

Supplementary Table I.- Descriptive statistics of the 21 microsatellite marker loci reported for each breed: number of alleles; effective number of allele; observed heterozygosity; expected heterozygosity; Fis, inbreeding coefficient; polymorphic information content.

Locus	Therparker (n=24)						Dhani (n=25)						Lohani (n=23)					
	na	Ne	Ho	He	Fis	PIC	na	ne	Ho	He	Fis	PIC	na	ne	Ho	He	Fis	PIC
BM1818	12	8.5970	0.5417	0.9025	0.3870	0.88	16	10.504	0.6000	0.9233	0.3369	0.90	10	4.3008	0.5217	0.7845	0.3202	0.75
BM1824	5	2.7042	0.7917	0.6436	-0.2562	0.57	6	3.8344	0.6000	0.7543	0.1883	0.70	6	5.3166	0.9130	0.8300	-0.1246	0.78
BM2113	6	3.2542	0.4583	0.7074	0.3383	0.63	7	4.0984	0.7600	0.7714	-0.0050	0.72	7	5.5393	0.9565	0.8377	-0.1672	0.80
BM6526	6	2.4935	0.5833	0.6117	0.0261	0.53	10	5.1867	0.8004	0.8237	-0.0410	0.78	19	10.796	0.8261	0.9275	0.0896	0.90
CSSM66	2	1.4922	0.4167	0.3369	-0.2632	0.28	5	1.8142	0.5600	0.4580	-0.2480	0.41	5	1.7065	0.5217	0.4232	-0.2603	0.37
ETH10	4	2.3415	0.4167	0.5851	0.2727	0.48	5	3.3156	0.1600	0.7127	0.7709	0.66	9	5.4819	0.7391	0.8357	0.0960	0.80
ETH225	8	2.4202	0.7500	0.5993	-0.2781	0.55	8	1.6171	0.1600	0.3894	0.5807	0.40	6	2.1770	0.5217	0.5527	0.0350	0.51
HAUT27	5	1.4903	0.3750	0.3360	-0.1398	0.31	4	2.1368	0.1200	0.5429	0.7744	0.44	6	1.5201	0.0870	0.3498	0.7459	0.33
ILSTS011	6	4.1290	0.0833	0.7739	0.8900	0.72	12	10.163	0.3600	0.9200	0.6007	0.89	9	6.4512	0.3478	0.8638	0.5884	0.83
ILSTS029	10	7.2911	0.3750	0.8812	0.5654	0.85	2	1.6756	0.1600	0.4114	0.6032	0.34	6	2.7916	0.5652	0.6560	0.1193	0.58
ILSTS033	3	2.2027	0.9167	0.5576	-0.6789	0.45	5	2.5407	0.2800	0.6188	0.5383	0.53	3	2.1725	0.3043	0.5517	0.4361	0.43
ILSTS044	5	1.4240	0.3333	0.3041	-0.1195	0.29	7	3.0120	0.1600	0.6816	0.7605	0.61	3	1.2491	0.0435	0.2039	0.7820	0.29
ILSTS049	4	2.3510	0.8750	0.5869	-0.5227	0.48	8	6.1881	0.8400	0.8555	-0.0020	0.83	7	4.6201	0.6522	0.8010	0.1677	0.75
ILSTS052	9	4.0851	0.6250	0.7713	0.1724	0.73	9	4.9801	0.8400	0.8155	-0.0510	0.78	8	5.1863	0.7826	0.8251	0.0304	0.78
INRA005	5	3.2360	0.7083	0.7057	-0.0251	0.64	10	7.4850	0.6400	0.8841	0.2613	0.85	5	2.3616	0.5652	0.5894	0.0197	0.49
INRA32	4	2.2857	0.0000	0.5745	1.0000	0.48	8	3.6982	0.1200	0.7445	0.8355	0.69	6	1.7692	0.1304	0.4444	0.7000	0.44
INRA63	6	1.9726	0.2500	0.5035	0.4930	0.46	4	2.1079	0.0400	0.5363	0.9239	0.42	6	3.2256	0.0870	0.7053	0.8740	0.64
TGLA122	11	6.5085	0.8333	0.8644	0.0154	0.82	11	6.4103	0.5200	0.8612	0.3839	0.83	6	2.8289	0.2609	0.6609	0.5965	0.61
TGLA126	13	6.6977	0.9583	0.8688	-0.1265	0.84	13	8.0128	0.9200	0.8931	-0.0510	0.86	10	6.1871	0.7826	0.8570	0.0665	0.82
