

BLAST Results

[Questions/comments](#)

Job title: Nucleotide Sequence

RID [J1BT2DRF013](#) (Expires on 09-15 00:26 am)

Query ID	Icl Query_19371	Database Name	nt
Description	None	Description	Nucleotide collection (nt)
Molecule type	dna	Program	BLASTN 2.13.0+
Query Length	669		

Graphic Summary.



Descriptions

Sequences producing significant alignments:

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum palustre chloroplast, partial genome	1195	1195	98%	0.0	99.39%	MT984458.1
Equisetum palustre ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1179	1179	96%	0.0	99.69%	AY226138.1
Equisetum arvense chloroplast, complete genome	1173	1173	98%	0.0	98.79%	GU191334.1
Equisetum arvense chloroplast ribulosebiphosphate carboxylase (rbcL) gene, complete cds	1173	1173	98%	0.0	98.79%	L11053.1
Equisetum arvense plastid, complete genome	1168	1168	98%	0.0	98.63%	JN968380.1
Equisetum pratense ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1166	1166	96%	0.0	99.38%	AY226137.1
Equisetum sylvaticum ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1166	1166	96%	0.0	99.38%	AY226136.1
Equisetum sylvaticum isolate 11640 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1158	1158	95%	0.0	99.37%	MH750204.1
Equisetum environmental sample isolate EDNA16-0043490 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1157	1157	96%	0.0	99.07%	MT197555.1
Equisetum fluviatile ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1157	1157	96%	0.0	99.07%	AY226142.1
Equisetum arvense ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1157	1157	96%	0.0	99.07%	AY226140.1
Equisetum telmateia subsp. braunii ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1157	1157	96%	0.0	99.07%	AY226135.1
Equisetum environmental sample isolate EDNA16-0043491b ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1151	1151	96%	0.0	98.91%	MT197548.1
Equisetum telmateia subsp. telmateia isolate 11642 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1149	1149	95%	0.0	99.06%	MH750210.1

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum arvense subsp. boreale isolate 41074 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1146	1146	95%	0.0	99.06%	MH750160.1
Equisetum diffusum ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1146	1146	96%	0.0	98.76%	AY226141.1
Equisetum x dycei isolate 26083 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1144	1144	95%	0.0	99.06%	MH750220.1
Equisetum telmateia ribulose-1,5-bisphosphate carboxylase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1144	1144	95%	0.0	99.06%	AF313580.1
Equisetum fluviatile isolate 41076 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1142	1142	95%	0.0	99.06%	MH750169.1
Equisetum fluviatile isolate 41075 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1142	1142	95%	0.0	99.06%	MH750168.1
Equisetum sylvaticum isolate 41081 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1138	1138	93%	0.0	99.36%	MH750205.1
Equisetum pratense isolate 41087 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1138	1138	93%	0.0	99.36%	MH750195.1
Equisetum arvense subsp. boreale isolate 41073 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1134	1134	94%	0.0	99.05%	MH750159.1
Equisetum telmateia subsp. braunii isolate 40828 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1129	1129	94%	0.0	99.05%	MH750207.1
Equisetum palustre isolate 17671 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1129	1129	92%	0.0	99.68%	MH750191.1
Equisetum palustre isolate 39349 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1127	1127	92%	0.0	99.68%	MH750192.1
Equisetum arvense subsp. arvense isolate 41071 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1127	1127	93%	0.0	99.04%	MH750158.1
Equisetum x fontqueri isolate 26093 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1125	1125	93%	0.0	99.04%	MH750221.1
Equisetum x litorale isolate 41084 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1122	1122	93%	0.0	99.04%	MH750222.1

