

Phenotyping and SSR markers as a tool for identification of duplicates in lettuce germplasm

MICHAL SOCHOR, MICHAELA JEMELKOVÁ, IVANA DOLEŽALOVÁ

*Centre of the Region Haná for Biotechnological and Agricultural Research,
Department of Genetic Resources for Vegetables, Medicinal and Special Plants,
Crop Research Institute, Olomouc, Czech Republic*

Electronic Supplementary Material (ESM)

Table S2. Genotype assignment based on phenotypic and SSR data under different thresholds (T; T = 0 does not allow any variation within genotype, T = 1 allows for one difference, etc.)

Acc. and Ind. No.	Phenotypic data							SSR data								
	T=0	T=1	T=2	T=3	T=4	T=5	T=6	T=0	T=1	T=2	T=3	T=4	T=5	T=6	T=7	T=8
5/1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5/2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5/3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
9/1	2	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1
9/2	2	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1
9/3	2	2	1	1	1	1	1	2	2	2	2	1	1	1	1	1
14/1	3	3	1	1	1	1	1	3	3	3	3	1	1	1	1	1
14/2	3	3	1	1	1	1	1	4	3	3	3	1	1	1	1	1
14/3	3	3	1	1	1	1	1	4	3	3	3	1	1	1	1	1
18/1	4	4	1	1	1	1	1	4	3	3	3	1	1	1	1	1
18/2	4	4	1	1	1	1	1	3	3	3	3	1	1	1	1	1
18/3	4	4	1	1	1	1	1	3	3	3	3	1	1	1	1	1
21/1	5	5	2	2	1	1	1	5	4	4	4	2	2	2	2	1
21/2	5	5	2	2	1	1	1	5	4	4	4	2	2	2	2	1
21/3	5	5	2	2	1	1	1	5	4	4	4	2	2	2	2	1
27/1	6	6	3	3	2	1	1	6	5	5	5	1	1	1	1	1
27/2	6	6	3	3	2	1	1	6	5	5	5	1	1	1	1	1
27/3	6	6	3	3	2	1	1	7	6	5	5	1	1	1	1	1
28/1	7	7	1	1	1	1	1	8	7	6	6	1	1	1	1	1
28/2	7	7	1	1	1	1	1	9	8	6	6	1	1	1	1	1
28/3	7	7	1	1	1	1	1	9	8	6	6	1	1	1	1	1
32/1	8	8	1	1	1	1	1	10	9	7	7	3	3	3	1	1
32/2	8	8	1	1	1	1	1	10	9	7	7	3	3	3	1	1
32/3	8	8	1	1	1	1	1	10	9	7	7	3	3	3	1	1
279/1	9	9	1	1	1	1	1	6	5	5	5	1	1	1	1	1
279/2	9	9	1	1	1	1	1	6	5	5	5	1	1	1	1	1
279/3	9	9	1	1	1	1	1	6	5	5	5	1	1	1	1	1
716/1	10	10	1	1	1	1	1	11	10	3	3	1	1	1	1	1
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716/3	10	10	1	1	1	1	1	11	10	3	3	1	1	1	1	1
717/1	11	3	1	1	1	1	1	12	11	3	3	1	1	1	1	1
717/2	11	3	1	1	1	1	1	12	11	3	3	1	1	1	1	1
717/3	11	3	1	1	1	1	1	12	11	3	3	1	1	1	1	1
718/1	3	3	1	1	1	1	1	13	12	8	8	1	1	1	1	1
718/2	3	3	1	1	1	1	1	14	13	8	8	1	1	1	1	1
718/3	3	3	1	1	1	1	1	14	13	8	8	1	1	1	1	1
721/1	12	11	1	1	1	1	1	15	14	9	9	4	1	1	1	1
721/2	12	11	1	1	1	1	1	15	14	9	9	4	1	1	1	1
721/3	12	11	1	1	1	1	1	15	14	9	9	4	1	1	1	1
737/1	13	8	1	1	1	1	1	16	15	10	10	1	1	1	1	1
737/2	13	8	1	1	1	1	1	17	15	10	10	1	1	1	1	1
737/3	13	8	1	1	1	1	1	17	15	10	10	1	1	1	1	1
738/1	14	8	1	1	1	1	1	18	16	10	10	1	1	1	1	1
738/2	14	8	1	1	1	1	1	18	16	10	10	1	1	1	1	1
738/3	14	8	1	1	1	1	1	18	16	10	10	1	1	1	1	1
834/1	15	12	1	1	1	1	1	19	17	11	11	1	1	1	1	1
834/2	15	12	1	1	1	1	1	19	17	11	11	1	1	1	1	1
834/3	15	12	1	1	1	1	1	19	17	11	11	1	1	1	1	1
1139/1	16	13	4	1	1	1	1	20	18	12	12	5	4	4	3	1
1139/2	16	13	4	1	1	1	1	20	18	12	12	5	4	4	3	1
1139/3	16	13	4	1	1	1	1	20	18	12	12	5	4	4	3	1
1224/1	17	12	1	1	1	1	1	21	19	13	13	6	5	1	1	1
1224/2	17	12	1	1	1	1	1	21	19	13	13	6	5	1	1	1
1224/3	17	12	1	1	1	1	1	21	19	13	13	6	5	1	1	1
1266/1	18	14	5	4	3	1	1	22	20	14	14	7	6	3	1	1
1266/2	18	14	5	4	3	1	1	22	20	14	14	7	6	3	1	1
1266/3	18	14	5	4	3	1	1	22	20	14	14	7	6	3	1	1
1267/1	19	15	6	5	4	2	1	23	21	15	15	8	7	5	4	1
1267/2	19	15	6	5	4	2	1	23	21	15	15	8	7	5	4	1
1267/3	19	15	6	5	4	2	1	23	21	15	15	8	7	5	4	1

