

Fact sheet of reference DNA sequences of *Acanthopanax gracilistylus* (細柱五加)

Summary	Information
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Type of reference material used for data generation	● Cortex Acanthopanax (五加皮) ● Plant voucher specimen
Cortex Acanthopanax (五加皮) (number of specimens / locality)	● 5 / Macheng City, Hubei Province, China ● 6 / Yingshan County, Hubei Province, China ● 5 / Guangde City, Anhui Province, China
Plant voucher specimen (number of specimens / locality)	● 2 / Macheng City, Hubei Province, China ● 1 / Yingshan County, Hubei Province, China ● 1 / Guangde City, Anhui Province, China
Total number of specimen	● 20
Specimen source	● GCMTI collection

	● Hong Kong Chinese Materia Medica Standards (HKCMMS) Project
Method for data generation	● GCMTI RD-5:2020
Length of DNA barcode	● Nuclear internal transcribed spacer 2 (ITS2) is 230-231 bp ● Chloroplast <i>psbA-trnH</i> intergenic spacer (<i>psbA-trnH</i>) is 473 bp ● Chloroplast ribulose biphosphate carboxylase large chain (<i>rbcL</i>) is 553 bp

Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210513-3

>RD658-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCTCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGACCGTCGCCAGCAAA
AGCTCATGTGACCCGTGTGTGCCGTCTCGACGAGCA
CTCCGACCG

Remarks: observation at nucleotide position 168

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

Batch ID. BI210513-3

>RD658-1A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAA
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGAGGGGCGG
ATGTAGCCAAGTGGATCARGGCAGT

Remarks: observation at nucleotide position 467

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210513-3

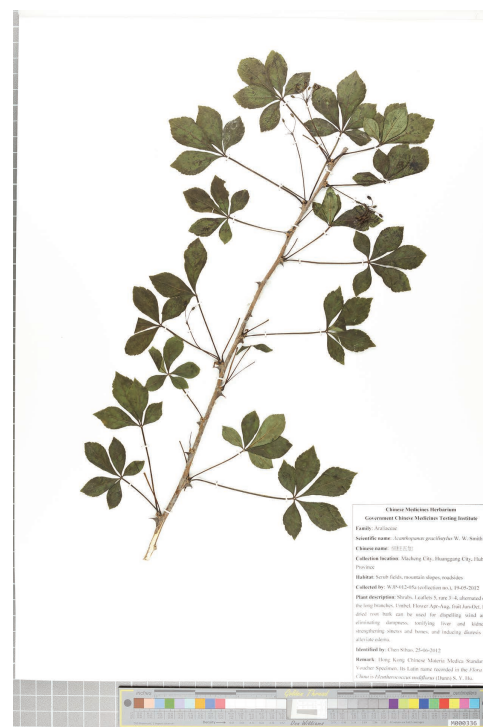
>RD658-1A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCCTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCAAGGCCCGCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD658
Sample mark	RD658-1A
Locality	Macheng City, Hubei Province, China
Corresponding CMM specimen	RD603, RD604
Authenticated	Yes
Remarks	ITS2: 168K; <i>psbA-trnH</i> : 467R

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210513-3

>RD659-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCTCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGACCGTCGCCAGCAAA
AGCTCATGTGACCCGTGTGTGCCGTCTCGACGAGCA
CTCCGACCG

Remarks: observation at nucleotide position 168

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

Batch ID. BI210513-3

>RD659-1A psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTAT
TTAGTAGTATTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAA
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210513-3