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum pratense isolate 41086 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1118	1118	92%	0.0	99.35%	MH750194.1
Equisetum arvense voucher JAG288 (OAC) ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1118	1118	92%	0.0	99.35%	EU677106.1
Equisetum telmateia subsp. braunii isolate 40832 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1116	1116	92%	0.0	99.04%	MH750208.1
Equisetum arvense subsp. arvense isolate 26085 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1116	1116	92%	0.0	99.04%	MH750156.1
Equisetum pratense isolate 39348 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1114	1114	91%	0.0	99.35%	MH750193.1
Equisetum diffusum isolate 40689 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1110	1110	92%	0.0	98.87%	MH750166.1
Equisetum arvense subsp. arvense isolate 26084 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1109	1109	92%	0.0	99.03%	MH750155.1
Equisetum arvense subsp. arvense isolate 40833 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1101	1101	91%	0.0	99.02%	MH750157.1
Equisetum scirpoides ribulose-1,5- bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1101	1101	96%	0.0	97.52%	AY226133.1
Equisetum arvense voucher AP400 (OAC) ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1099	1099	90%	0.0	99.34%	EU677105.1
Equisetum diffusum isolate 40804 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1098	1098	92%	0.0	98.71%	MH750167.1
Equisetum palustre chloroplast rbcL gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, partial cds, specimen_voucher: TNS:776981	1094	1094	89%	0.0	99.67%	AB574686.1
Equisetum pratense voucher AP451 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1092	1092	90%	0.0	99.01%	HQ590083.1
Equisetum fluviatile ribulose-1,5- bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1092	1092	91%	0.0	99.01%	DQ463101.1

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum arvense x Equisetum telmateia subsp. braunii isolate 40834 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; plastid	1090	1090	90%	0.0	99.01%	MH750161.1
Equisetum xylochaetum chloroplast, complete genome	1090	1090	98%	0.0	96.51%	MW282958.1
Equisetum arvense ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplast	1088	1088	91%	0.0	98.85%	KM218345.1
Equisetum hyemale chloroplast, complete genome	1085	1085	98%	0.0	96.36%	KC117177.1
Equisetum sylvaticum chloroplast rbcl gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, partial cds, specimen_voucher: TNS:776974	1081	1081	89%	0.0	99.33%	AB574690.1
Equisetum pratense chloroplast rbcl gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, partial cds, specimen_voucher: TNS:1107843	1081	1081	89%	0.0	99.33%	AB574687.1
Equisetum scirpoides isolate 41089 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; plastid	1079	1079	94%	0.0	97.62%	MH750203.1
Equisetum komarovii isolate 40830 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; plastid	1079	1079	94%	0.0	97.62%	MH750182.1
Equisetum bogotense ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplast gene for chloroplast product	1075	1075	95%	0.0	96.88%	AY226139.1
Equisetum ramosissimum isolate BTPS123 voucher LISE:96444 chloroplast, complete genome	1074	1074	98%	0.0	96.05%	ON641349.1
Equisetum ramosissimum isolate BTPS056 voucher LISE:96334 chloroplast, complete genome	1074	1074	98%	0.0	96.05%	NC_062377.1
Equisetum ramosissimum isolate BTPS056 voucher LISE:96334 chloroplast, complete genome	1074	1074	98%	0.0	96.05%	OM691674.1
Equisetum myriochaetum ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplast gene for chloroplast product	1074	1074	96%	0.0	96.74%	AY226131.1
Equisetum giganteum ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplast gene for chloroplast product	1074	1074	96%	0.0	96.74%	AY226127.1
Equisetum sp. Schuettpelz 1643 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplast	1072	1072	96%	0.0	96.73%	MW620286.1

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum fluviatile chloroplast rbcL gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, partial cds, specimen_voucher: TNS:776384	1072	1072	89%	0.0	99.00%	AB574684.1
Equisetum hyemale ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1070	1070	98%	0.0	95.90%	DQ646001.1
Equisetum laevigatum ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1070	1070	95%	0.0	96.73%	AY226130.1
Equisetum scirpoides isolate 26090 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1068	1068	94%	0.0	97.30%	MH750202.1
Equisetum hyemale subsp. affine voucher OAC 94916 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1068	1068	96%	0.0	96.58%	KF186500.1
Equisetum hyemale subsp. affine ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1068	1068	96%	0.0	96.58%	AY226128.1
Equisetum giganteum isolate 40806 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1066	1066	95%	0.0	96.72%	MH750172.1
Equisetum giganteum isolate 26087 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1066	1066	95%	0.0	96.72%	MH750170.1
Equisetum ramosissimum voucher R825 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1066	1066	97%	0.0	96.30%	KY656709.1
Equisetum arvense chloroplast rbcL gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, partial cds, specimen_voucher: TNS:763618	1066	1066	89%	0.0	98.83%	AB574683.1
Equisetum x ferrissii ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1066	1066	95%	0.0	96.72%	EU352292.1
Equisetum x ferrissii ribulose-1,5-bisphosphate carboxylase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1064	1064	95%	0.0	96.71%	AF313579.1
Equisetum scirpoides isolate 10933 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1059	1059	92%	0.0	97.57%	MH750201.1
Equisetum ramosissimum subsp. debile voucher G.M. Plunkett 3642 (NYBG) ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1057	1057	96%	0.0	96.27%	MT657901.1

