Supplemental Table 1 Information of the isolated *P. stipifolia* sequences (>200bp)

Clone No.	GenBank accession number	Length (bp)	Type	Clone No.	GenBank accession number	Length (bp)	Type
S2	MN587532	224	Retrotransposon (LTR/*Copia*)	S9	MN587533	528	Retrotransposon (LTR/*Gypsy*)
S10	MN587534	224	Retrotransposon (LTR/*Gypsy*)	S12	MN587536	457	Retrotransposon (LTR/*Copia*)
S13	MN587537	228	Retrotransposon (LTR/*Gypsy*)	S15	MN587538	346	Retrotransposon (LTR/*Copia*)
S16	MN587539	299	Retrotransposon (LTR/*Gypsy*)	S17	MN587540	255	Retrotransposon (LTR/*Copia*)
S19	MN587541	397	Retrotransposon (LTR/*Copia*)	S20	MN587542	203	Retrotransposon (LINE/*L1*)
S21	MN587543	308	Retrotransposon (LTR/*Copia*)	S22	MN587544	349	Transposon (TIR/*CACTA*)
S26	MN587545	301	Retrotransposon (LTR/*Gypsy*)	S31	MN587546	610	Retrotransposon (LTR/*Copia*)
S32	MN587547	605	Retrotransposon (LTR/*Copia*)	S33	MN587548	479	Retrotransposon (LTR/*Gypsy*)
S37	MN587549	228	Chloroplast sequence	S41	MN587550	283	Transposon (*MuDR*)
S43	MN587551	431	Retrotransposon (LTR/*Gypsy*)	S44	MN587552	461	Retrotransposon (LINE/*L1*)
S46	MN587553	329	Retrotransposon (PLE/*Penelope*)	S47	MN587554	455	Retrotransposon (LTR/*Gypsy*)
S48	MN587555	235	Transposon (TIR/*CACTA*)	S52	MN587556	306	mRNA
S53	MN587557	466	Retrotransposon (LTR/*Gypsy*)	S57	MN587558	553	Retrotransposon (LTR/*Gypsy*)
S67	MN587559	238	Transposon (TIR/*hAT*)	S70	MN587560	403	Transposon (TIR/*hAT*)
S71	MN587561	431	Tandem repeat	S82	MN587562	304	Transposon (TIR/*CACTA*)
S84	MN587563	355	Retrotransposon (LTR/*Copia*)	S85	MN587564	458	Retrotransposon (LTR/*Gypsy*)
S90	MN587565	290	Tandem repeat	S93	MN587566	272	Retrotransposon (LTR/*Gypsy*)
S99	MN587567	264	Chloroplast sequence	S112	MN587568	586	Retrotransposon (LTR/*Copia*)
S125	MN587569	411	Transposon (TIR/*CACTA*)	S126	MN587570	270	Retrotransposon (LTR/*Copia*)
S130	MN587571	215	Retrotransposon (LTR/*Gypsy*)	S133	MN587572	330	Retrotransposon (LTR/*Copia*)
S134	MN587573	308	Chloroplast sequence	S140	MN587574	454	Retrotransposon (LTR/*Copia*)
S143	MN587575	772	Retrotransposon (LTR/*Gypsy*)	S147	MN587576	257	Chloroplast sequence
S151	MN587577	628	Retrotransposon (LTR/*Gypsy*)	S155	MN587578	589	Retrotransposon (LTR/*Gypsy*)
S157	MN587579	309	Retrotransposon (LTR/*Copia*)	S158	MN587580	537	Retrotransposon (LTR/*Copia*)