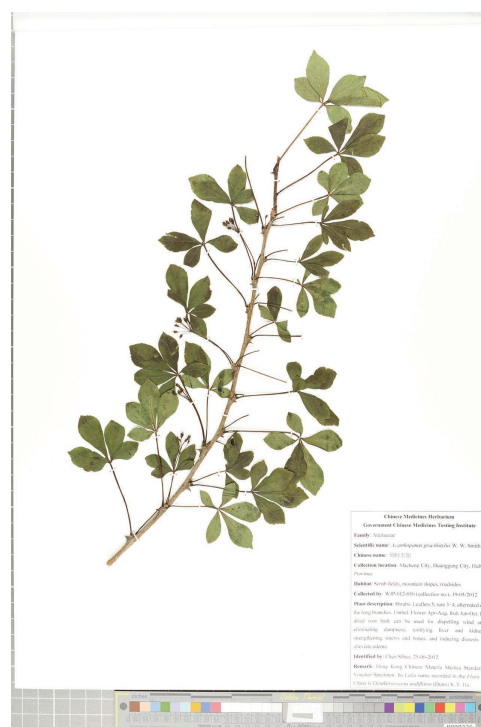
>RD659-1A rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCTGC
TAAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD659
Sample mark	RD659-1A
Locality	Macheng City, Hubei Province, China
Corresponding CMM specimen	RD603, RD604
Authenticated	Yes
Remarks	ITS2: 168K

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210513-3

>RD660-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCTCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTTGACCGTCGCCAGCAA
AGCTCATGTGACCCGTGTTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BI210513-3

>RD660-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTATTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAGAAATAGTAGAGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210513-3

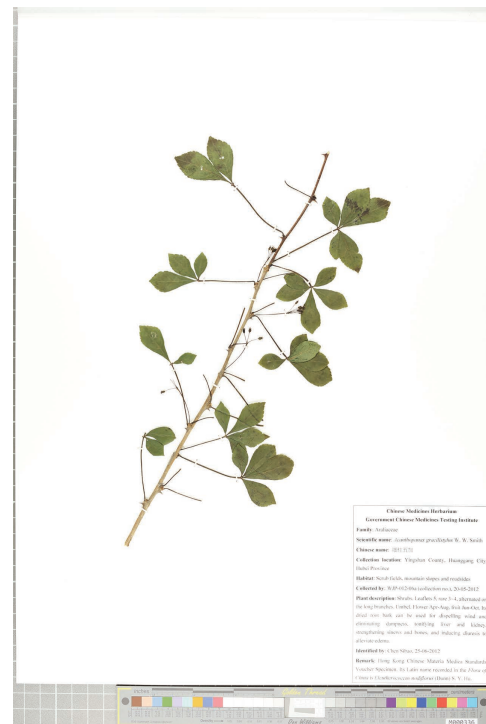
>RD660-1A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGAGGTAATGTATTTGGGTTCAAAGCCCTGCGTCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD660
Sample mark	RD660-1A
Locality	Yingshan County, Hubei Province, China
Corresponding CMM specimen	RD605
Authenticated	Yes
Remarks	-

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210513-3

>RD662-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCTCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTTGACCGTCGCCAGCAAA
AGCTCATGTGACCCGTGTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BI210513-3

>RD662-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAGAAATAGTAGAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210513-3

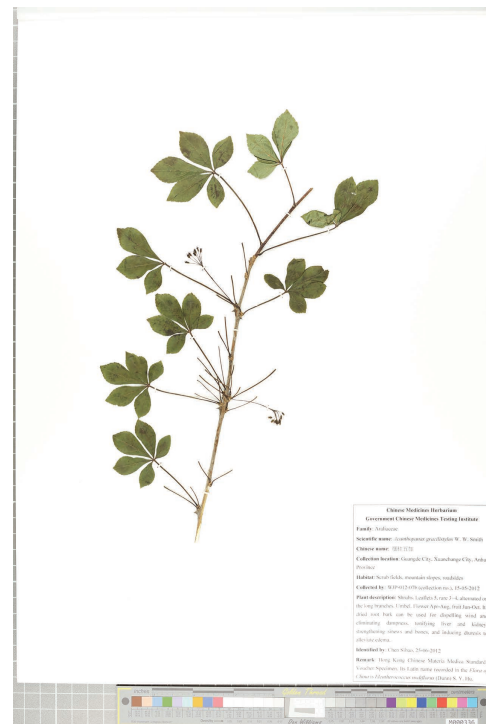
>RD662-1A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGCGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD662
Sample mark	RD662-1A
Locality	Guangde City, Anhui Province, China
Corresponding CMM specimen	RD606
Authenticated	Yes
Remarks	-

