

Supporting Information

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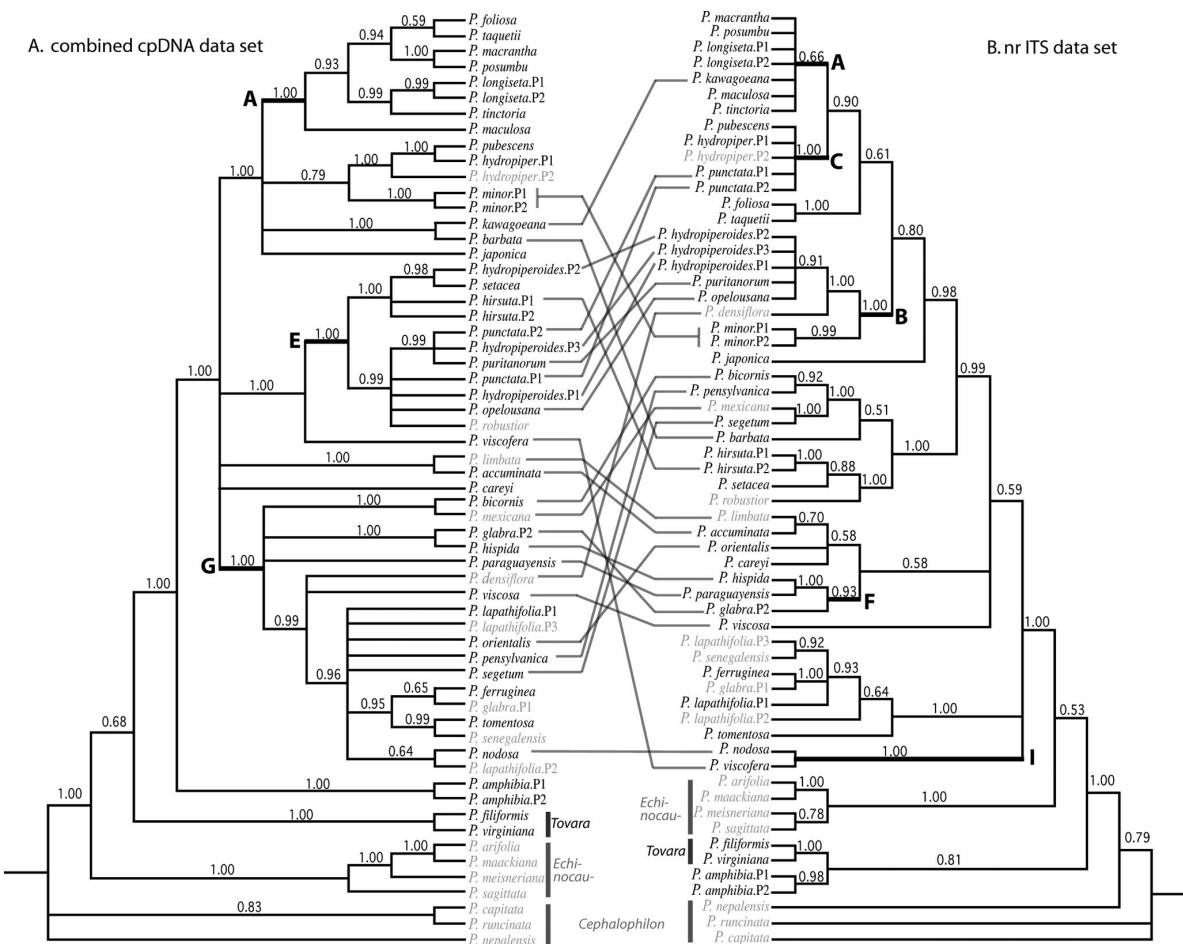


Fig. S1. Fifty percent majority-rule consensus tree from Bayesian inference using (A) the combined data set of three chloroplast regions: *psbA*–*trnH* intergenic spacer, partial *matK*, and *trnL*–F; and (B) the nrITS region. Gray taxa are not included in this study. Clade name with capital letter corresponds to that in Figs. 1–3 in the text. For more detailed discussion and information, see Kim S-T, Donoghue MJ, Incongruence between cpDNA and nrITS trees indicates extensive hybridization within *Eupersicaria* (Polygonaceae). *Am J Bot*, in press.

Table S1. Voucher information and GenBank accession numbers for LEAFY second intron (*PL2int*) sequences

