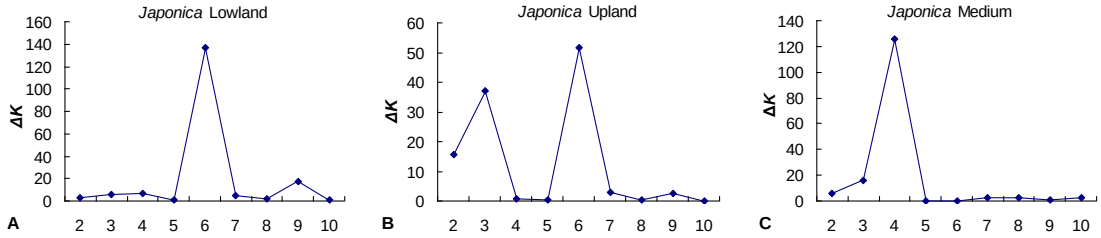
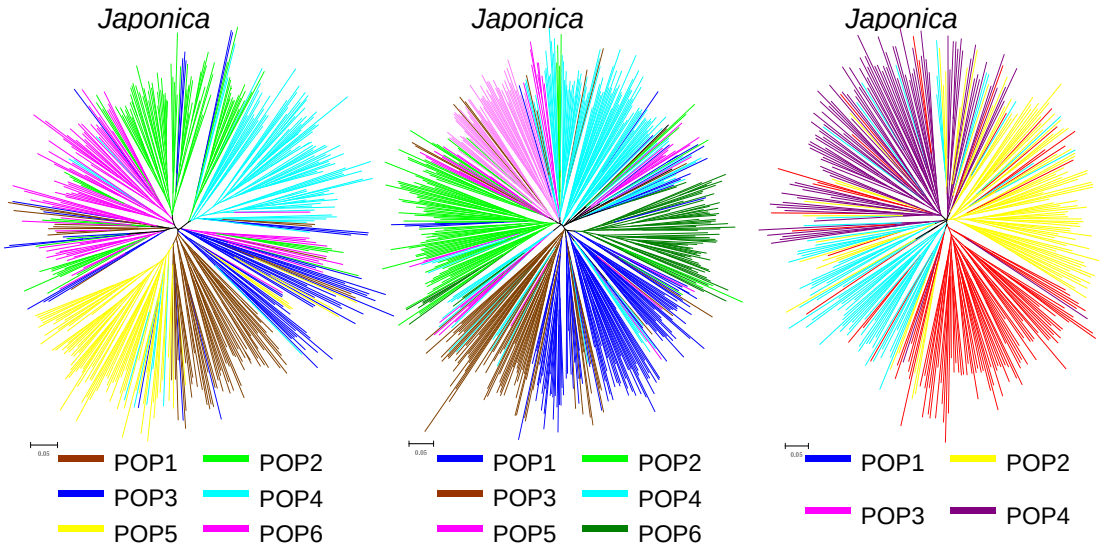
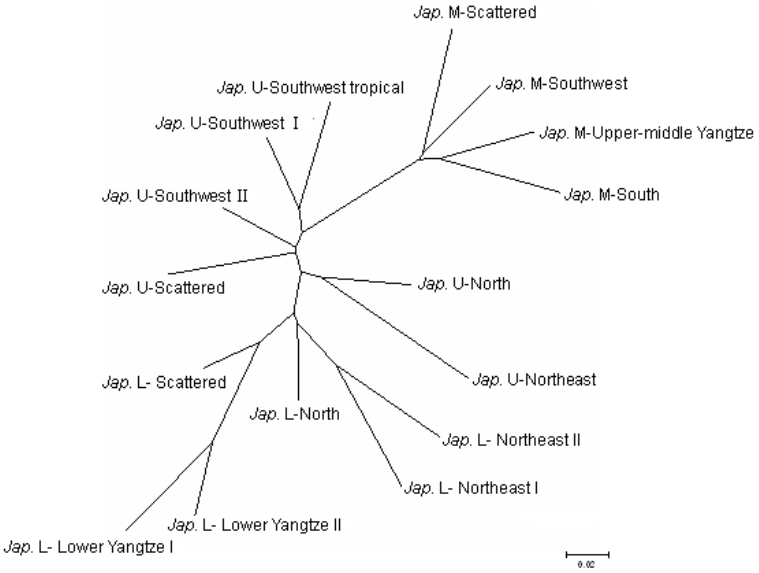