Image



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210427

>RD603-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCTCCCGTG
TCTACCGYGCGGTTGGCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

Remarks: observation at nucleotide position 83

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

Batch ID. BI210427

>RD603-1A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTCTTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTTACTTAGTTAATACTTAATATTTTTATCTCGAAAAA
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210427

>RD603-1A *rbcL*

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCTGC
TAAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD603
Sample mark	RD603-1A
Locality	Macheng City, Hubei Province, China
Corresponding plant voucher specimen	RD658, RD659
Authenticated	Yes
Remarks	ITS2: 83Y

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. BIC220519

>RD603-3A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGCG
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519

>RD603-3A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATAAA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTCTTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519

>RD603-3A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD603
Sample mark	RD603-3A
Locality	Macheng City, Hubei Province, China
Corresponding plant voucher specimen	RD658, RD659
Authenticated	Yes
Remarks	-

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. BIC220519

>RD603-4A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGTGC GGTTGGCCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519

>RD603-4A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTAAATACCTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519

>RD603-4A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTTAAAGCCCTGCGTGCT
CTACGTCGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCTCTGC
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD603
Sample mark	RD603-4A
Locality	Macheng City, Hubei Province, China
Corresponding plant voucher specimen	RD658, RD659
Authenticated	Yes
Remarks	-

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. BIC220519

>RD603-6A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGCG
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519

>RD603-6A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATAAA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTCTTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519

>RD603-6A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD603
Sample mark	RD603-6A
Locality	Macheng City, Hubei Province, China
Corresponding plant voucher specimen	RD658, RD659
Authenticated	Yes
Remarks	-

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. BIC220519

>RD603-8A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCTCTCAC
GGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGT
GTCTACCGCGCGGTTGGCCCAATGTGAGTCCTTGG
CAACGGGCGTCACGACAAGTGGTGGTTGTAAGAAAGC
CCTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAA
AAGCTCATGTGACCCTGTTGTGCCGTCTCGACGAGC
ACTCCGACCG

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

Batch ID. BIC220519

>RD603-8A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAGTTTAATC
TTTTGAAACGTAAGGAAAAGAAATAGTAGAGGGCGG
ATGTAGCCAAGTGGATCARGGCAGT

Remarks: observation at nucleotide position 467

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519

>RD603-8A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCTGC
TAAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD603
Sample mark	RD603-8A
Locality	Macheng City, Hubei Province, China
Corresponding plant voucher specimen	RD658, RD659
Authenticated	Yes
Remarks	psbA-trnH: 467R

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. BI210427

>RD605-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCTTTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BI210427

>RD605-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210427

>RD605-1A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD605
Sample mark	RD605-1A
Locality	Yingshan County, Hubei Province, China
Corresponding plant voucher specimen	RD660
Authenticated	Yes
Remarks	-

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. BI210427

>RD605-2A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BI210427

>RD605-2A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTAAATACCTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAGAAATAGTAGAGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210427

>RD605-2A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTTAAAGCCCTGCGTGCT
CTACGTCGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCTGCTG
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD605
Sample mark	RD605-2A
Locality	Yingshan County, Hubei Province, China
Corresponding plant voucher specimen	RD660
Authenticated	Yes
Remarks	-

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. BIC220519

>RD605-3A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGCG
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519

>RD605-3A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519

>RD605-3A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTTAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD605
Sample mark	RD605-3A
Locality	Yingshan County, Hubei Province, China
Corresponding plant voucher specimen	RD660
Authenticated	Yes
Remarks	-

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. BIC220519

>RD605-4A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAGGACCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTKTGTGCCGTCTYACGAGCA
CTCCGACCG

Remarks: observation at nucleotide position 200, 213

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

Batch ID. BIC220519

>RD605-4A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTGTACTTACCTAGTTTCTTTAAATTAT
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAA
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519

>RD605-4A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD605
Sample mark	RD605-4A
Locality	Yingshan County, Hubei Province, China
Corresponding plant voucher specimen	RD660
Authenticated	Yes
Remarks	ITS2: 200K, 213Y