S159	MN587581	294	Transposon (TIR/*CACTA*)	S161	MN587582	347	Retrotransposon (LTR/*Gypsy*)
S165	MN587583	606	Retrotransposon (LTR/*Gypsy*)	S166	MN587584	229	Retrotransposon (LTR/*Gypsy*)
S167	MN587585	239	Retrotransposon (LTR/*Copia*)	S170	MN587586	322	Retrotransposon (LTR/*Gypsy*)
S174	MN587587	512	Transposon (*Polinton*)	S175	MN587588	282	Retrotransposon (LTR/*Gypsy*)
L5	MN587589	385	Retrotransposon (LTR/*Copia*)	L14	MN587590	524	Tandem repeat
L15	MN587591	434	Tandem repeat	L16	MN587592	281	Retrotransposon (LTR/*Copia*)
L18	MN587593	1121	Retrotransposon (LTR/*Copia*)	L20	MN587594	1433	Retrotransposon (LTR/*Gypsy*)
L21	MN587595	295	mRNA	L25	MN587596	669	Retrotransposon (LTR)
L38	MN587597	770	Retrotransposon (LTR/*Gypsy*)	L39	MN587598	316	mRNA
L40	MN587599	988	Retrotransposon (Non-LTR/*Daphne*)	L48	MN587600	390	Retrotransposon (LTR/*Gypsy*)
L49	MN587601	390	Transposon (TIR/*hAT*)	L52	MN587602	938	Transposon (TIR/*CACTA*)
L55	MN587603	322	Transposon (TIR/*CACTA*)	L58	MN587604	285	mRNA
L59	MN587605	437	Retrotransposon (LTR/*Gypsy*)	L60	MN587606	551	Retrotransposon (LTR/*Gypsy*)
L62	MN587607	654	Transposon (TIR/*CACTA*)	L65	MN587608	1087	Retrotransposon (LTR/*Gypsy*)
L68	MN587609	618	Retrotransposon (LTR/*Gypsy*)	L70	MN587610	411	Retrotransposon (LTR/*Copia*)
L72	MN587611	338	Transposon (TIR/PIF-Harbinger)	L75	MN587612	432	Transposon (*MuDR*)
L78	MN587613	630	Transposon (TIR/*CACTA*)	L84	MN587614	342	Retrotransposon (LTR/*Copia*)
L91	MN587615	416	mRNA	L92	MN587616	280	Retrotransposon (LTR/*Gypsy*)
L93	MN587617	1231	Retrotransposon (LTR/*Gypsy*)	L95	MN587618	829	Transposon (*MuDR*)
L103	MN587619	467	Tandem repeat	L105	MN587620	371	Retrotransposon (LTR/*Gypsy*)
L106	MN587621	258	Retrotransposon (LTR)	L107	MN587622	704	Retrotransposon(PLE/*Penelope*)
L108	MN587623	514	Transposon (*MuDR*)	L115	MN587624	435	Retrotransposon (LTR/*Gypsy*)
L117	MN587625	428	Retrotransposon (LTR)	L119	MN587626	1058	Retrotransposon (LTR/*Copia*)
L124	MN587627	806	Retrotransposon (LTR/*Gypsy*)	L125	MN587628	688	Transposon (TIR/*CACTA*)
L128	MN587629	365	Transposon (*MuDR*)	L129	MN587630	420	Retrotransposon (LTR/*Gypsy*)
L130	MN587631	806	Retrotransposon (LTR/*Copia*)	L131	MN587632	319	Tandem repeat

L135	MN587633	399	Transposon (TIR/*CACTA*)	L136	MN587634	461	Tandem repeat
L144	MN587635	1042	Retrotransposon (LINE/*L1*)	L146	MN587636	738	Transposon (*MuDR*)
L147	MN587637	458	Transposon (TIR)	L148	MN587638	749	Retrotransposon (LTR/*Copia*)
L152	MN587639	570	Retrotransposon (LTR/*Gypsy*)	L154	MN587640	446	Retrotransposon (DIRs/*DIRs*)
L155	MN587641	338	Retrotransposon (LTR/*Gypsy*)	L159	MN587642	260	Tandem repeat
L164	MN587643	254	Retrotransposon (LTR/*Gypsy*)	L165	MN587644	443	Retrotransposon (LTR/*Copia*)
L167	MN587645	508	Retrotransposon (LTR/*Copia*)	L168	MN587646	873	Retrotransposon (LTR/*Gypsy*)
L169	MN587647	840	Retrotransposon (LTR/*Gypsy*)	L172	MN587648	338	Retrotransposon (LTR/*Gypsy*)
L175	MN587649	883	Tandem repeat				

