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APPENDIX

APPENDIX

Table 4.2 Classification function coefficients of 9 categories based on 35 vegetative and reproductive characters.

Character	Categories								
	1	2	3	4	5	6	7	8	9
LL	6885.563	6929.381	6745.762	6731.514	6704.820	6748.684	6778.235	6754.513	6745.639
LW	24.720	78.271	28.894	25.999	40.681	25.659	10.442	7.831	14.589
DBL	-10668.539	-10744.322	-10456.802	-10412.222	-10400.220	-10460.210	-10493.619	-10457.848	-10444.935
LS	36916.158	37230.884	36332.151	36171.799	36105.454	36321.644	36421.033	36360.658	36282.467
PETL	75.238	52.508	53.229	47.598	47.076	43.004	49.058	46.761	46.695
PETW	553.504	449.808	557.004	489.078	549.364	553.628	546.723	539.432	551.612
PECL	93.527	93.774	100.233	99.538	94.833	102.810	104.003	97.760	99.019
PECW	-344.823	-287.532	-325.270	-304.006	-227.444	-295.124	-313.619	-319.215	-307.438
SPL	100.171	2.164	-9.983	-13.578	1.092	-16.132	-7.059	-21.818	-15.577
SPW	35.290	110.494	116.783	121.468	95.012	104.246	89.386	124.499	112.898
DCO	359.043	253.702	251.116	244.067	235.263	250.331	260.326	276.808	268.672
COL	-71.986	31.039	3.540	-8.620	-6.397	-1.477	16.930	-19.668	-9.799
COAL	62.211	49.368	122.676	115.665	125.030	122.985	120.607	111.521	111.542
COLW	338.958	431.755	350.944	380.469	372.657	377.101	338.008	361.136	352.379
COBW	-707.772	-743.168	-674.570	-687.125	-648.170	-682.971	-671.837	-680.893	-673.455
DCN	-71.955	-65.177	-106.175	-93.295	-83.563	-125.275	-130.357	-115.129	-113.876
DCNR	512.238	361.137	414.633	409.072	361.809	444.990	460.591	431.667	423.260
DCNL	-335.100	-269.663	-311.589	-295.755	-265.356	-291.887	-310.402	-285.805	-296.398
POW	2.897	-7.419	3.721	-4.436	-4.082	-.969	3.711	-3.795	-1.565
COPL	-6.606E-02	14.450	2.471	3.024	3.696	3.504	-.790	1.926	1.700
LCNL	22.821	22.211	26.046	19.683	24.808	24.815	26.836	22.458	22.934
COPW	-1.830	-22.227	-2.048	-.136	-1.699	-.300	-1.797	1.733	1.016
(Constant)	-13420.255	-13256.303	-12755.137	-12522.551	-12587.179	-12746.752	-12824.037	-12663.297	-12639.083

Fisher's linear discriminant functions

Table 4.3 Poolled within canonical structure of 9 categories based on 35 vegetative and reproductive characters.

Character	Discriminant function							
	1	2	3	4	5	6	7	8
LW	**.615**	-.200	.156	-.289	-.215	-.296	-.049	.121
CNLW[a]	**.395**	-.076	-.219	.196	-.007	-.161	-.110	.102
POLL[a]	**.385**	-.126	-.210	.296	-.058	-.138	.067	.187
PETW	**.379**	-.133	-.067	-.273	-.244	-.143	.314	.002
PECL	**.343**	-.147	-.178	.167	.045	-.316	-.314	.036
COL	**.315**	.057	-.205	.256	.104	.063	-.211	-.031
DCO	**.314**	.135	-.202	.265	.057	.045	-.119	-.084
COAL	**.311**	-.087	-.210	.197	-.045	.006	-.304	.135
COLL[a]	**.276**	.079	-.204	.247	.014	-.004	-.162	-.011
DCOT[a]	**.275**	.061	-.194	.132	.072	.084	-.170	-.001
DBCN[a]	**.267**	-.042	-.049	.171	-.066	-.225	-.150	.060
COBW	**.246**	.025	-.227	.154	-.033	.186	-.162	.044
COTL[a]	**.212**	-.004	-.108	.143	.180	.127	-.181	-.042
SPL	.132	**.608**	-.053	.207	-.249	.119	-.209	.101
DBCL[a]	.117	**.203**	-.110	.187	.064	-.011	.046	-.148
RCCD[a]	-.128	.128	**.280**	.040	-.154	-.132	-.020	.177
RCRD[a]	-.045	.141	**.256**	-.198	-.068	.197	-.119	.252
DCNR	.313	.170	-.147	**.482**	-.050	-.252	-.210	.027
COPL	.252	-.101	.119	**.456**	-.053	-.175	.205	.144
DCNL	-.126	.159	.304	**.419**	-.174	.108	-.154	.002
DCOR[a]	.168	.167	-.102	**.343**	-.029	-.118	-.232	-.009
LCNL	.223	-.088	.050	**.339**	.186	.250	.142	.170
COLW	.248	.022	-.070	**.339**	.008	-.083	-.195	.044
COPW	.056	-.045	-.281	.373	**-.500**	-.251	-.014	.082
LL	.326	-.043	-.090	-.425	.050	**-.433**	-.214	.041
DBL	.112	-.040	-.083	-.358	.048	**-.378**	-.223	.239
UCNL[a]	.145	-.060	.107	.308	-.178	**-.362**	.148	.061
CNLS[a]	.183	-.181	-.062	.039	-.066	**-.260**	.020	-.087
PECW	.288	.005	-.124	.145	-.140	**.199**	-.338	-.231
DCN	.208	.238	.074	.225	-.090	-.048	**-.250**	.209
CNLL[a]	.197	.135	-.007	.211	-.026	-.051	**-.245**	.181
LS	-.364	.027	-.001	.009	.050	-.026	**-.090**	.470
PETL	.170	.177	-.012	-.308	-.017	-.216	-.054	**.392**
POW	.310	-.063	-.314	.279	.036	-.038	.132	**.367**
SPW	-.013	.206	.061	.150	-.157	-.040	-.019	**.249**