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. BIC220519-2

>RD605-6A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519-2

>RD605-6A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519-2

>RD605-6A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD605
Sample mark	RD605-6A
Locality	Yingshan County, Hubei Province, China
Corresponding plant voucher specimen	RD660
Authenticated	Yes
Remarks	-

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. BIC220519-2

>RD605-8A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCTCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAKCAA
AGCTCATGTGACCTGTTGTGCCGTCTCGACGAGCA
CTCCGACCG

Remarks: observation at nucleotide position 180

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

Batch ID. BIC220519-2

>RD605-8A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
MTYTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAA
AAGAAAGAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
AKGTAGCCAAGTGGATCARGGCAGT

Remarks: observation at nucleotide position 38, 40, 450, 467

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519-2

>RD605-8A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

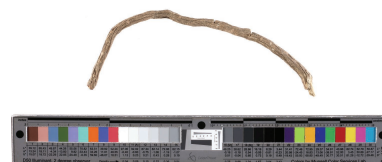
Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD605
Sample mark	RD605-8A
Locality	Yingshan County, Hubei Province, China
Corresponding plant voucher specimen	RD660
Authenticated	Yes
Remarks	ITS2: 180K; psbA-trnH: 38M, 40Y, 450K, 467R

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. BI210427

>RD606-1A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BI210427

>RD606-1A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTATTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTAAATACCTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAGTTAATC
TTTTGAAACGTAAGGAAAAGAAATAGTAGAGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210427

>RD606-1A *rbcL*

AAAGTGTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGTTCTGTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCTGCT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD606
Sample mark	RD606-1A
Locality	Guangde City, Anhui Province, China
Corresponding plant voucher specimen	RD662
Authenticated	Yes
Remarks	-

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. BIC220519-2

>RD606-3A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519-2

>RD606-3A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519-2

>RD606-3A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTTAAAGATTACAGA
TTGACTTATTATACTCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD606
Sample mark	RD606-3A
Locality	Guangde City, Anhui Province, China
Corresponding plant voucher specimen	RD662
Authenticated	Yes
Remarks	-

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. BIC220519-2

>RD606-4A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAGGACCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519-2

>RD606-4A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTSAGCTCC
ATCTACAAATGGATAAGACCCGGTCTAGTGATACG
AGTTTTTTTGAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAAATAATGATGAATGGTAAAAGTTTAATC
TTTTGAAACGTAAGGAAAAGAAATAGTAGAGGGCGCG
ATGTAGCCAAGTGGATCAAGGCAGT

Remarks: observation at nucleotide position 29

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519-2

>RD606-4A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD606
Sample mark	RD606-4A
Locality	Guangde City, Anhui Province, China
Corresponding plant voucher specimen	RD662
Authenticated	Yes
Remarks	<i>psbA-trnH</i> : 29S

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. BIC220519-2

>RD606-5A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519-2

>RD606-5A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTATTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTACTATTTTATCTCGAAAAAT
AAGAAAGAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519-2

>RD606-5A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD606
Sample mark	RD606-5A
Locality	Guangde City, Anhui Province, China
Corresponding plant voucher specimen	RD662
Authenticated	Yes
Remarks	-

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. BIC220519-2

>RD606-6A ITS2

CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACG
GGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTG
TCTACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGC
GACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCC
CTCTTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAA
AGCTCATGTGACCCCTTTGTGCCGTCCTCGACGAGCA
CTCCGACCG

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

Batch ID. BIC220519-2

>RD606-6A *psbA-trnH*

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCC
ATCTACAAATGGATAAGACCCGGTCTTAGTGATACG
AGTTTTTTTGAAATAAAAAGGAGCAATAACCTCTTTC
TTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTAT
TTAGTAGTATTTGTACTTACCTAGTTTCTTTAAATTTA
TTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCA
TGAGTGAGTATCATGCTTTCGTTCTGTATTAATCATT
ATCTAGAATTTAGCTACTTCTTCCCAATCTTTGGGAA
GTCTTTTTTAAAAAGAAAAGATAAAAAATGTTGGACTT
TTACTTAGTTAATACTTAATATTTTATCTCGAAAAAT
AAGAAAGAAAATAATGATGAATGGTAAAAAGTTAATC
TTTTGAAACGTAAGGAAAAAGATAGTAGGGGCGG
ATGTAGCCAAGTGGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BIC220519-2