Supplemental Table 2 Information of the isolated *P. stipifolia* sequences (<200bp)*

Clone No.	Sequence	Length (bp)	Type
S5	TCAACTTTTTAGCACATGCTATGTGGGTGAAATGATGATACCATGCCAACTTTCAACCTTTTCAGAGTTCATTTGAAGTGCTTTTCAATTTCAGGGTCATTTAGCTCAAAAAAATCAGTAAGTGA	125	Transposon (TIR/*CACTA*)
S7	AGCCCGGGCTTCGACGGAGAACTCCGCACCGAGTGACAACACCGTAAACCTTGGTGACCTAATACATGACACGTTCGACTATCTAAGGGATCTGTTTATGAGAAAATCAAAGTTTTGCTCGGGTCCAAGCTTGAGGTACATATTCATGCTCAACAA	156	mRNA
S23	AGAGGGGGAGAGGGCCTAGCCTATCGAAGACTAGCATCTTCAAGCAGTCTTGCAGCATCAGAAGAGAGTAGAGTATAGCAGCATATAATGTTGGTTGTATTATAGCAACTCCCCGAGATCCTTCCTCGACTATCCCGCGAGAAGGCGATCCCGAGAGCAGAAGTAACAGTTAA	173	Retrotransposon (LTR/*Gypsy*)
S30	CAAATGCCGAGCAAAATGGCAATTCTGATGGAAGTAGCAATGCGAATGCAAATCCAGATGCTGATACTGAAGAAAATGATCATTCGGAAGGAAATCCTCATCCTCGAGTTGCAAATCGAGTTGATCCTACAA	132	Tandem repeat
S36	TCTCCGGCGCGTCAGCTGTCTCCGCCGCGTCAGCTGTCTCCGTCGCGTCAGCCGACTCCGGCGGAGGAGGCCCCTCAGCAGAATCCTA	88	mRNA
S51	AATAGTCCACGAAACGTGTCAGAATCGGCCAAAACCGCGAGTGTTGATGACCGACATGTAAACGCACCCCGGGGTTCGTCAA	90	Tandem repeat

