

**File S1**  
**Supporting Table and References**

**Table S1 Sex specific map lengths.**

These are the data graphed in Figure 1A.

Data ° : LM - recombination data from linkage maps. CC recombination data from chiasmata counts

Taxon	Species	Male rec	Female rec	Data*	Reference
Amphibian	<i>Hyla arborea</i>	20.7	296.6	LM	BERSET- BRÄNDLI <i>et al.</i> , 2008
Amphibian	<i>Salamandra sala- mandra</i>	24	36.8	CC	LENORMAND and DUTHEIL, 2005
Amphibian	<i>Triturus alpestris</i>	32.3	24.5	CC	LENORMAND and DUTHEIL, 2005
Amphibian	<i>Triturus cristatus</i>	36.5	24	CC	LENORMAND and DUTHEIL, 2005
Amphibian	<i>Triturus helveti- cus</i>	22	25	CC	LENORMAND and DUTHEIL, 2005
Amphibian	<i>Triturus mar- moratus</i>	25.7	29	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Silene vulgaris</i>	547	446	LM	BRATTELER <i>et al.</i> , 2006
Angiosperm	<i>Humulus lupulus</i>	445.9	661.9	LM	CERENAK <i>et al.</i> , 2006
Angiosperm	<i>Actinidia chinen- sis</i>	2782	3090	LM	FRASER <i>et al.</i> , 2009
Angiosperm	<i>Cucumis melo</i>	279.1	295.7	LM	KARYIA <i>et al.</i> , 2005

Angiosperm	<i>Fagopyrum esculentum</i>	911.3	909	LM	KONOSHI and OHNISHI, 2006
Angiosperm	<i>Acacia mangium</i>	1561	1537	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Arabidopsis thaliana</i>	417.29	216.23	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Brassica napus</i>	1544	1577	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Brassica nigra</i>	418	401	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Brassica oleracea</i>	1050.8	1749.4	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Castanea sativa</i>	1054	947	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Coffea canephora</i>	211	217	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Dioscorea rotundata</i>	852	891	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Dioscorea tokoro</i>	570.9	489.4	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Eucalyptus grandis</i>	1415	1551	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Eucalyptus urophylla</i>	1101	1331	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Hordeum bulbosum</i>	1203.7	1016.9	LM	LENORMAND and DUTHEIL, 2005

Angiosperm	<i>Malus pumila</i>	559	447	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Manihot esculenta</i>	49.1	40.8	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Passiflora edulis</i>	783.5	727.7	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Pennisetum glaucum</i>	267	234	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Quercus robur</i>	921.7	893.2	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Rhododendron sp.</i>	164	171	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Rosa species</i>	287.3	238.4	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Solanum chacoense</i>	514	709	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Solanum tuberosum</i>	382.9	525.1	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Triticum aestivum</i>	495.5	352.8	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Vitis vinifera</i>	816	767	LM	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Panicum virgatum</i>	1645	1376	LM	OKADA <i>et al.</i> , 2010
Angiosperm	<i>Populus tremula x tremuloides</i>	1403.2	1681.5	LM	PAKULL <i>et al.</i> , 2009

Angiosperm	<i>Fragaria virginiana</i>	2852.64	2724.66	LM	SPIGLER <i>et al.</i> , 2010
Angiosperm	<i>Lolium multiflorum x Lolium perenne</i>	537	712	LM	WARNKE <i>et al.</i> , 2004
Angiosperm	<i>Betula platyphylla</i>	1610.6	2225.7	LM	WEI <i>et al.</i> , 2009
Angiosperm	<i>Allium cepa</i>	22.4	17.9	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Secale cereale</i>	10.7	10.6	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Allium consanguineum</i>	21.9	17.5	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Omocestus pantei</i>	11.8	11.26	CC	CANO and SANTOS, 1990
Angiosperm	<i>Rana esculenta</i>	25.2	45.7	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Allium flavum</i>	14.9	18.8	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Allium macranthum</i>	42.3	58.7	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Allium nigrum</i>	21.9	16.9	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Allium pallens</i>	15	19.4	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Allium paniculatum</i>	14.6	16	CC	LENORMAND and DUTHEIL, 2005