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum ramosissimum subsp. debile ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1057	1057	96%	0.0	96.27%	AY226132.1
Equisetum myriochaetum isolate 40815 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1053	1053	95%	0.0	96.55%	MH750185.1
Equisetum scirpoides voucher AP248 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1050	1050	90%	0.0	97.86%	HQ590084.1
Equisetum xylochaetum isolate 40614 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1046	1046	94%	0.0	96.66%	MH750228.1
Equisetum myriochaetum isolate 41080 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1046	1046	94%	0.0	96.66%	MH750190.1
Equisetum myriochaetum isolate 40826 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1046	1046	94%	0.0	96.66%	MH750188.1
Equisetum sylvaticum voucher TJD-502 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1046	1046	85%	0.0	99.82%	KJ841305.1
Equisetum x schaffneri isolate 40813 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1044	1044	93%	0.0	96.66%	MH750224.1
Equisetum giganteum isolate 40811 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1042	1042	93%	0.0	96.65%	MH750176.1
Equisetum hyemale subsp. hyemale isolate 41088 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1040	1040	94%	0.0	96.50%	MH750181.1
Equisetum variegatum ribulose-1,5- bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast gene for chloroplast product	1040	1040	96%	0.0	95.81%	AY226134.1
Equisetum bogotense isolate 40800 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1037	1037	92%	0.0	96.78%	MH750162.1
Equisetum arvense voucher TJD-508 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1037	1037	85%	0.0	99.47%	KJ841301.1
Equisetum arvense voucher TJD-503 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1035	1035	85%	0.0	99.47%	KJ841302.1
Equisetum giganteum isolate 40807 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1033	1033	92%	0.0	96.62%	MH750173.1

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
Equisetum arvense voucher TJD-504 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1033	1033	84%	0.0	99.47%	KJ841300.1
Equisetum trachyodon isolate 41092 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1029	1029	93%	0.0	96.33%	MH750227.1
Equisetum ramosissimum subsp. debile isolate 40829 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1029	1029	94%	0.0	96.18%	MH750200.1
Equisetum myriochaetum isolate 40936 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1029	1029	92%	0.0	96.61%	MH750189.1
Equisetum hyemale voucher AP344 (OAC) ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1029	1029	92%	0.0	96.76%	EU677107.1
Equisetum hyemale subsp. affine isolate 40831 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1027	1027	92%	0.0	96.46%	MH750177.1
Equisetum sylvaticum plastid partial rbcL gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, specimen voucher H823764	1027	1027	83%	0.0	99.82%	HE574610.1
Equisetum ramosissimum subsp. debile isolate 36802 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1026	1026	94%	0.0	96.03%	MH750199.1
Commelina diffusa voucher Q555 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1026	1026	84%	0.0	99.29%	MH714073.1
Equisetum myriochaetum isolate 26088 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1022	1022	92%	0.0	96.59%	MH750184.1
Equisetum scirpoides chloroplast rbcL gene for ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit, partial cds, specimen_voucher: TNS:768168	1022	1022	89%	0.0	97.49%	AB574689.1
Equisetum palustre voucher Chase 11641 (K) ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; chloroplast	1022	1022	82%	0.0	100.00%	GQ248601.1
Equisetum laevigatum isolate 40812 ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcL) gene, partial cds; plastid	1020	1020	91%	0.0	96.59%	MH750183.1