	TCGTGGAA		
S61	CCCTCGAATCTAGAGCTGTTTGGCGTTCCAATCCAGTTCCAACAATGCATTTCTCGGACCGAGAAAGCGGAACTGCTTGGCGCTGCATATTAGAACTCATTAAAGCCCGATTCGCATCATTGTGCTCAATAAA	133	Chloroplast sequence
S88	AGTCTAACTCTCTTCCTATGCATCGGCATGTCATAAAAGAACAATTCATGCACATCAAGTAAAGGCCAATGCATAGTATAAATAGTTTCTTGCAATTTTATCGTATTGGAAACATAGAGAGGTGGAGATGTAGTTCCTCTCTCATAATAATTGCAAGTAGGAGCAGCAAGCACATGCATATTAA	184	Retrotransposon (LTR/*Gypsy*)
S94	CTGGCATCGGTCAATATATATGTGGAAAAAATATTTCCAGTATCGAGGACACAAAATTTCATGGCATTCCGGAGAAAAGCATCACGGGAAAGTGAAATTCTTTGAAGGAGTGCCATATAATGGACCCGTGTTCA	134	Tandem repeat
S95	CAAAAGACTTCCACCCCCGCTTCAGGAACATGAAGCCAGCGGGGAGAACTCGGTCGCCACCCAGGAGGGGCCGTTGCAGCAGCCGTCTGCA	91	mRNA
S102	CCAATTGTTCCAAAGGTAGAATTGATGGCTTAAAATGATGTTTCTTGTTAATTCTGCTGTTAATGCTCATGCTTCTTTACTCAACTCTTCTGCTTCTTTCTCTGTTATTCAGAACCTGGAGAATGGCTATCATGAGGCTGAAGAGCCAAAGGTTTGGATTTGACACCTTTATATTTCTATTTAGTCTCTA	190	Retrotransposon (Non-LTR/*Tx1*)
S105	TTTTGCAAACGATTTGTTGGATTGATGCAAGTGATACGGCATTGGAAAACTATGGAAAACGCCTAACTTTTGCGTATAGAAAGTTTTTTCTAATTTCTTCTGGTTTAAATTCAAATTCGAATATGGTGAAAGTTGGTTTCAAACGCGATTTTTTTAAAGTTTGTCGA	168	Transposon
S108	GACCAAGCAACCACGAAGGTCAGAAGAAATGAAAGTGCAAGTACGGAAGTGAAATGAAAGGGGCTAAACTAACCGCCATCATGCGATTGGAGTGCTCTGACTGCAGCAAGGCAGCTCTCGTCTGCCACGCCATGTTCTCCTGGCGTGTGTA	151	Transposon (TIR/*CACTA*)
S110	CCCAAGGGGAGGACAGCTTGTGCTGGCCGGTTGTCCGCTGGACCAGCCGGAGCACGAGGTCGCCCTCTCAAAATGCGAGAGGGTGGATCTTCTTGCTGTGGTAGCGACGCAGGA	114	Retrotransposon (LTR/ *Gypsy*)
S116	TGAGGGAAAATTGCTACTGTCCTACAAAACTCTGCGCTTGGAGGCCCAACAACGTCTACAAGAAGAAGGTTGCGTAGTAGACATCAAGCTCTTTTCTGGCGCCGTTGCCGGGGAGGTGAGTGCTTGAAGGTATATCTTTAGATCTA	146	Retrotransposon (LTR/ *Gypsy*)
S119	AAAACCTTTGGGATAGTGTGGATACTTGTTGATTCAATTCTGTGCAAAAACAGAAACTTTTGCCTCCAGTGTTTAATTTCCCAGATTTTACTGGGGCGTAAAAAAATTCTGAAATTTTTACACAGTATTTATATGAAATTTTTTGACGTTGTCCTAATTTTTCAGAATTTTTAGAGTTCCATAAGTATGGTAGTA	195	Retrotransposon (LTR/*Gypsy*)
S124	TGTGCTAAGCAGAAATACTGCTTGTGCATCCAAAATCCTTAAACCCAGTTTTGCCTTATGAGTCCACTATATCTACCTATATGCGGTATTTCAATGCCGTTCCAAGTAAATTTGCGTGTGCCAACTCTAAATTTCAAAATAATTTTTCCGTTTTGTGTGCCCGTACCGCT	182	Retrotransposon (LTR/*Gypsy*)

	CATGAAGTGGCA		
S156	CGTGGCTCCTTCTGACCTATTTCCAACGCTATAAATTCATTTTCATGGAGAAAAAATAGGAGAGGAAGTTTTATTGCGTTTCACG ATACGGAGCCGCTGCCACCTCCTGTTCTTCATCGGGAGGCCAGATCTGGAGTCCGTTCAGGGCTCCGGAGAGGGGGATCTTCC GGCATCGTCATCAA	182	Retrotransposon (LTR/*Gypsy*)
S163	CCCGCCAGCCACTGTTCCCGCCTTCTCTCTCTCTCGTTTAAACAGAAGGGGCCCCACCTGTCATTCTCTCTCTCGCTCCCGAAC CGGTA	89	Retrotransposon (LTR/*Gypsy*)
L26	GTTTGAATTTTGAAGGCGGGAAGATAGTAATGGCGCACCATGGGCAGGTGCGCCATTACTGAGTTTGATTTTTTTTGAATTTTTT TGCCTCTCCAGATCTTGAAAGCCCCGTAACTTTTTTTCTGTTAGGTTTTTGAGGATTCTAAAAATCTTCAACGGGTTCCCCCGGT TGAATTCGGATATAACTA	188	Tandem repeat
L47	TGTTTGTTTGCCGTCCGCAGGCAGACGGCAAAGTCTGCCGTTAGCCACCTAACGGGGCTAACAGCTATACTTTGCCGTCCAGA ACCTTTGCCGTCAGCTTAGCCAGGAAGGAGGACGGTAAACGTCTTTGCCGA	134	Transposon (TIR/*CACTA*)

* Sequence with length less than 200 nucleotides is not accepted by GenBank.