Angiosperm	<i>Allium ursinum</i>	13.8	14.1	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Cypripedium cordigerum</i>	16.4	19.7	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Epipactis consimilis</i>	25.8	27.1	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Epipactis latifolia</i>	30.7	29.1	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Listera ovata</i>	26.9	30.3	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Neottia listeroides</i>	29.3	31.1	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Rhoeo discolor</i>	10.2	11.4	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Endymion non-scriptus</i>	17.7	18.2	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Fritillaria meleagris</i>	24.8	37.8	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium hansonii</i>	40	49	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium henryi</i>	41.2	44.4	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium longiflorum</i>	27.3	31.5	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium martagon</i>	36.3	41	CC	LENORMAND and DUTHEIL, 2005

Angiosperm	<i>Lilium pardalinum</i>	31.2	36.9	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium regale</i>	41.8	45	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium sargentiae</i>	31.2	42	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Lilium speciosum</i>	26.4	33.9	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Hordeum vulgare</i>	13.9	13.7	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Tulbaghia acutiloba</i>	14.4	15.8	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Tulbaghia leucantha</i>	12.4	15.5	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Tulbaghia pulchella</i>	12.2	13.7	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Tulbaghia violacea</i>	11	14.3	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Vicia faba</i>	20.6	16	CC	LENORMAND and DUTHEIL, 2005
Angiosperm	<i>Trigonella foenum</i>	21.3	21.1	CC	LENORMAND and DUTHEIL, 2005
Arthropod	<i>Litopenaeus vannamei</i> (formerly <i>Penaeus vannamei</i> )	4200.05	5130.79	LM	ZHANG <i>et al.</i> , 2007

Arthropod	<i>Fenneropenaeus chinensis</i>	2515.89	1660.4	LM	TIAN <i>et al.</i> , 2008
Arthropod	<i>Culex tarsalis</i>	510	510	LM	VENKATESAN <i>et al.</i> , 2009
Arthropod	<i>Penaeus monodon</i>	2994	3433.2	LM	YOU <i>et al.</i> , 2010
Bird	<i>Ficedula albicollis</i>	1982	1982	LM	BACKSTRÖM <i>et al.</i> , 2008
Bird	<i>Taeniopygia guttata</i>	1304	1330	LM	BACKSTRÖM <i>et al.</i> , 2010
Bird	<i>Gallus gallus domesticus</i>	2913.7	3097.7	LM	GROENEN <i>et al.</i> , 2009
Bird	<i>Acrocephalus arundinaceus</i>	441	621	LM	AKESSON <i>et al.</i> , 2007
Bird	<i>Anas platyrhynchos</i>	1415	1387.6	LM	HUANG <i>et al.</i> , 2006
Bird	<i>Struthio camelus</i>	342.7	456.7	LM	HUANG <i>et al.</i> , 2008
Bird	<i>Perisoreus infaustus</i>	774	988.4	LM	JAARI <i>et al.</i> , 2009
Cnidaria	<i>Acropora millepora</i>	945.4	1185.8	LM	WANG <i>et al.</i> , 2009
Dasyuromorphia	<i>Sminthopsis crassicaudata</i>	13.6	10.2	CC	LENORMAND and DUTHEIL, 2005
Echinoderm	<i>Apostichopus japonicus</i>	1470.99	1774.65	LM	LI <i>et al.</i> , 2009

Eutherian mammal	<i>mus musculus</i>	1385	1747	LM	SHIFMAN <i>et al.</i> , 2006
Eutherian mammal	<i>Sus scrofa</i>	1800	2150	LM	ARCHIBALD <i>et al.</i> , 1995
Eutherian mammal	<i>Macaca mulatta</i>	2354.3	3562.8	LM	COOP and PRZE- WORSKI, 2007
Eutherian mammal	<i>Papio hamadryas</i>	1993	3244	LM	COOP and PRZE- WORSKI, 2007
Eutherian mammal	<i>Bos taurus</i>	3158	3132	LM	IHARA <i>et al.</i> , 2004
Eutherian mammal	<i>Homo sapiens</i>	2590.48	3435.71	LM	KONG <i>et al.</i> , 2002
Eutherian mammal	<i>Vulpes vulpes</i>	1238	1717.7	LM	KUKEKOVA <i>et al.</i> , 2007
Eutherian mammal	<i>Ovis aries</i>	3145.2	3807.2	LM	MADDOX <i>et al.</i> , 2001
Eutherian mammal	<i>Felis silvestris</i> <i>catus</i>	3113	5710	LM	MENOTTI- RAYMOND <i>et al.</i> , 2009
Eutherian mammal	<i>Canis familiaris</i>	1699	2175	LM	WONG <i>et al.</i> , 2010
Eutherian mammal	<i>Papio papio</i>	41.5	39.6	CC	LENORMAND and DUTHEIL, 2005
Eutherian mammal	<i>Equus caballus</i>	62.4	79.9	LM	LENORMAND and DUTHEIL, 2005
Fish	<i>Oncorhynchus</i> <i>kisutch</i>	287.4	429.7	LM	MCCLELLAND and NAISH, 2008