>RD606-6A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTACAGA
TTGACTTATTATACTCCTGACTATGAAACCAAAGATA
CTGATATCTTGGCAGCATTCCGAGTAACCTCCTCAACC
TGGAGTTCCACCTGAAGAAGCAGGGGCGCGGTAGC
TGCCGAATCTTCTACTGTTACATGGACAACCTGTGTGG
ACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGC
GATGCTACGGAATCGAGCCCGTTGCTGGAGAAGAAA
GTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTT
TTTGAAGAAGGTTCTGTTACTAACATGTTTACTTCCAT
TGTAAGTAATGTATTTGGGTTCAAAGCCCTGCGTGCT
CTACGTCTGGAAGATCTGCGAATCCCTGTTGCTTATGT
TAAACTTTTCCAAGGCCCGCCTCATGGCATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCTGC
TAAAACTACGGTAGAGCGGTTTATGAATGTCTC

Reference Detail

Description of reference material	Specimen of Acanthopanax Cortex
Scientific name	<i>Acanthopanax gracilistylus</i> W. W. Smith
Laboratory number	RD606
Sample mark	RD606-6A
Locality	Guangde City, Anhui Province, China
Corresponding plant voucher specimen	RD662
Authenticated	Yes
Remarks	-

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 *Acanthopanax gracilistylus* and Chinese Materia Medica (CMM) Cortex *Acanthopanax*

```
>RD658-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCTCTACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGACCGTCGCCAGCAAAAGCTCATGTGACCCTGTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD659-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCTCTACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGACCGTCGCCAGCAAAAGCTCATGTGACCCTGTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD660-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCTCTACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTTGACCGTCGCCAGCAAAAGCTCATGTGACCCTGTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD662-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCTCTACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGACCGTCGCCAGCAAAAGCTCATGTGACCCTGTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD603-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGYCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
TCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGA
CCG
>RD605-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD605-2A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD606-1A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD603-3A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD603-4A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGTGC GTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD603-6A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCTCGACGAGCACTCCGAC
CG
>RD603-8A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCTCTACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
CTCACC CGCGGTTGGCCCCAAATGTGAGTCCTTGGCAACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTC
TTCTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTGTTGTGCCGTCTCGACGAGCACTCCG
ACCG
>RD605-3A ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCAGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
```

CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCCTCGACGAGCACTCCGAC
CG
>RD605-4A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTKTTGTGCCGTCCTYGACGAGCACTCCGAC
CG
>RD605-6A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCCTCGACGAGCACTCCGAC
CG
>RD605-8A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCTCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAKCAAAAGCTCATGTGACCCTGTTGTGCCGTCCTCGACGAGCACTCCGAC
CG
>RD606-3A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCCTCGACGAGCACTCCGAC
CG
>RD606-4A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCCTCGACGAGCACTCCGAC
CG
>RD606-5A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCCTCGACGAGCACTCCGAC
CG
>RD606-6A_ITS2
CGCATCGCGTCGCCCCCAACCATGCACTCCCTCACGGGAGTCATGACTGAGGGGCGGATACTGGCCTCCCGTGTC
TCACCGCGCGGTTGGCCCAAATGTGAGTCCTTGGCGACGGGCGTCACGACAAGTGGTGGTTGTAAAAAGCCCTCTT
CTCCTGTCGTGCGGTGGACCGTCGCCAGCAAAAGCTCATGTGACCCTTTTGTGCCGTCCTCGACGAGCACTCCGAC
CG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*) sequence of plant voucher specimen of *Acanthopanax gracilistylus* and Chinese Materia Medica (CMM) Cortex *Acanthopanax*