Note: The number in **bold** letter represent the largest absolute correlation between each variable and any discriminant function

a This variable not used in the analysis.

Table 4.4 Summary of canonical discriminant function of 9 categories based on 35 vegetative and reproductive characters.

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation	Wilks' Lambda	Chi-square	df	Sig.
1	3.242	46.6	46.6	.874	.018	2081.849	176	.000
2	1.538	22.1	68.7	.778	.076	1334.090	147	.000
3	1.165	16.7	85.4	.734	.193	852.176	120	.000
4	.499	7.2	92.6	.577	.417	452.435	95	.000
5	.299	4.3	96.9	.480	.625	243.072	72	.000
6	.102	1.5	98.4	.305	.812	107.554	51	.000
7	.059	.9	99.2	.236	.895	57.150	32	.004
8	.054	.8	100.0	.227	.948	27.408	15	.026

Table 4.5 Classification function coefficients of 4 categories based on 35 vegetative and reproductive characters.

Character	Categories			
	1	2	3	4
LL	-32.551	-21.140	-33.345	-27.300
LW	19.129	3.181	.835	7.076
DBL	10.990	7.634	25.380	15.369
PETW	313.274	307.822	303.127	316.138
PECL	-9.957	-8.865	-14.263	-12.991
SPL	219.543	230.744	212.748	218.768
SPW	26.572	11.451	47.096	36.375
COL	118.161	140.084	116.587	117.842
COLW	11.983	-18.493	5.067	-3.752
DCNL	-71.278	-84.283	-64.834	-74.570
CNLS	1347.180	1358.937	1323.301	1321.371
CNLW	-131.516	-123.252	-152.144	-141.066
RCRD	1036.232	1038.641	1066.771	1072.125
RCCD	320.071	315.556	309.726	301.076
POLL	6.237	8.240	8.549	7.887
POW	33.143	36.159	28.521	31.120
COPL	-32.516	-37.452	-33.924	-34.074
LCNL	57.570	60.055	55.604	55.884
COPW	19.408	17.498	21.293	20.635
(Constant)	-2096.938	-2119.871	-2016.553	-2039.137

Fisher's linear discriminant functions

Table 4.6 Poolled within canonical structure of 4 categories based on 35 vegetative and reproductive characters.

Character	Discriminant function		
	1	2	3
LW	**.597**	.009	-.474
CNLW	**.520**	.050	.239
PECL	**.403**	.100	.152
POW	**.361**	.064	.263
POLL	**.355**	.075	.251
LS[a]	**-.350**	-.010	.085
LL	**.329**	-.328	-.230
DCO[a]	**.329**	.055	.281
COAL[a]	**.323**	-.004	.136
DBCN[a]	**.317**	.174	.242
CNLS	**.299**	.143	.169
DCNR[a]	**.294**	.257	.284
DCOT[a]	**.280**	-.107	.120
COLL[a]	**.275**	.064	.265
COBW[a]	**.263**	.048	.173
COLW	**.239**	.223	.237
COPL	.248	**.485**	.088
DCNL	-.221	**.467**	.094
UCNL[a]	.138	**.401**	-.078
COPW	.116	**.295**	-.030
DBL	.128	**-.274**	-.154
RCCD	-.206	**.252**	-.039
DCN[a]	.119	**.153**	.109
SPW	-.098	**.129**	.018
PETW	.399	-.131	**-.416**
COL	.313	.030	**.321**
DCOR[a]	.145	.175	**.281**
LCNL	.225	.247	**.275**
DBCL[a]	.106	.101	**.273**
PECW[a]	.228	-.030	**.266**
COTL[a]	.208	-.038	**.243**
PETL[a]	.105	-.098	**-.188**
CNLL[a]	.147	.102	**.186**
RCRD	-.142	-.059	**-.148**
SPL	-.078	-.020	**.147**