Alignments

Equisetum palustre chloroplast, partial genome

Sequence ID: **MT984458.1** Length: 5501 Number of Matches: 1

Range 1: 2224 to 2882

Score	Expect	Identities	Gaps	Strand	Frame
1195 bits(647)	0.0()	655/659(99%)	0/659(0%)	Plus/Plus	
Features:					
Query 1	AACAGAGACTAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA	60			
Sbjct 2224	AACGGAGACCAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA	2283			
Query 61	TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC	120			
Sbjct 2284	TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC	2343			
Query 121	TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG	180			
Sbjct 2344	TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG	2403			
Query 181	CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG	240			
Sbjct 2404	CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG	2463			
Query 241	CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC	300			
Sbjct 2464	CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC	2523			
Query 301	TTTAGATCTTTTGAAGAAGGTTCTGTTACCAATCTTTTACTTCAATTGTTGGTAATGT	360			
Sbjct 2524	TTTAGATCTTTTGAAGAAGGTTCTGTTACCAATCTTTTACTTCAATTGTTGGTAATGT	2583			
Query 361	TTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTGAAGATTTAAGAATTCCTCCTGCTTA	420			
Sbjct 2584	TTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTGAAGATTTAAGAATTCCTCCTGCTTA	2643			
Query 421	CTCCAAAACCTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA	480			
Sbjct 2644	CTCCAAAACCTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA	2703			
Query 481	ATATGGTCGTCCTTTATTAGGTTGTACAATTAAACCAAATTTGGGACTATCTGCTAAAAA	540			
Sbjct 2704	ATATGGTCGTCCTTTATTAGGTTGTACAATTAAACCAAATTTGGGACTATCTGCTAAAAA	2763			
Query 541	CTATGGTAGGGCTGTTTATGAATGTCTTCGTGGTGGACTTGATTTACCAAAGATGATGA	600			
Sbjct 2764	CTATGGTAGGGCTGTTTATGAATGTCTTCGTGGTGGACTTGATTTACCAAAGATGATGA	2823			
Query 601	GAATGTAAACTCTCAACCCCTTATGCGTTGGAGAGATCGATTCTTATTTGTAGCAGAAG	659			
Sbjct 2824	GAATGTAAACTCTCAACCCCTTATGCGTTGGAGAGATCGATTCTTATTTGTAGCAGAAG	2882			

Equisetum palustre ribulose-1,5-bisphosphate carboxylase/oxygenase large subunit (rbcl) gene, partial cds; chloroplast gene for chloroplast product

Sequence ID: **AY226138.1** Length: 1325 Number of Matches: 1

Range 1: 1 to 644

Score	Expect	Identities	Gaps	Strand	Frame
1179 bits(638)	0.0()	642/644(99%)	0/644(0%)	Plus/Plus	
Features:					
Query 16	AGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTATTTTACTCCAGATTA	75			
Sbjct 1	AGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTATTTTACTCCAGATTA	60			
Query 76	TGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCCTCAACCGGGAGTACC	135			
Sbjct 61	TGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCCTCAACCGGGAGTACC	120			
Query 136	ACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGGCACCTGGACTACCGT	195			
Sbjct 121	ACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGGCACCTGGACTACCGT	180			
Query 196	ATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATGCTATAATATTGAACC	255			
Sbjct 181	ATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATGCTATAATATTGAACC	240			
Query 256	TGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCCTTTAGATCTTTTGA	315			
Sbjct 241	TGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCCTTTAGATCTTTTGA	300			
Query 316	AGAAGGTTCTGTTACCAATCTTTTACTTCAATTGTTGGTAATGTTTTCGGCTTCAAAGC	375			
Sbjct 301	AGAAGGTTCTGTTACCAATCTTTTACTTCAATTGTTGGTAATGTTTTCGGCTTCAAAGC	360			