TGLA227	4	2.0389	0.6667	0.5204	-0.3083	0.45	7	3.3693	0.0400	0.7176	0.9431	0.66	6	2.4605	0.4348	0.6068	0.2675	0.51
INRA023	1	1.0000	0.0000	0.0000	****	***	5	3.1328	0.4000	0.6947	0.4125	0.61	5	2.6853	0.3913	0.6415	0.3765	0.58
Mean	6.14	3.3341	0.5218	0.6017	0.1142	0.54	7.71	4.5373	0.4343	0.7148	0.3800	0.66	7.05	3.8489	0.4969	0.6642	0.2352	0.61
SD	3.23	2.1407	0.2898	0.2238			3.41	2.6758	0.2997	0.1660			3.34	2.2968	0.2789	0.1931		

Locus	Sahiwal (n=40)						Cholistani (n=36)						Red Sindhi (n=20)					
	na	ne	Ho	He	Fis	PIC	na	ne	Ho	He	Fis	PIC	na	ne	Ho	He	Fis	PIC
BM1818	6	2.7374	0.3750	0.6427	0.4092	0.60	14	9.8182	0.6944	0.9108	0.2268	0.89	14	10.5263	0.3000	0.9282	0.6685	0.90
BM1824	6	3.7253	0.5500	0.7408	0.2482	0.68	7	3.1380	0.6944	0.6909	-0.0193	0.63	5	2.6846	0.6500	0.6436	-0.0359	0.57
BM2113	8	6.2500	0.7705	0.8506	0.0774	0.79	7	2.2697	0.6111	0.5673	-0.0924	0.53	8	5.8824	0.7000	0.8513	0.1566	0.80
BM6526	9	4.8855	0.8705	0.8054	-0.1002	0.76	12	3.5653	0.3056	0.7297	0.5753	0.68	9	3.7209	0.9000	0.7500	-0.2308	0.73
CSSM66	11	2.7444	0.7750	0.6437	-0.2193	0.61	10	2.700	0.8889	0.6385	-0.4118	0.59	2	1.6632	0.5500	0.4090	-0.3793	0.32
ETH10	12	6.7941	0.3500	0.8636	0.5896	0.83	7	4.2078	0.7778	0.7731	-0.0202	0.76	4	2.2409	0.3500	0.5679	0.3679	0.40
ETH225	14	4.3656	0.7000	0.7807	0.0920	0.76	6	1.9908	0.4444	0.5047	0.1070	0.42	6	2.3324	0.5500	0.5859	0.0372	0.52
HAUT27	9	2.4042	0.0250	0.5915	0.9572	0.56	8	1.6220	0.1944	0.3889	0.4930	0.37	4	1.6097	0.4500	0.3885	-0.1881	0.35
ILSTS011	8	6.4777	0.3750	0.8563	0.5565	0.83	8	5.3224	0.1667	0.8236	0.7948	0.79	11	3.5398	0.2500	0.7359	0.6516	0.70
ILSTS029	8	6.3492	0.1250	0.8532	0.8516	0.83	5	2.3542	0.4167	0.5833	0.2757	0.55	9	7.4074	0.4000	0.8872	0.5376	0.85
ILSTS033	9	4.2953	0.5000	0.7769	0.3483	0.74	8	3.1229	0.4444	0.6894	0.3462	0.64	6	2.8986	0.9000	0.6718	-0.3740	0.60
ILSTS044	10	3.1558	0.3000	0.6918	0.5608	0.65	5	1.4939	0.0556	0.3353	0.8320	0.30	6	1.8265	0.4500	0.4641	0.0055	0.43
ILSTS049	10	7.6372	0.8000	0.8801	0.0795	0.85	7	4.9750	0.8333	0.8103	-0.0430	0.77	6	2.4845	0.9000	0.6128	-0.5063	0.53
ILSTS052	12	5.6838	0.6500	0.8345	0.2112	0.81	7	3.4286	0.3056	0.7183	0.5686	0.67	9	4.9383	0.7500	0.8179	0.0596	0.78
INRA005	10	6.2378	0.6250	0.8503	0.2557	0.82	8	2.6749	0.6389	0.6350	-0.0203	0.58	4	3.6530	0.9000	0.7449	-0.2392	0.68
INRA32	4	2.6556	0.0750	0.6313	0.8797	0.55	7	4.2702	0.3333	0.7766	0.5647	0.73	5	3.2258	0.0000	0.7077	1.0000	0.64
INRA63	11	3.7515	0.4500	0.7427	0.3865	0.71	9	2.3889	0.2500	0.5896	0.5700	0.56	4	1.5066	0.0500	0.3449	0.8513	0.31