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Table S2 to be continued

Acc. and Ind. No.	Phenotypic data						SSR data									
	T=0	T=1	T=2	T=3	T=4	T=5	T=6	T=0	T=1	T=2	T=3	T=4	T=5	T=6	T=7	T=8
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1268/2	20	16	1	1	1	1	1	24	22	3	3	1	1	1	1	1
1268/3	20	16	1	1	1	1	1	24	22	3	3	1	1	1	1	1
1279/1	21	17	1	1	1	1	1	25	23	3	3	1	1	1	1	1
1279/2	21	17	1	1	1	1	1	25	23	3	3	1	1	1	1	1
1279/3	21	17	1	1	1	1	1	25	23	3	3	1	1	1	1	1
1324/1	22	18	1	1	1	1	1	26	24	3	3	1	1	1	1	1
1324/2	22	18	1	1	1	1	1	26	24	3	3	1	1	1	1	1
1324/3	22	18	1	1	1	1	1	26	24	3	3	1	1	1	1	1
1373/1	23	16	1	1	1	1	1	27	15	10	10	1	1	1	1	1
1373/2	23	16	1	1	1	1	1	27	15	10	10	1	1	1	1	1
1373/3	23	16	1	1	1	1	1	27	15	10	10	1	1	1	1	1
1374/1	24	19	7	6	4	2	1	28	25	16	16	9	8	5	4	1
1374/2	24	19	7	6	4	2	1	28	25	16	16	9	8	5	4	1
1374/3	24	19	7	6	4	2	1	28	25	16	16	9	8	5	4	1
1567/1	25	20	8	6	4	2	1	29	26	17	17	1	1	1	1	1
1567/2	25	20	8	6	4	2	1	29	26	17	17	1	1	1	1	1
1567/3	25	20	8	6	4	2	1	29	26	17	17	1	1	1	1	1
1568/1	26	21	9	7	5	1	1	30	27	18	18	10	9	6	5	1
1568/2	26	21	9	7	5	1	1	30	27	18	18	10	9	6	5	1
1568/3	26	21	9	7	5	1	1	30	27	18	18	10	9	6	5	1
1569/1	27	22	10	8	6	2	1	31	28	19	19	11	10	3	1	1
1569/2	27	22	10	8	6	2	1	31	28	19	19	11	10	3	1	1
1569/3	27	22	10	8	6	2	1	32	29	20	20	12	11	3	1	1
1570/1	28	23	11	9	7	2	1	33	30	21	21	13	12	3	1	1
1570/2	28	23	11	9	7	2	1	34	31	21	21	13	12	3	1	1
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1571/1	29	24	1	1	1	1	1	36	33	22	22	14	13	1	1	1
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1571/3	29	24	1	1	1	1	1	36	33	22	22	14	13	1	1	1
1572/1	30	25	12	10	6	2	1	31	28	19	19	11	10	3	1	1