Taxon	Chr. no. (2n)	Collector(s) and number	GenBank accession
Tovara (outgroup)			
<i>P. filiformis</i> (Thunb.) Nakai	c. 44 ¹	Kim & Kim Ch-Ko-102	EU196804, EU196805
<i>P. virginiana</i> (L.) Gaertn.	44 ¹ , 48 ²	Sultan s.n.	EU196866, EU196867
<i>Eupersicaria</i>			
<i>P. accuminata</i> (Kunth) M. Gómez	—	*Ritter 3876 (NHA)	EU196792
<i>P. amphibia</i> (L.) Gray Pop.1	66 ^{1, 2} , 88 ² , 96 ²	Kim 600	EU196793, EU196794
Pop.2		Kim & Kim Ch-Ko-91	EU196795
<i>P. barbata</i> (L.) Hara	22 ² , 40 ² , 60 ²	*Ou & Kao 9463 (GH)	EU196796
<i>P. bicornis</i> (Raf.) Nieuwl.	—	*Lathrop 1290 (GH)	EU196797, EU196798
<i>P. careyi</i> (Olney) Greene	—	*Souther 7-18-92	EU196799, EU196800
<i>P. ferruginea</i> (Weddell) Soják	66 ¹	*Ritter & Ritter 3297 (NHA)	EU196801, EU196802, EU196803
<i>P. foliosa</i> (H. Lindb.) Kitag.	20 ²	Kim & Kim Ch-Ko-99	EU196806
<i>P. glabra</i> (Willd.) M. Gómez	40 ² , 60 ²	*Lundal 10 (GH)	EU196807, EU196808
<i>P. hirsuta</i> Small Pop.1	20 ³	*Sorrie 9886	EU196809
Pop.2		Kim, Koh & Yoo 20	EU196810
<i>P. hispida</i> (Kunth) M. Gómez	—	*Ritter & Ritter 2941 (NHA)	EU196811, EU196812
<i>P. hydropiper</i> (L.) Spach	18 ² , 20 ² , 22 ² , 24 ²	*MHF.8	EU196817
<i>P. hydropiperoides</i> (Mich.) Small Pop.1	40 ³	Kim 670	EU196813, EU196814
Pop.2		Kim, Koh & Yoo 10	EU196815
Pop.3		Kim & Chae 310	EU196816
<i>P. japonica</i> (Meisn.) Nakai	40 ⁴	Kim & Kim Ch-Ko-92	EU196818, EU196819, EU196820
<i>P. kawagoearia</i> (Makino) Nakai	—	Kim & Deng Ch-Ko-74	EU196821, EU196822
<i>P. lapathifolia</i> (L.) Gray	22 ²	**NBL.6	EU196823
<i>P. longiseta</i> (Bruijn) Moldenke Pop. 1	40 ⁴	**ORD.4	EU196824, EU196825
Pop. 2		Kim & Kim Ch-Ko-84	EU196826, EU196827
<i>P. maculosa</i> Gray	c. 40 ² , 44 ^{1, 2}	Kim, Donoghue & Sultan 11	EU196830, EU196831
<i>P. macrantha</i> (Meisn.) Haraldson	—	Kim & Ma Ch-Ko-41	EU196828, EU196829
<i>P. minor</i> (Huds.) Opiz Pop.1	40 ²	*Tanaka 5020 (GH)	EU196832
Pop.2		Kim & Chae 320	EU196833, EU196834
<i>P. nodosa</i> (Pers.) Opiz Pop.1	22 ¹ , 40 ⁵	Sultan & Heschel 7-18-01	EU196835
Pop.2		Kim 665	EU196836, EU196837
<i>P. opelousana</i> (Riddell) Small	40 ³	Kim & Lundgren 10	EU196838, EU196839
<i>P. orientalis</i> (L.) Spach	22 ^{1, 2}	Kim & Ma Ch-Ko-34	EU196840
<i>P. paraguayensis</i> (Wedd.) Kim & Donoghue	—	*Ritter 3919 (NHA)	EU196841, EU196842
<i>P. pensylvanica</i> (L.) M. Gómez	c. 80 ²	Kim, Donoghue & Sultan 14	EU196843, EU196844, EU196845, EU196846
<i>P. posumbu</i> (Buch.-Ham. ex D. Don) H. Gross	40 ^{2, 4}	Kim & Deng Ch-Ko-46	EU196847, EU196848
<i>P. pubescens</i> (Blume) Hara	44 ⁶	Kim & Deng Ch-Ko-75	EU196849
<i>P. punctata</i> (Elliott) Small Pop.1	40 ^{1, 5}	Kim 560	EU196850, EU196851
Pop.2		Kim, Koh & Yoo 30	EU196852, EU196853
Pop.3		Kim, Donoghue & Sultan 20	EU196854
<i>P. puritanorum</i> (Fern.) Soják	60 ⁵	**LP.6	EU196855, EU196856, EU196857
<i>P. segetum</i> (Kunth) Small	—	*Crow 5967 (NHA)	EU196858
<i>P. setacea</i> (Baldwin) Small	20 ³	Kim, Koh & Yoo 40	EU196859, EU196860
<i>P. taquetii</i> (H. Lev.) Koidz.	—	*Murata & Terao 1461 (GH)	EU196861
<i>P. tinctoria</i> (Ait.) H. Gross	40 ¹	Kim Ch-Ko-88	EU196862, EU196863
<i>P. tomentosa</i> E. P. Bicknell	22 ¹ , 40 ⁵	Kim & Chae Cr-40	EU196864, EU196865
<i>P. viscofera</i> (Makino) H. Gross ex Nakai	24 ²	Kim Ch-Ko-85	EU196868
<i>P. viscosa</i> (Buch.-Ham. ex D. Don) H. Gross ex Nakai	22 ⁶	Kim & Ma Ch-Ko-35	EU196869

Samples are deposited in Yale University Herbarium except as indicated (GH, Gray Herbarium, Harvard University; NHA, University New Hampshire Herbarium).

P., *Persicaria*; Pop., Population; c., circa; s.n., without number. References for chromosome (Chr.) numbers: ¹ = ref. 2; ² = index to plant chromosome numbers from Missouri Botanical Garden's w3TROPICOS (www.mobot.org), ³ = ref. 3, ⁴ = ref. 4, ⁵ = unpublished counts by S.-T. Kim, ⁶ = ref. 5.

*Herbarium specimen.

**Inbred line cultivated at Wesleyan University by Sultan (1).

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3. McDonald CB (1980) A biosystematic study of the *Polygonum hydropiperoides* (Polygonaceae) complex. *Am J Bot* 67:664–670.
4. Doida Y (1960) Cytological studies in *Polygonum* and related genera I. *Bot Mag Tokyo* 37:337–340.
5. Sugiura T (1936) Studies on the chromosome number in higher plants, with special reference to cytokinesis. I. *Cytologia* 7:544–595.