, 196

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD115
Sample mark	22RD115-6B
Locality	Deqing County, Guangdong Province, China
Corresponding plant voucher specimen	22RD112
Authenticated	Yes
Remarks	rbcL: 19W, 73K, 196K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI230331

>22RD116-15A ITS2

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CCCTCGGGCGCGGGCCGGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI230331

>22RD116-15A\_psbA-trnH

```
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ATTGCTACTTATTTTTATTTCTTTTTATTTGTTTATG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTCA
TTAGAAATTTCTATTTTTTATATTTATACTACTTTTATA
TACTAGACGTACCTAAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI230331

>22RD116-15A\_rbcL

```
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ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGC CG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTAT
GTTAAAACCTTCCARGGCCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAAACTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD116
Sample mark	22RD116-15A
Locality	Nanjing County, Fujian Province, China
Corresponding plant voucher specimen	22RD111
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



# Reference DNA Sequence

## Chinese Materia Medica (CMM)

### DNA Information

#### Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI230331

>22RD116-16A ITS2

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CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATT
CGGACGGGCGGGGGTACGGATGTTGGCCCCCGTG
CCCTCGGGCGCGGGCCGCTAAATGCGAGTCTCGG
CCCGGACGTCACGACGAGTGGTGGTTGAACCCTTCA
ACTCGAGAGCCGTCGAGACGACGCCCGACGGGGAAC
TCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCC
GCGAGCCTTCGACCG
```

#### Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI230331

>22RD116-16A\_psbA-trnH

```
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ATCTATAAATGGATAACACATTCGTGTTATTGTATAG
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ATTGCTACTTATTTTTATTTCTTTTTATTTGTTTATG
TATTTTACTATTTAAAAATGAATTTCTAATGATTTTATT
TAGAATTTCTATTTTTTATATTTATACTACTTTTATAC
TACTAGACGTACCTAAAAATAGAGAATTCTAGATTTTA
AGAATTTTTAAAGAAAAGAAAATGTTGAAATGGAA
TTTTATGAATGAAATATTTAAACATTTAAAAATTAGAG
TAGGGGCGGATGTAGCCAAGTGGATTAAGGCAGT
```

#### Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI230331

>22RD116-16A\_rbcL

```
AAGTGTGGATTCAAAGCWGGTGTAAAGAGTACAA
ATTKACTTATTATACTCCTGAATACGAAACCAAAGAK
ACTGATATCTTGGCAGCATTCCGAGTAACTSCCAAC
CTGGAGTTCCACCGAAGAAGCAGGGGCCGCGGTAG
CTGCCGAGTCTTCTACTGGTACATGGACAACGTATG
GACGGATGGACTKACCAGTCTTGATCGTTACAAAAGGG
CGATGCTACCACATCGAGCCAGTTCCTGGAGAAGAA
GAGCAATTTATTGCTTATGTAGCTTACCCGYTAGACC
TTTTGAAGAAGTTCTGTACTAACATGTTACTTCC
ATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGC CG
CTCTGCGTCTGGAAGATTTGCGAATTTCCATTTCTTAT
GTTAAAACCTTCCARGGCCGCCTCATGGCATTCAAG
TCGAGAGAGAKAAAATTGAACAAGTATGGTCGTCCCT
GTTGGGATGTACTATTAACCTAAATTAGGTTTATCT
GCTAAAACCTACGGTAGAGCAGTTTATGAATGTCTT
```

Remarks: observation at nucleotide position 19, 40, 73, 104, 196, 287, 421, 454

### Reference Detail

Description of reference material	Specimen of Radix Morindae Officinalis
Scientific name	<i>Morinda officinalis</i> F.C. How
Laboratory number	22RD116
Sample mark	22RD116-16A
Locality	Nanjing County, Fujian Province, China
Corresponding plant voucher specimen	22RD111
Authenticated	Yes
Remarks	rbcL: 19W, 40K, 73K, 104S, 196K, 287Y, 421R, 454K

### Image

Front view



Back view



## Reference DNA sequences in FASTA format

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2) sequence of plant voucher specimen of *Morinda officinalis* and Chinese Materia Medica (CMM) Radix Morindae Officinalis

```

>22RD110-1A_ITS2
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GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
CCTTCGACCG
>22RD111-1A_ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATTCGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTGCCC
TCGCGGCGCGGCCGGCCTAAATGCGAGTCCTCGGCCGGGACGTCACGACGAGTGGTGGTTGAACCTTCAACTC
GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
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>22RD112-1A_ITS2
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GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
CCTTCGACCG
>22RD113-5C_ITS2
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GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
CCTTCGACCG
>22RD114-1A_ITS2
CGCATCGCGTCGCCACCCCTCCTCGCCTTAGGAATTCGGACGGGCGGGGGTGACGGATGTTGGCCCCCGTGCCC
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GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
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>22RD114-3A_ITS2
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GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
CCTTCGACCG
>22RD114-4A_ITS2
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CCTTCGACCG
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GAGAGCCGTCGAGACGACGCCCGACGGGAACCTCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG
CCTTCGACCG
>22RD114-10D_ITS2
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>22RD114-11D_ITS2
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CCTTCGACCG
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GAGAGCCGTCGAGACGACGCCCGACGGGGAACCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG  
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>22RD114-14D\_ITS2

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>22RD114-20D\_ITS2

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>22RD115-6B\_ITS2

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>22RD116-15A\_ITS2

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GAGAGCCGTCGAGACGACGCCCGACGGGGAACCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG  
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>22RD116-16A\_ITS2

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GAGAGCCGTCGAGACGACGCCCGACGGGGAACCTAACGACCCTAGGGCTGTCGGCCCCGAGAGGAGCCGCGAG  
CCTTCGACCG







Partial chloroplast ribulose biphosphate carboxylase large chain (*rbcL*) sequence of plant voucher specimen of *Morinda officinalis* and Chinese Materia Medica (CMM) Radix *Morindae Officinalis*

>22RD110-1A\_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGAGTACAAATTGACTTATTATACTCCTGAATACGAAACCAAAGATACT  
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GAGTCTTCTACTGGTACATGGACAACCTGTATGGACGGATGGACTTACCAGTCTTGATCGTTACAAAGGGCGATGCT  
ACCACATCGAGCCAGTTCCTGGAGAAGAAGAGCAATTTATTGCTTATGTAGCTTACCCGTTAGACCTTTTTGAAGA  
AGGTTCTGTTACTAACAATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGCGCTCTGCGTCTGG  
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ATTGAACAAGTATGGTCGTCGCCCTGTTGGGATGTACTATTAACCTAAATTAGGTTTATCTGCTAAAAACTACGGT  
AGAGCAGTTTATGAATGTCTT

>22RD111-1A\_rbcL

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>22RD112-1A\_rbcL

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>22RD113-5C\_rbcL

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>22RD114-1A\_rbcL

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>22RD114-3A\_rbcL

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>22RD114-4A\_rbcL

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>22RD114-5C\_rbcL



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>22RD114-18C\_rbcL  
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