TGLA122	16	8.4881	0.4750	0.8934	0.4616	0.87	14	6.6462	0.8889	0.8615	-0.0463	0.83	10	7.8431	0.6000	0.8949	0.3123	0.86
TGLA126	19	10.0629	0.5750	0.9120	0.3616	0.90	9	3.3838	0.6389	0.7144	0.0931	0.68	12	8.6957	0.8000	0.9077	0.0960	0.87
TGLA227	8	3.4783	0.5750	0.7215	0.1930	0.66	4	1.8305	0.3889	0.4601	0.1429	0.39	4	1.8779	0.6000	0.4795	-0.2834	0.40
INRA023	9	3.3299	0.1500	0.7085	0.7856	0.67	10	6.4800	0.6667	0.8576	0.2117	0.83	4	1.6563	0.2500	0.4064	0.3691	0.35
Mean	10	5.0243	0.4810	0.7748	0.3714	0.73	8.19	3.6992	0.5066	0.6695	0.2326	0.62	6.76	3.9149	0.5381	0.6571	0.1602	0.59
SD	3.3982	2.1280	0.2482	0.0964			2.65	2.0341	0.2487	0.1570			3.17	2.6413	0.2743	0.1888		

Locus	Nari Master (n=50)						Friesien (n=25)					
	na	ne	Ho	He	Fis	PIC	na	ne	Ho	He	Fis	PIC
BM1818	7	2.7716	0.6000	0.6457	0.0613	0.64	13	9.6899	0.3600	0.9151	0.5986	0.89
BM1824	10	4.2553	0.5800	0.7727	0.2418	0.73	8	5.0403	0.5200	0.8180	0.3513	0.78
BM2113	14	5.9032	0.7000	0.8390	0.1572	0.81	9	5.4113	0.6400	0.8318	0.2149	0.80
BM6526	17	8.8496	0.7000	0.8960	0.2108	0.88	8	3.3602	0.6000	0.7167	0.1458	0.67
CSSM66	7	2.2957	0.8400	0.5701	-0.4883	0.51	6	3.1095	1.0000	0.6922	-0.4740	0.64
ETH10	11	4.0816	0.4200	0.7626	0.4437	0.73	8	4.3554	0.3200	0.7861	0.5846	0.74
ETH225	10	5.7274	0.6200	0.8337	0.2488	0.81	8	5.2521	0.5600	0.8261	0.3083	0.79
HAUT27	12	3.2852	0.5400	0.7026	0.2237	0.66	9	3.8700	0.6400	0.7567	0.1370	0.71
ILSTS011	7	3.4317	0.3600	0.7158	0.4920	0.68	10	7.7160	0.1600	0.8882	0.8162	0.86
ILSTS029	7	3.6284	0.1800	0.7317	0.7515	0.68	4	2.0392	0.2400	0.5200	0.5290	0.50
ILSTS033	9	4.1288	0.5800	0.7655	0.2346	0.73	9	4.9407	0.6000	0.8139	0.2477	0.77
ILSTS044	8	2.3585	0.2200	0.5818	0.6181	0.54	7	2.7655	0.2800	0.6514	0.5614	0.60
ILSTS049	7	1.7325	0.2600	0.4271	0.3851	0.44	3	1.1292	0.0400	0.1167	0.6503	0.28
ILSTS052	8	4.3328	0.4000	0.7770	0.4800	0.74	6	2.4225	0.2000	0.5992	0.6594	0.53
INRA005	6	4.3215	0.6400	0.7764	0.1673	0.73	5	2.5510	0.8000	0.6204	-0.3160	0.57
INRA32	4	2.5100	0.0000	0.6077	1.0000	0.52	3	2.8802	0.0000	0.6661	1.0000	0.58
INRA63	12	4.1771	0.8000	0.7683	-0.0518	0.73	9	2.9833	0.5600	0.6784	0.1576	0.62
TGLA122	15	3.9651	0.5400	0.7554	0.2779	0.72	5	1.5337	0.1200	0.3551	0.6552	0.33
TGLA126	11	4.3029	0.5000	0.7754	0.3486	0.74	7	2.6709	0.3600	0.6384	0.4246	0.60
TGLA227	13	5.3362	0.7000	0.8208	0.1386	0.79	11	4.8828	1.0000	0.8114	-0.2580	0.77
INRA023	21	11.211	0.8600	0.9200	0.0558	0.90	14	7.3529	0.7200	0.8816	0.1667	0.85
Mean	10.3	4.4098	0.5257	0.7355	0.2780	0.70	7.71	4.0932	0.4629	0.6945	0.3199	0.66
SD	4.09	2.1937	0.2265	0.1160			2.92	2.1591	0.2894	0.1889		