Supplemental Table 3. List of 11 FISH-positive clones identified in this study in *P. stipifolia*

Clone No.	LS (bp)	Sequence	Superfamily
S5	125	TCAACTTTTTAGCACATGCTATGTGGGTGAAATGATGATACCATGCCAACTTTCAACCTTTTCAGAGTTCATTTGAAGTGCTTTTCAATT TCAGGGTCATTTAGCTCAAAAAAATCAGTAAGTGA	TIR/*CACTA*
S13	228	TCTCTGTTGAGCCTAGGTAGGACTACGTCGTGTCGATCAGCCGAGGCCAGGCATGACCCGAAAAAGTGTGTCCGGCCAGAGTTAATC GAGCGTGTTGGGTAAGTTGGTGCACCCCTGCAGGGAAGTTATCTATTCGTATAGCCGTGTCCACGGTAACGGACGCTCAGAGAGTATC CCGATCTACTACAACTAGAACTGGATACCTGTGTTACTTAATTAATATGTTAA	LTR/*Gypsy*
S17	255	CGAAGGACTAGCCTCACTCGGGCAGATCTTCAAGAAGTAGGCGATCTCCTTGCCCATACAAACTCCTTGGTTCAACTCCACATCATGT CGGAGGCTCCCAAGTGACACCTAACCAATATAGGAGACACCACTCTCCAAAAGGTAATAGACGGTGTGTTGTTGATGAACTCCTTGCT CTTGTGCTTCAAATGATAGTCTTCCCAACACTCAAACAACTCCTCACAGATTTGGCTATGGTGGAAGAAGGATTTGAGA	LTR/*Copia*
S21	308	CCTTTTTATGGCTGAAATTTCAGCCCCTCCACCCCTCCTTCTCCTATAAATAGAGGTGGAGAGGAGCTCTCCACACTCACTCCAACTCT	LTR/*Copia*

