

Table S5. Differentially expressed genes (DEGs) identified in pairwise comparison between preparation of summer diapause and winter diapause in *P. melete*.

geneID	log2(foldchange)	control_rpkm	treat_rpkm	noiseq_probility	Up/Down
Unigene19936	3.982793699	4.830807822	76.3765665	0.831744104	Up
Unigene11527	6.444001904	0.123745732	10.77377979	0.907712899	Up
CL959.Contig4	7.081139704	0.03	4.062157043	0.829055103	Up
CL10099.Contig1	5.085773159	0.221244616	7.513511976	0.825136414	Up
Unigene36025	6.889977011	0.03	3.55804146	0.808872493	Up
CL3796.Contig1	7.791511698	0.03	6.6466068	0.889696596	Up
Unigene14866	3.495311259	3.144617985	35.46185315	0.805491604	Up
Unigene2593	4.898885232	19.80360006	590.8204881	0.897908622	Up
CL5242.Contig1	8.425231606	0.03	10.31261224	0.925774523	Up
Unigene18069	4.431996819	1.200677803	25.91734232	0.831728997	Up
CL2480.Contig1	2.840609965	202.5386779	1450.830831	0.808845301	Up
Unigene3135	7.041807454	0.03	3.952906319	0.82566515	Up
Unigene26748	4.933209569	0.238489454	7.286403797	0.804083655	Up
Unigene16984	4.048102008	1.649326722	27.28392363	0.815679592	Up
Unigene6383	2.889380413	19.9169538	147.5751011	0.804500601	Up
CL2480.Contig4	2.854079507	98.86661005	714.8471415	0.808250095	Up
Unigene2354	4.567013697	1.437958298	34.084302	0.848128879	Up
Unigene1357	4.703569044	0.356811726	9.29724952	0.801666576	Up
Unigene16580	3.404252023	5.73427712	60.71005816	0.811905927	Up
Unigene21672	7.79777523	0.03	6.675526104	0.890098436	Up
CL3951.Contig1	3.72215898	1.943360843	25.64690419	0.803397809	Up
CL3730.Contig2	7.579137038	0.03	5.736788573	0.874166863	Up
Unigene22368	8.438788772	0.03	10.40997777	0.926288152	Up
CL7857.Contig1	4.135179331	2.59267717	45.55766531	0.830892083	Up
Unigene17222	6.927424415	0.03	3.651605027	0.812857652	Up
CL3949.Contig2	2.663301418	124.8184273	790.7010595	0.800887068	Up
Unigene13679	4.878930681	0.606069542	17.83310394	0.854337751	Up
Unigene22472	4.708746425	0.579113355	15.14389175	0.831378521	Up
CL62.Contig2	7.855261009	0.03	6.94689032	0.893932527	Up
Unigene32203	8.260622788	0.03	9.200607346	0.917683351	Up
Unigene16049	6.82541802	0.03	3.402332953	0.800288841	Up
Unigene17962	2.83303883	21.61929716	154.0533823	0.803343425	Up
Unigene7060	4.724952428	0.604436475	15.98464785	0.834964862	Up
Unigene873	8.133118294	0.03	8.422360367	0.910728206	Up
CL6673.Contig1	4.077518471	1.649908833	27.85577945	0.817338313	Up
CL1430.Contig3	5.694870816	0.15688856	8.126774606	0.856963303	Up
Unigene15674	5.059965325	0.645611412	21.53637172	0.88204352	Up
Unigene605	8.086560361	0.03	8.154897098	0.908099632	Up
Unigene19432	4.224413527	7.387676204	138.0966165	0.84537643	Up
CL6785.Contig1	7.782383002	0.03	6.604682973	0.88883249	Up
CL1822.Contig4	7.328269557	0.03	4.821145156	0.853540114	Up
CL6074.Contig6	5.822384393	0.195870524	11.08361505	0.884409236	Up
Unigene3251	7.151166805	0.03	4.26419412	0.836693073	Up
Unigene36148	9.525889592	0.03	22.11565251	0.96382539	Up
Unigene506	5.881272009	0.214140807	12.62230651	0.895352561	Up
CL20.Contig2	4.597757966	2.480015354	60.05061092	0.860063207	Up
Unigene12644	4.763000611	1.195837657	32.4697002	0.862190236	Up
CL3819.Contig1	7.188792167	0.03	4.376866795	0.84067219	Up
Unigene34325	6.926582315	0.03	3.649474211	0.812857652	Up
Unigene20268	4.177343082	2.350980327	42.53579604	0.831324136	Up

CL139. Contigl	7. 004017545	0. 03	3. 850708343	0. 820637625	Up
CL1434. Contigl	8. 339315374	0. 03	9. 716398664	0. 921611104	Up
CL3078. Contigl	-7. 181762091	4. 35559074	0. 03	0. 839663059	Down
Unigene10269	-3. 523788046	94. 62286061	8. 226785487	0. 819933651	Down
Unigene1440	-2. 625796036	6958. 129818	1127. 325051	0. 801569893	Down
CL10274. Contig3	-11. 09991007	65. 84565695	0. 03	0. 987304292	Down
Unigene14942	-5. 368181425	50. 67575409	1. 226920969	0. 919239345	Down
Unigene10219	-3. 039074358	391. 8751278	47. 6754893	0. 813147702	Down
CL1289. Contig4	-6. 980691817	63. 9089473	0. 506015752	0. 976717486	Down
CL8427. Contigl	-2. 961145049	298. 5739109	38. 34055327	0. 809543232	Down
CL9771. Contigl	-6. 846994841	3. 453600369	0. 03	0. 803440108	Down
CL1289. Contigl	-9. 246135731	18. 21736055	0. 03	0. 956441214	Down