Fish	<i>Salvelinus alpinus</i>	390	992	LM	WORAM <i>et al.</i> , 2004
Fish	<i>Scophthalmus maximus</i>	531.7	522.1	LM	BOUZA <i>et al.</i> , 2007
Fish	<i>Gasterosteus aculeatus</i>	757	1010	LM	CAMPOS-RAMOS <i>et al.</i> , 2009
Fish	<i>Oncorhynchus mykiss</i>	1104	2276	LM	CAMPOS-RAMOS <i>et al.</i> , 2009
Fish	<i>Oreochromis aureus</i> x <i>Oreochromis niloticus</i>	2451	2394	LM	CAMPOS-RAMOS <i>et al.</i> , 2009
Fish	<i>Paralichthys olivaceus</i>	1645.16	1277.4	LM	CASTAÑO SÁNCHEZ <i>et al.</i> , 2010
Fish	<i>Dicentrarchus labrax</i>	1046.9	1380	LM	CHISTIAKOV <i>et al.</i> , 2008
Fish	<i>Sparus aurata</i>	1171	1452	LM	FRANCH <i>et al.</i> , 2006
Fish	<i>Salmo trutta</i>	346.4	912.5	LM	GHARBI <i>et al.</i> , 2006
Fish	<i>Takifugu rubripes</i>	697.1	1213.5	LM	KAI <i>et al.</i> , 2005
Fish	<i>Oryzias latipes</i>	1453.5	1455.2	LM	KIMURA <i>et al.</i> , 2005
Fish	<i>Ictalurus punctatus</i>	1891.2	3403.2	LM	KUCUKTAS <i>et al.</i> , 2009
Fish	<i>Salmo salar</i>	103	901	LM	MOEN <i>et al.</i> , 2004

Fish	<i>Gadus morhua</i>	907.4	152.6	LM	MOEN <i>et al.</i> , 2009
Fish	<i>Misgurnus anguillicaudatus</i>	662.2	784.5	LM	MORISHIMA <i>et al.</i> , 2008
Fish	<i>Seriola quinqueradiata</i> and <i>S. lalandi</i>	1715.3	901.7	LM	OHARA <i>et al.</i> , 2005
Fish	<i>Sciaenops ocellatus</i>	1122.9	1270.9	LM	PORTNOY <i>et al.</i> , 2010
Fish	<i>Hippoglossus hippoglossus</i>	1459.6	1562.2	LM	REID <i>et al.</i> , 2007
Fish	<i>Poecilia reticulata</i>	2232.21	1749.68	LM	SHEN <i>et al.</i> , 2007
Fish	<i>Danio rerio</i>	943	2583	LM	SINGER <i>et al.</i> , 2002
Fish	<i>Xiphophorus maculatus</i> and <i>X. andersi</i>	1567.3	1506.8	LM	WALTER <i>et al.</i> , 2004
Fish	<i>Lates calcarifer</i>	414.5	873.8	LM	WANG <i>et al.</i> , 2007
Fish	<i>Lepomis macrochirus</i>	1993.57	2124.8	LM	WANG <i>et al.</i> , 2010
Fish	<i>Ctenopharyngodon idella</i>	888.8	1149.4	LM	XIA <i>et al.</i> , 2010
Fish	<i>Hypophthalmichthys molitrix</i>	1005.15	1744.26	LM	ZHANG <i>et al.</i> , 2010
group/species name	Pinus	LM length	LM length	LM	LENORMAND and DUTHEIL, 2005
Gymnosperm	<i>Pinus pinaster</i>	1538.8	1169.4	LM	LENORMAND and DUTHEIL, 2005