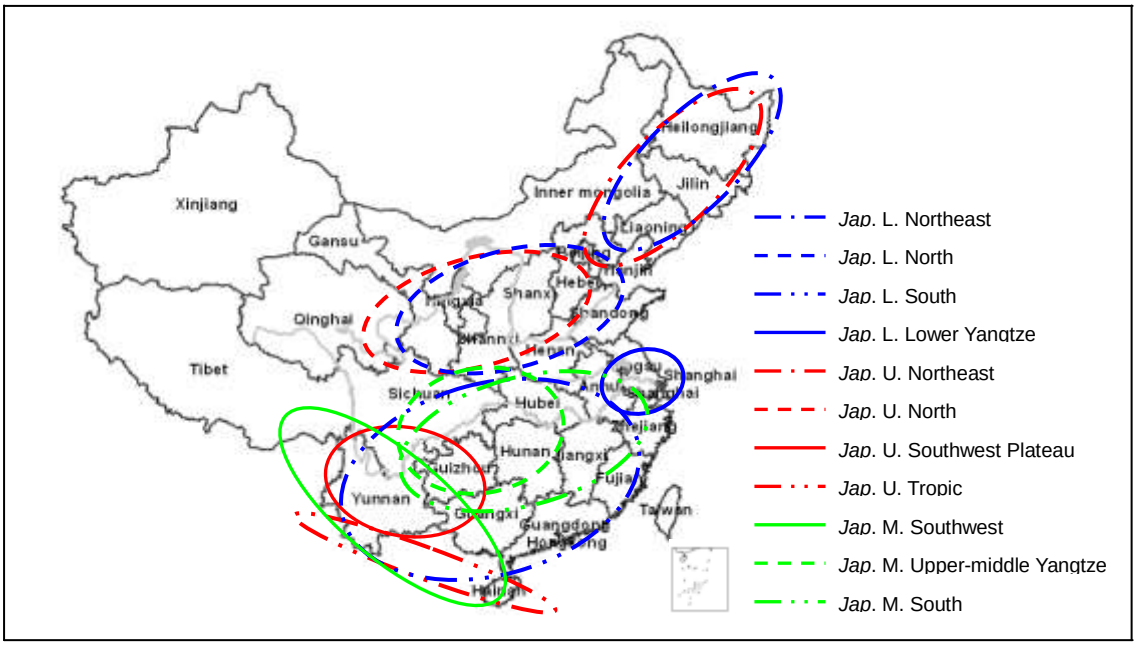
Appendix A Δ*K* with k=2 to 10 for three inferred *japonica* ecotypes (Zhang *et al*. 2009); A, *Japonica* Lowland ecotype. B, *Japonica* Upland ecotype. C: *Japonica* Medium ecotype.



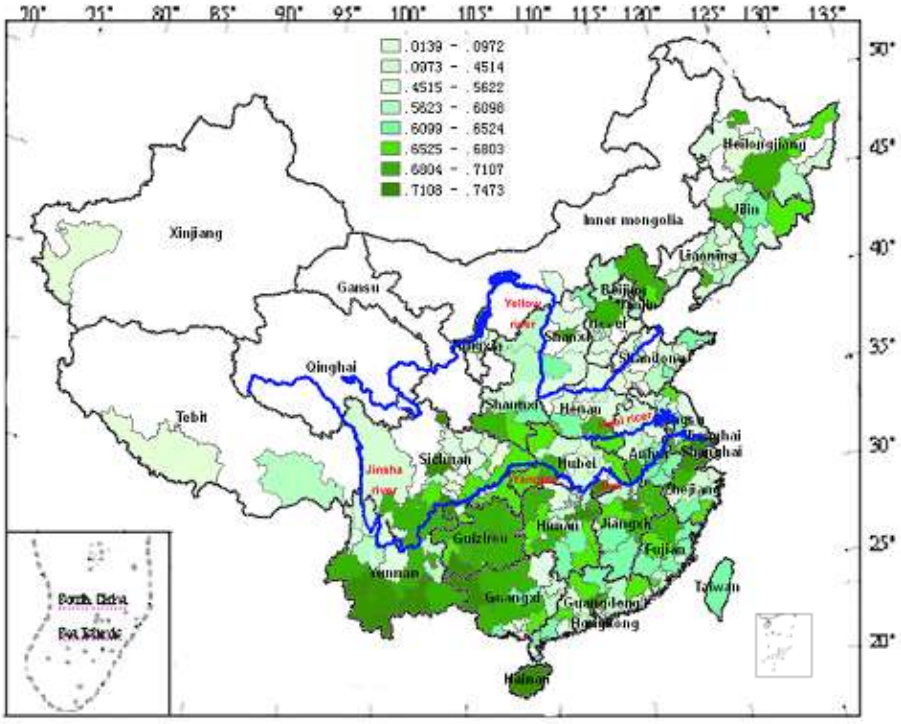
Appendix B Unrooted neighbor-joining tree of three *japonica* ecotypes based on Nei's D_A (Nei *et al*. 1983) based on 36 nuclear SSRs. The color corresponds that of model-based populations.



Appendix C Unrooted neighbor-joining tree of 16 inferred eco-geographical types using Nei's D_A (Nei *et al*. 1983).