1572/2	30	25	12	10	6	2	1	31	28	19	19	11	10	3	1	1
1572/3	30	25	12	10	6	2	1	31	28	19	19	11	10	3	1	1
1573/1	31	26	13	11	3	1	1	37	34	23	23	15	14	3	1	1
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1573/3	31	26	13	11	3	1	1	37	34	23	23	15	14	3	1	1
1576/1	32	24	1	1	1	1	1	17	15	10	10	1	1	1	1	1
1576/2	32	24	1	1	1	1	1	17	15	10	10	1	1	1	1	1
1576/3	32	24	1	1	1	1	1	17	15	10	10	1	1	1	1	1
1578/1	33	16	1	1	1	1	1	38	35	24	24	1	1	1	1	1
1578/2	33	16	1	1	1	1	1	38	35	24	24	1	1	1	1	1
1578/3	33	16	1	1	1	1	1	38	35	24	24	1	1	1	1	1
1580/1	34	27	1	1	1	1	1	39	36	25	25	1	1	1	1	1
1580/2	34	27	1	1	1	1	1	40	37	25	25	1	1	1	1	1
1580/3	34	27	1	1	1	1	1	40	37	25	25	1	1	1	1	1
1581/1	35	28	14	12	8	3	1	41	38	26	26	1	1	1	1	1
1581/2	35	28	14	12	8	3	1	42	39	26	26	1	1	1	1	1
1581/3	35	28	14	12	8	3	1	41	38	26	26	1	1	1	1	1
1582/1	36	29	1	1	1	1	1	43	40	10	10	1	1	1	1	1
1582/2	36	29	1	1	1	1	1	44	40	10	10	1	1	1	1	1
1582/3	36	29	1	1	1	1	1	43	40	10	10	1	1	1	1	1
1584/1	37	30	15	13	3	1	1	22	20	14	14	7	6	3	1	1
1584/2	37	30	15	13	3	1	1	22	20	14	14	7	6	3	1	1
1584/3	37	30	15	13	3	1	1	22	20	14	14	7	6	3	1	1
1269/96/1	-	-	-	-	-	-	-	45	41	27	27	16	11	7	1	1
1269/96/2	-	-	-	-	-	-	-	46	42	28	28	17	15	7	1	1
1269/96/3	-	-	-	-	-	-	-	47	43	29	27	16	11	7	1	1
1269/99/1	-	-	-	-	-	-	-	48	44	30	29	18	16	3	1	1
1269/99/2	-	-	-	-	-	-	-	49	45	30	29	18	16	3	1	1
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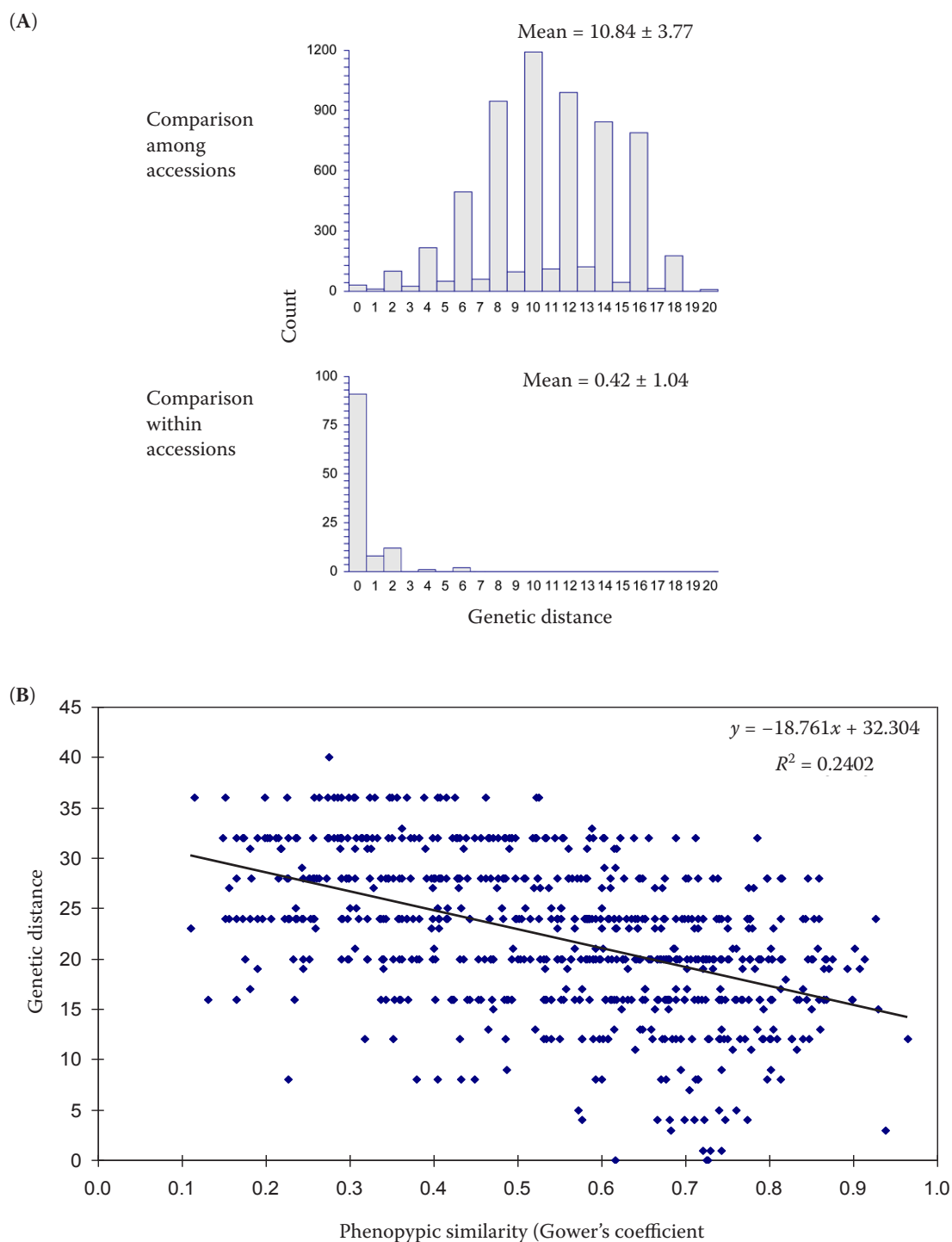


Figure S1. Histograms of pairwise genetic distances within and among accessions (A) and Mantel test for correlation between genetic distance and phenotypic similarity on the level of accessions (B) ($P=0.01$)