Query	376	TCTACGTGCTTTACGTTT	AGAAGATTTAAGAATTCCTCCTGCTTACTCCAAAAC	TTTTAT	435
Sbjct	361	TCTACGTGCTTTACGTTT	AGAAGATTTAAGAATTCCTCCTGCTTACTCCAAAAC	TTTTAT	420
Query	436	AGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAAATATGGTCGTCCTTT			495
Sbjct	421	AGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAAATATGGTCGTCCTTT			480
Query	496	ATTAGGTTGTACAATTAACCAAAATTTGGGACTATCTGCTAAAAACTATGGTAGGGCTGT			555
Sbjct	481	ATTAGGTTGTACAATTAACCAAAATTTGGGACTATCTGCTAAAAACTATGGTAGGGCTGT			540
Query	556	TTATGAATGTCCTTCGTGGTGGACTTGATTTACCAAAGATGATGAGAATGTAAACTCTCA			615
Sbjct	541	TTATGAATGTCCTTCGTGGTGGACTTGATTTACCAAAGATGATGAGAATGTAAACTCTCA			600
Query	616	ACCCTTTATGCGTTGGAGAGATCGATTCTTATTTGTAGCAGAAG			659
Sbjct	601	ACCCTTTATGCGTTGGAGAGATCGTTTCTTATTCGTAGCAGAAG			644

Equisetum arvense chloroplast, complete genome

Sequence ID: **GU191334.1** Length: 133309 Number of Matches: 1

Range 1: 27302 to 27960

Score	Expect	Identities	Gaps	Strand	Frame
1173 bits(635)	0.0()	651/659(99%)	0/659(0%)	Plus/Minus	
Features:					
Query	1	AACAGAGACTAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA			60
Sbjct	27960	AACGGAGACCAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA			27901
Query	61	TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC			120
Sbjct	27900	TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC			27841
Query	121	TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG			180
Sbjct	27840	TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG			27781
Query	181	CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG			240
Sbjct	27780	CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG			27721
Query	241	CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC			300
Sbjct	27720	CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC			27661
Query	301	TTTAGATCTTTTTGAAGAAGGTTCTGTTACCAATCTTTTTACTTCAATTGTTGGTAATGT			360
Sbjct	27660	TTTAGATCTTTTTGAAGAAGGTTCTGTTACCAATCTTTTTACTTCAATTGTTGGTAATGT			27601
Query	361	TTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTAGAAGATTTAAGAATTCCTCCTGCTTA			420
Sbjct	27600	TTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTAGAAGATTTAAGAATTCCTCCTGCTTA			27541
Query	421	CTCCAAAACTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA			480
Sbjct	27540	CTCCAAAACTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA			27481
Query	481	ATATGGTCGTCCTTTATTAGGTTGTACAATTAACCAAAATTTGGGACTATCTGCTAAAAA			540
Sbjct	27480	ATACGGTCGTCCTTTATTAGGTTGTACAATTAACCAAAATTTGGGACTATCTGCTAAAAA			27421
Query	541	CTATGGTAGGGCTGTTTATGAATGTCCTTCGTGGTGGACTTGATTTACCAAAGATGATGA			600
Sbjct	27420	CTATGGTAGAGCTGTTTATGAATGTCCTTCGTGGTGGGCTTGATTTACCAAAGATGATGA			27361
Query	601	GAATGTAAACTCTCAACCTTTATGCGTTGGAGAGATCGATTCTTATTTGTAGCAGAAG			659
Sbjct	27360	GAATGTAAACTCTCAACCTTTATGCGTTGGAGAGATCGTTTCTTATTCGTAGCAGAAG			27302

Equisetum arvense chloroplast ribulosebiphosphate carboxylase (rbcL) gene, complete cds

Sequence ID: **L11053.1** Length: 1587 Number of Matches: 1

Range 1: 84 to 742

Score	Expect	Identities	Gaps	Strand	Frame
1173 bits(635)	0.0()	651/659(99%)	0/659(0%)	Plus/Plus	

Features:

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Query 1 AACAGAGACTAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA 60
Sbjct 84 AACGGAGACCAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA 143

Query 61 TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC 120
Sbjct 144 TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC 203

Query 121 TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG 180
Sbjct 204 TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG 263

Query 181 CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG 240
Sbjct 264 CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG 323

Query 241 CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC 300
Sbjct 324 CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC 383

Query 301 TTTAGATCTTTTTGAAGAAGGTTCTGTTACCAATCTTTTTACTTCAATTGTTGGTAATGT 360
Sbjct 384 TTTAGATCTTTTTGAAGAAGGTTCTGTTACCAATCTTTTTACTTCAATTGTTGGTAATGT 443

Query 361 TTTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTAGAAGATTTAAGAATTCCTCCTGCTTA 420
Sbjct 444 TTTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTAGAAGATTTAAGAATTCCTCCTGCTTA 503