>RD658-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD659-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD660-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD662-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD603-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTCTTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTAAATATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD605-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD605-2A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD606-1A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTCTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD603-3A_psbA-trnH

ATAA CTTCCCTCTAGACCTAGCTGCTGTGCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTTAG
TAGTATTTGTACTTACCTAGTTCTTTAAATAAAATTTAAAGAAACGTCGTTTATTTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAACTCTAGAATTTAGCTACTTCTCCCAATCTTTTGGGAAGTCTTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAAAGAAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGACGT

>RD603-4A psbA-trnH

ATAACTTCCTCTAGACCTAGCTGCTGTCTGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTATTTAG
TAGTATTGTACTTACCTAGTTCTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAACTCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAAGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAAAGAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACCGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGACGT

>RD603-6A psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTGCGAAGCTCCAATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTTAG
TAGTATTTGTACTIONACCTAGTTCTTTAAATAAATTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTCGTTCGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAAGTCTTTTT
TAAAAAGAAAAGATAAAAAATTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACCGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCGAGT

>RD603-8A psbA-trnH

ATAAAGTCCCTCTAGACCTAGCTGCTGTCTGAAGCTCCAATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTTAG
TAGTATTTGTACTIONTACCTAGTTCTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTCGTTCTGTATTAATCATTAACTAGAAATTTAGCTACTTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAAGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAAAGAAAGAA
ATAATGATGAATGGTAAAAGTTTAATCTTTTGAACCGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCARGGAGT

>RD605-3A psbA-trnH

ATAATATCCCTCTAGACCTAGCTGCTGTGCGAAGCTCCAATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTTAG
TAGTATTTGTACTTACCTAGTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACCGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGACGT

>RD605-4A_psbA-trnH

ATAAAGTTCCTCTAGACCTAGCTGCTGTGCGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTATTTAG
TAGTATTGTGACTTACCTAGTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAAGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAAAGAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACCGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGACGT

>RD605-6A psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCTGAAGCTCCAATCTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAACTAGAAATTTAGCTACTTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACCGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGACGT

>RD605-8A_psbA-trnH

ATCAGCTTCCCTCTAGACCTAGCTGTGTCGAAGCTCCMTYTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAAGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAAAAGAAAGAA
ATAATGATGAATGGTAAAAAGTTTAATCTTTTGAACAGTAAGGAAAAGAATAGTAGAGGGGCGGAKGTAGCCAAGT
GGATCARGGCAGT

>RD606-3A psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTCGAAGCTCCAICTACAAATGGATAAGACCCGGTCTTAGTGATACGAG
TTTTTTTGAATAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTATTAG
TAGTATTTGTACTTACCTAGATTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTCTAGAGTG
AGTATCATGCTTTCGTTCTGTATTAATCATTAACTAGAATTTAGTACTCTCTCCCAATCTTTGGGAAGTATTTTT
TAAAAAGAAAAAGATAAAAAATGTGGACCTTTTACTTAGTTAATACTTACTATTTTATCTCGAAAAATAAGAAAGA

ATAATGATGAATGGTAAAAGTTTAATCTTTTGAAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD606-4A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTGSAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTTAATCTTTTGAAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD606-5A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTGGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTTGGGAAGTATTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTACTATTTTTATCTCGAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTTAATCTTTTGAAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

>RD606-6A_psbA-trnH

ATAACTTCCCTCTAGACCTAGCTGCTGTGGAAGCTCCATCTACAAATGGATAAGACCCGGTCTTAGTGTATACGAG
TTTTTTTGAATAAAAAAGGAGCAATAACCTCTTTCTTGTTCTATCAAGAGGGCGGTATTGCTCCTTTTTTTATTAG
TAGTATTTGTACTTACCTAGTTTCTTTAAATTTATTTAAAGAAACGTCGTTTTATTTTTATTGGTTGGTTCATGAGTG
AGTATCATGCTTTTCGTTCTGTATTAATCATTAATCTAGAATTTAGCTACTTCTCCCAATCTTTTGGGAAGTCTTTTT
TAAAAAGAAAAGATAAAAAATGTTGGACTTTTTACTTAGTTAATACTTAAATATTTTTATCTCGAAAATAAGAAAGAA
ATAATGATGAATGGTAAAAGTTTAATCTTTTGAAACGTAAGGAAAAGAATAGTAGAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Partial chloroplast ribulose biphosphate carboxylase large chain (*rbcL*) sequence of plant voucher specimen of *Acanthopanax gracilistylus* and Chinese Materia Medica (CMM) Cortex *Acanthopanax*