		CTCACCAAATGGCATGCATGATCTGCCTTTCTTCTCTCCCTCACACGAAACTGTTTCGTAAAGCCGAAAGGCTGTCTGGGTTTCGGTGGGAACTAGTTCTGGACGGCGAAGCCCTGCCGGATAGCTGACACCGTATGTGTGCAACCCCGTAGAGATGTCGTAGTTTCGATCCTTTTTGCCCGAGGGACTATTCGAGTGCCCTCCCGAAGGGCTGTCCGA	
S23	173	AGAGGGGGAGAGGGCCTAGCCTATCGAAGACTAGCATCTTCAAGCAGTCTTGCAGCATCAGAAGAGAGTAGAGTATAGCAGCATATAATGTTGGTTGTATTATAGCAACTCCCCGAGATCCTTCCTCGACTATCCCGCGAGAAGGCGATCCCGAGAGCAGAAGTAACAGTTAA	LTR/*Gypsy*
S158	537	GGTGAAGTGTCATGTAGTCGACGTTGTTAGGACCGAGAGTATATCGACCAGAGGGGGGGTGAATGGGAGATTCAAAATTTCTTTCGAAAGTTTTGAACTGATCTCAATCACAGCAGCGGAATAATGTAAAGAATGAAATGTACTGAATCAATTTTCGTCATCAGAAGCATATTCCTTGATGAAAGAAGTAATGACAGCGCGAGCTAGGGAAATCACAGGTTTAACTACGATGAGAGTAATGCAACATGCAACCAGATGCAGTAGTACGAGGCCGAACATACCCCATCGAGCTGAACATGTGCTAATCTCGGAAGTGTTGTCCGTTCGGCGCTAGATCGGAATGGATCATGATTGGATCGCGAAGAGTACGACTACATCAACCGCGTTACATACACTAACGCTTTCGATCTACAAGGGTATGTGGATCCAACTCTCCTCTCGTAGATGTGCATCTCCTAGATTGATCTTGGTGAGCGTAGGAAATTTTTTGTTTCCCATGCAACGTTCCCCAACAGTGGTATCAGAGCTAGGTCTTGA	LTR/*Copia*
S159	294	TAACAGGGTGCTTGGGTCAGCCTTGACTTTGAAGGGAGGAATTTCATGAAACTTTTCATAATCTTCGGACATGTCTGTCTTGCCCTCCACTCCCACGATGTCTCTTTTTCCTGAAAGAACTATGTGGCGCTTTGGCTCATCGTATGATGTATTCGCTTCCTTATCTTTTCTTTTTCTCGGTTTGGTAGACATGTCCTTCACATAGAAAACCTACGCCACATCATTGGCTAGGACGAATGGTTCGTCTGTGTACCCAAGATTGTTCAGATCCACTGTTGTCATTCCGTACTGTGA	TIR/*CACTA*
S161	347	GAATAAGATCCTTCAAGTAAGTTGTCATCGGTGCAAAAAGCAATAAAAATTCCTCCTAAAATATGTGTGATCTTTTATTGCAAGGGAAAATAAGCATTGTACGAACTTGTGATGGTAAAGAAATAAAAGCGACGGACTGCATAATAAAGGTTGCTATCACAAGGGGCAATATAACGTGATGTTCCTTTGCATTAAGAGCTTATGTATCCAACAACAAAAAGCGCATGACAACCTCTGCTTCCCTCTGCGAAGGGCCTATCTTTTACTTTTATGCATTTACTTTTCTGTATTTACTTTTATGCAAGAGTCATTAATGTTCATCCCTATTCCACCCTATTTATTCTTTA	LTR/*Gypsy*
S166	229	AGCCCTCCGTGATCGATTCCCCCTCCAGCAGAGTGCCAGAACAGGGCTCCAGATGGGATCGCTTCGGAACAGAGGCTTGTGGCGGCGATAAAATTGTTTTGGGTCTCACTCTGAGGGTTTCAGGATTTATGGGAATTTATAGGCCAAGAATTAGGGCAAATGGAGCCACAGGGGGCCCACAAGCTAGGGTGGCGCGCCCTACCCCCAGGGCAGGCCCCCTGCCTTGTGA	LTR/*Gypsy*
S170	322	TGATCACCGGCAGCACCACCATCTGGCCTTCCGGGAACAAGCCGGGCTTCGCCTAGGCGCCCCTTTTGCCCTCCTTGCACTCGATGTAAACCCTGGGGAAGGGCCAATAAAATGTAACCGAGTACTTTTTTAATGAATATCTATTGTTTGCCAGGCTTAGATGAATGCATGCCGTTCCCCCTTGTTTTATTTTGCCTTTGTATGATTACGTTCCCTACGCTGTTTGGAAACTTGCCGGTGCCCACACTTGACGCGAGCGCTTTGAG	LTR/*Gypsy*

		GAACAGGTCCTTAGCAGCCTGCTGGAAGTGCCACCGCTGGCAAGGTAACTTGCCGA	
S175	282	TCAAATCATTCAAGCATTCAATCATAATAGCATTATGTTTCAATTGATCACTTGTCTATTAAAGTTTTCTTGCTTAACGATAAAATTATCAA ATTCATCTAAGCACCAACTTGGAGATTTATTATAAGGAATATCACCCTCATCAAACCTATAAAGAGAGTCTACCTCTACTCCCTGTGATT GATAACCCACAAGTATAGGGGATCAATTGTAGCTTTTTCGATAAATAAGAGTGTCGAACCCAACGAGGAGCTAAAGGTAGAATTAATAT TCCCTTCAAGA	LTR/*Gypsy*

LS: Length of the sequence