Query 421 CTCCAAAACCTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA 480
Sbjct 504 CTCCAAAACCTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA 563

Query 481 ATATGGTCGTCTTTTATTAGGTTGTACAATTAACCAAAATTGGGACTATCTGCTAAAAA 540
Sbjct 564 ATACGGTCGTCTTTTATTAGGTTGTACAATTAACCAAAATTGGGACTATCTGCTAAAAA 623

Query 541 CTATGGTAGGGCTGTTTATGAATGTCTTCGTGGTGGACTTGATTTACCAAAGATGATGA 600
Sbjct 624 CTATGGTAGAGCTGTTTATGAATGTCTTCGTGGTGGGCTTGATTTACCAAAGATGATGA 683

Query 601 GAATGTAAACTCTCAACCTTTATGCGTTGGAGAGATCGATTCTTATTTGTAGCAGAAG 659
Sbjct 684 GAATGTAAACTCTCAACCTTTATGCGTTGGAGAGATCGTTTCTTATTCGTAGCAGAAG 742

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Equisetum arvense plastid, complete genome

Sequence ID: **JN968380.1** Length: 132726 Number of Matches: 1

Range 1: 64969 to 65627

Score	Expect	Identities	Gaps	Strand	Frame
1168 bits(632)	0.0()	650/659(99%)	0/659(0%)	Plus/Plus	

Features:

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Query 1 AACAGAGACTAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA 60
Sbjct 64969 AACGGAGACCAAAGCAGGTGTTGGATTTAAAGCTGGTGTTAAAGATTATCGATTGACTTA 65028

Query 61 TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC 120
Sbjct 65029 TTTTACTCCAGATTATGAAACCAAAGATACCGATATTTAGCAGCATTCCGTATGACTCC 65088

Query 121 TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG 180
Sbjct 65089 TCAACCGGGAGTACCACCGGAAGAAGCAGGAGCAGCCGTAGCTGCTGAATCGTCCACGGG 65148

Query 181 CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG 240
Sbjct 65149 CACCTGGACTACCGTATGGACAGATGGACTTACTAGTCTTGATCGATATAAAGGTCGATG 65208

Query 241 CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC 300
Sbjct 65209 CTATAATATTGAACCTGTTGCTGGAGAAGATAATCAATTCATAGCTTATGTAGCCTATCC 65268

Query 301 TTTAGATCTTTTTGAAGAAGGTTCTGTTACCAATCTTTTTACTTCAATTGTTGGTAATGT 360
Sbjct 65269 TTTAGATCTTTTTGAAGAAGGTTCTGTTACCAATCTTTTTACTTCAATTGTTGGTAATGT 65328

Query 361 TTTTCGGCTTCAAAGCTCTACGTGCTTTACGTTTAGAAGATTTAAGAATTCCTCCTGCTTA 420
Sbjct 65329 TTTTCGGATTCAAAGCTCTACGTGCTTTACGTTTAGAAGATTTAAGAATTCCTCCTGCTTA 65388

Query 421 CTCCAAAACCTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA 480
Sbjct 65389 CTCCAAAACCTTTTATAGGACCACCCACGGTATCCAGGTTGAAAGAGATAAGTTAAACAA 65448

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Query	481	ATATGGTCGTCCTTTATTAGGTTGTACAATTAACCAAAATTGGGACTATCTGCTAAAAA	540
Sbjct	65449	ATACGGTCGTCCTTTATTAGGTTGTACAATTAACCAAAATTGGGACTATCTGCTAAAAA	65508
Query	541	CTATGGTAGGGCTGTTTATGAATGTCTTCGTGGTGGACTTGATTTACCAAAGATGATGA	600
Sbjct	65509	CTATGGTAGAGCTGTTTATGAATGTCTTCGTGGTGGGCTTGATTTACCAAAGATGATGA	65568
Query	601	GAATGTAAACTCTCAACCCTTTATGCGTTGGAGAGATCGATTCTTATTTGTAGCAGAAG	659
Sbjct	65569	GAATGTAAACTCTCAACCCTTTATGCGTTGGAGAGATCGTTTCTTATTCGTAGCAGAAG	65627

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