Note: The number in **bold** letter represent the largest absolute correlation between each variable and any discriminant function

a This variable not used in the analysis.

Table 4.7 Summary of canonical discriminant function of 4 categories based on 35 vegetative and reproductive characters.

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation	Wilks' Lambda	Chi-square	df	Sig.
1	2.713	75.3	75.3	.855	.130	1027.956	57	.000
2	.545	15.1	90.5	.594	.482	367.405	36	.000
3	.343	9.5	100.0	.505	.745	148.318	17	.000

Table 4.8 Classification function coefficients of 3 categories based on 35 vegetative and reproductive characters.

Character	Categories		
	1	2	3
LW	-52.854	-12.564	-54.597
LS	442.812	492.772	554.384
PETL	29.370	7.669	2.659
PETW	306.529	205.671	316.067
PECL	-27.143	-25.872	-16.311
SPL	196.675	102.985	86.620
SPW	-7.905	58.102	55.449
DCO	231.209	122.270	120.460
COL	-270.374	-165.666	-200.234
COLL	-135.144	-90.711	-84.865
COAL	102.254	69.774	136.433
COLW	45.274	102.515	54.330
COBW	-47.353	-65.717	-14.506
DCN	102.335	104.234	58.771
DCNR	426.471	301.034	349.626
DCNL	-93.637	-46.082	-73.920
POW	21.544	14.832	19.056
COPL	2.820	14.307	4.468
COPW	24.488	3.321	24.629
(Constant)	-1268.990	-894.289	-987.442

Fisher's linear discriminant functions

Table 4.9 Poolled within canonical structure of 3 categories based on 35 vegetative and reproductive characters.

Character	Discriminant function	
	1	2
SPL	**.600**	.238
DCN	**.350**	-.020
DCNR	**.334**	.158
DCO	**.288**	.132
DCOR[a]	**.269**	.168
CNLL[a]	**.257**	.026
PECW[a]	**.249**	.125
PETL	**.237**	-.038
COL	**.222**	.108
COTL[a]	**.213**	.045
DCOT[a]	**.211**	.129
LS	**-.198**	.110
COLW	**.183**	.046
SPW	**.179**	.062
CNLW[a]	**.177**	.103
LL[a]	**.165**	-.099
COLL	**.162**	.122
DBCN[a]	**.150**	.037
DBCL[a]	**.142**	.065
PETW	**.111**	-.048
PECL	**.087**	.051
DBL[a]	**.060**	-.047
COPW	.014	**.454**
LW	.176	**-.250**
RCRD[a]	.092	**-.207**
POW	.123	**.199**
COBW	.158	**.170**
RCCD[a]	.041	**-.163**
POLL[a]	.124	**.142**
LCNL[a]	.125	**-.136**
COAL	.110	**.125**
COPL	.114	**-.116**
DCNL	.088	**-.095**
UCNL[a]	.054	**-.054**
CNLS[a]	-.008	**.027**

Note: The number in **bold** letter represent the largest absolute correlation between each variable and any discriminant function, Character with superscript [a] indicated character not used in the analysis.

Table 4.10 Summary of canonical discriminant function of 3 categories based on 35 vegetative and reproductive characters.

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation	Wilks' Lambda	Chi-square	df	Sig.
1	1.598	67.7	67.7	.784	.218	794.694	38	.000
2	.764	32.3	100.0	.658	.567	296.242	18	.000

BIOGRAPHY

Mr. Manit Kidyue was born on April 4, 1976, in Phetchaburi Province. He was graduated in Botany from Faculty of Science, Chulalongkorn University in 1998. In 2000, he received his Master of Science in Botany from the Department of Botany, Faculty of Science, Chulalongkorn University, then continued his study in Biological Science Ph.D. Program, Faculty of science, Chulalongkorn University from 2001-2004.