>RD658-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD659-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD660-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD662-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD603-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD605-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD605-2A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTTAAAGCCCTGCGTGTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD606-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC

GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCGTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCTACGTCTGG
AAGATCTGCGAATCCCTGTTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTGTGCTCCCTGTTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAAACTACGGT
AGAGCCGGTTTATGAATGTCTC

>RD603-3A rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCGTGTCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCTACGTCTGG
AAGATCTGCGAATCCCTGTTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCTGCCCTGTTGGGATGTACTATTAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD603-4A rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCGTGTCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTTAAAGCCCTGCGTGCTCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCTGCCCTGTTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD603-6A rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCGTGTCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCAATTAGACCTTTTGAAGA
AGGTTCTGTTACTAACAATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCTACGTCTGG
AAGATCTGCGAATCCCTGTTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTGTGCTCCCCTGTTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD603-8A rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGATTACAGATTGACTTATTATACTCTGACTATGAAACCAAAGATAC
 GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
 GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
 ACGGAATCGAGCCCCTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTGAAGA
 AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCTACGTCTGG
 AAGATCTGCGAATCCCTGTTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
 ATTGAACAAGTATGGTGTGCTCCCTGTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAAACTACGGT
 AGAGCGGTTTTATGAATGTCTC

>RD605-3A rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCGTGTCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTTAAAGCCCTGCGTGCTCTACGTCTGG
AAGATCTGCGAATCCCTGTTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTGTGCTCCCCTGTTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGCTTTATGAATGTCTC

>RD605-4A rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGATTACAGATTGACTTATTATACTCTGACTATGAAACCAAAGATACT
 GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
 GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
 ACGGAATCGAGCCCCGTGTCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTGAAGA
 AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCTACGTCTGG
 AAGATCTGCGAATCCCTGTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
 ATTGAACAAGTATGGTGTGCTCCCTGTTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAACTACGGT
 AGGCGCAATTTATGAATGTCTC

>RD605-6A rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCCGTGTCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCAATTAGACCTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCTACGTCTGG
AAGATCTGCGAATCCCTGTTGCTTATGTTAAAACTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTGTGCTCCCCTGTTGGGATGTACTATTAACCTAAATTTGGGGTTATCTGCTAAAACTACGGT
AGAGCCCTTTTATGAATGTCTC

>RD605-8A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCGTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTTAAAACCTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD606-3A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCGTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTTAAAACCTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD606-4A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCGTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTTAAAACCTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD606-5A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCGTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTTAAAACCTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC

>RD606-6A_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTACAGATTGACTTATTATACTCCTGACTATGAAACCAAAGATACT
GATATCTTGGCAGCATTCCGAGTAACTCCTCAACCTGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGCTGCC
GAATCTTCTACTGGTACATGGACAACCTGTGTGGACCGATGGACTTACCAGCCTTGATCGTTACAAAGGGCGATGCT
ACGGAATCGAGCCCGTTGCTGGAGAAGAAAGTCAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTTTGAAGA
AGGTTCTGTTACTAACATGTTTACTTCCATTGTAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCCTACGTCTGG
AAGATCTGCGAATCCCTGTGCTTATGTTAAAACCTTTCCAAGGCCCGCCTCATGGCATCCAAGTTGAGAGAGATAA
ATTGAACAAGTATGGTCGTCCTGTTGGGATGTACTATTAAACCTAAATTGGGGTTATCTGCTAAAACTACGGT
AGAGCGGTTTATGAATGTCTC