Appendix D Distribution of eco-geographical types of *japonica* rice in China



Appendix E Nei's gene diversity index (Nei 1987) of *japonica* in different districts of China

Appendix F **Numbers of varieties in three variety types and subspecies**

Variety type	Lowland	Upland	unknown	Subtotal
Early	216	92		308
Middle	344	167		511
Late	393	216	1	610
unknown	4	8	1	13
Subtotal	957	483	2	1442

Appendix G Information of SSR used in the study

Marker	Chromo-some	Motif	Forward primer	Reverse primer	Original Ref*
RM23	1	(ga)15	cattggagtggaggctgg	gtcaggcttctgccattctc	2
RM5	1	(ga)15	tgcaacttctagctgctcga	gcatccgatcttgatggg	3
RM81A	1	(ctt)10	gagtgcttgtgcaagatcca	cttcttcactcatgcagttc	2
RM211	2	(ga)18	ccgatctcatcaaccaactg	cttcacgaccatctcaaagg	2
RM262	2	(att)10t(att)4	cattccgtctcggctcaact	cagagcaaggtggcttgc	2
RM71	2	(ga)16	ctagaggcgaaaacgagatg	gggtgggcgaggtaataatg	4
RM231	3	(ga)16	ccagattatttcctgaggtc	cacttgcatagttctgcattg	2
RM251	3	(ga)29	gaatggcaatggcgctag	atgcggttcaagattcgatc	2
RM60	3	(aatt)5	agtcccatgttccacttccg	atggctactgcctgtactac	2
RM241	4	(ga)31	gagccaaataagatcgctga	tgcaagcagcagatttaggtg	2
RM255	4	(ga)16	tgttgcgtgtggagatgtg	cgaaaccgctcagttcaac	2
RM335	4	(ctt)25	gtacacacccacatcgagaag	gctctatgcgagtatccatgg	4
RM164	5	(ga)14	tcttgcccgtcactgcagatatcc	gcagccctaatgctacaattcttc	5
RM249	5	(ga)16tt(gt)4gag	ggcgtaaaggttttgcatgt	atgatgccatgaaggtcagc	2
RM267	5	(ga)21	tgcagacatagagaaggaagtg	agcaacagcacaacttgatg	4
RM190	6	(ga)18	ctttgtctatctcaagacac	ttgcagatgttcttcctgatg	1
RM225	6	(ga)25	tgcccatatggtctggatg	gaaagtggatcaggaaggc	2
RM253	6	(ct)11	tccttcaagagtgcaaaacc	gcattgtcatgtcgaagcc	2
RM134	7	(cca)7	acaaggccgcgagaggattccg	gctctccggtggctccgattgg	4
RM18	7	(ga)16	ttccctctcatgagctccat	gagtgcctggcgctgtac	3
RM82	7	(tct)11	Tgcttcttgtcaattcgcc	cgactcgtggaggtacgg	2
RM223	8	(ga)25	gagtgagcttgggctgaaac	gaaggcaagtcttggcactg	2
RM25	8	(ga)6	ggaaagaatgatcttttcatgg	ctaccatcaaaaccaatgttc	2
RM42	8	(ga)18	atcctaccgctgaccatgag	tttggtctacgtggcgtaca	2
RM219	9	(ga)10	cgtcggatgatgtaaagcct	catatcggcattcgcctg	2
RM242	9	(ga)17	ggccaacgtgtgtatgtctc	tatatgccagcacggatggg	2
RM296	9	(ga)26	cacatggcaccaacctcc	gccaagtcattcactact	4
RM216	10	(ga)18	gcatggccgatggtaaag	tgtataaaaccacacggcca	2
RM244	10	(ga)21	ccgactgttcgtccttatca	ctgctctcgggtgaacgt	2
RM258	10	(ga)8	tgctgtatgtagctcgcacc	tggccttaaagctgtcgc	2
RM206	11	(ga)11	cccatgcgtttaactattct	cgttccatcgatccgtatgg	2
RM224	11	(ga)13	atcgatcgatcttcacgagg	tgctataaaaggcattcggg	2
RM254	11	(ga)11	agccccgaataaatccacct	ctggaggagcatttggtagc	2
RM235	12	(ga)13	agaagctagggctaacgaac	tcacctggtcagcctctttc	2
RM247	12	(ga)16	tagtgccgatcgatgtaacg	catatggttttgacaaagcg	2
RM270	12	(ga)24	ggccgttggttctaaaatc	tgcgcagtatcatcggcgag	4

*Original references for the information of the SSR:

1 Akagi, H., Yokozeki, Y., Inagaki, A., and Fujimura, T. (1996) Microsatellite DNA markers for rice chromosomes. Theoretical and Applied Genetics, 93, 1071-1077

2 Chen, X., Temnykh, S., Xu, Y., Cho, Y.G., and McCouch, S.R. (1997) Development of a microsatellite framework map providing genome-wide coverage in rice (Oryza sativa L.). Theoretical And applied Genetics, 95, 553-567

3 Panaud, O., Chen, X., and McCouch, S.R. (1996) Development of microsatellite markers and characterization of simple sequence length polymorphism (SSLP) in rice (Oryza sativa L.). Molecular & General Genetics, 252, 597-607

4 Temnykh, S., Park, W.D., Ayres, N.M., Cartinhour, S., Hauck, N., Lipovich, L., Cho, Y.G., Ishii, T., and McCouch, S.R. (2000) Mapping and genome organization of microsatellite sequences in rice (Oryza sativa L.). Theoretical and Applied Genetics, 2000, 100, 697-712

5 Wu, K.S., and Tanksley, S.D. (1993) Abundance, polymorphism and genetic mapping of microsatellites in rice. Molecular & General Genetics, 241, 225-235