Gymnosperm	<i>Pinus sylvestris</i>	2437	1885	LM	LENORMAND and DUTHEIL, 2005
Gymnosperm	<i>Pinus taeda</i>	1983.7	1169.4	LM	LENORMAND and DUTHEIL, 2005
Maruspial	<i>Ovis canadensis</i>	2831	3166	LM	POISSANT <i>et al.</i> , 2010
Maruspial	<i>Monodelphis domestica</i>	884.6	443.1	LM	SAMOLLOW <i>et al.</i> , 2004
Maruspial	<i>Macropus eugenii</i>	1316.85	1027.15	LM	ZENGER <i>et al.</i> , 2002
Maruspial	<i>Bettongia penicillata</i>	28	27.9	CC	LENORMAND and DUTHEIL, 2005
Mollusk	<i>Haliotis discus</i>	2054.8	2584.4	LM	LIU <i>et al.</i> , 2006
Mollusk	<i>Haliotis diversicolor</i>	2597.79	2635.03	LM	SHI <i>et al.</i> , 2010
Mollusk	<i>Haliotis rubra</i>	765.9	1586.2	LM	BARANSKI <i>et al.</i> , 2006
Mollusk	<i>Crassostrea gigas</i>	776	1020	LM	HUBERT and HEDGECOCK, 2004
Mollusk	<i>Mytilus edulis</i>	1024.07	1063.83	LM	LALLIAS <i>et al.</i> , 2009
Mollusk	<i>Pinctada martensii</i>	1673.85	1720.32	LM	SHI <i>et al.</i> , 2009
Mollusk	<i>Argopecten irradians irradians</i>	1937.1	1892.4	LM	WANG <i>et al.</i> , 2007
Mollusk	<i>Chlamys farreri</i>	1989.569	1848.5096	LM	LI <i>et al.</i> , 2005

Mollusk	<i>Patinopecten yessoensis</i>	2610.01	2684.73	LM	XU <i>et al.</i> , 2009
Mollusk	<i>Crassostrea virginica</i>	858	1296	LM	YU and GUO, 2003
Mollusk	<i>Chlamys nobilis</i>	2053.5	2235.1	LM	YUAN <i>et al.</i> , 2010
Orthoptera	<i>Chorthippus jucundus</i>	12.66	12.65	CC	CANO and SANTOS, 1990
Orthoptera	<i>Chorthippus parallelus</i>	13.38	11.81	CC	CANO and SANTOS, 1990
Orthoptera	<i>Chorthippus vagans</i>	11.25	10.56	CC	CANO and SANTOS, 1990
Orthoptera	<i>Euchorthippus chopardi</i>	11.62	10.48	CC	CANO and SANTOS, 1990
Orthoptera	<i>Euchorthippus pulvinatus</i>	11.81	11.06	CC	CANO and SANTOS, 1990
Orthoptera	<i>Parapleurus alliaceus</i>	12.3	12.9	CC	LENORMAND and DUTHEIL, 2005
Orthoptera	<i>Chorthippus brunneus</i>	13.6	13.1	CC	LENORMAND and DUTHEIL, 2005
Orthoptera	<i>Chortoicetes terminifera</i>	13.1	11.6	CC	LENORMAND and DUTHEIL, 2005
Orthoptera	<i>Chrysochraon dispar</i>	12.6	12.1	CC	LENORMAND and DUTHEIL, 2005
Orthoptera	<i>Eyprepocnemis plorans</i>	14.1	12	CC	LENORMAND and DUTHEIL, 2005
Orthoptera	<i>Melanoplus femurrubrum</i>	13.5	14	CC	LENORMAND and DUTHEIL, 2005

Orthoptera	<i>Myrmeleotettix maculatus</i>	14.4	13.2	CC	LENORMAND and DUTHEIL, 2005
Orthoptera	<i>Stethophyma grossum</i>	11.3	13.7	CC	LENORMAND and DUTHEIL, 2005
Plagiorchiida	<i>Paradistomoides orientalis</i>	32.3	32.3	CC	LENORMAND and DUTHEIL, 2005
Planarian	<i>Schmidtea polychroa</i>	0.07	0.23	LM	LENORMAND and DUTHEIL, 2005
Polycladida	<i>Notoplana igiliensis</i>	12.5	18.6	CC	LENORMAND and DUTHEIL, 2005
Reptile	<i>Crocodylus porosus</i>	319	1824.1	LM	MILES <i>et al.</i> , 2009
Rhabdocoela	<i>Gytratrix herLMh-toditus</i>	5.2	4.5	CC	LENORMAND and DUTHEIL, 2005
Trematode	<i>Schistosoma mansoni</i>	1082.47	1374.73	LM	CRISCIONE <i>et al.</i> , 2009
Tricladida	<i>Dendrocoelum lacteum</i>	11.8	20.4	CC	LENORMAND and DUTHEIL, 2005

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