

Table S4. Details of sample origins.

Species	Identifier	Origin and voucher
<i>Hieracium</i> subgen. <i>Chionoracium</i>		
<i>Hieracium albidiflorum</i>	H908 albifl	USA: Idaho, Bouner County, Talache, leg. L.M. Wilson July 2001 (PRA – plants cultivated from seeds) B&T World Seed, http://www.b-and-t-world-seeds.com/index.html
<i>H. antarcticum</i>	ant.2	Chile: Patagonia National Park, Torres del Paine, leg. F. Müller 2000 (GLM 155579)
<i>H. argutum</i>	H905	USA: California, Monterey County, Big Sur, leg. L.M. Wilson 20 June 2002 (PRA – plants cultivated from seeds)
<i>H. aff. asplundii</i>	asp.Bol.2	Bolivia: Prov. Murillo, Dpto La Paz, Beck 14779 (M)
<i>H. bolanderi</i>	4475	USA: California, Del Norte County, leg. Roche & Korfhage R-2024 (ID)
<i>H. carneum</i>	H.carneum.1	USA: Arizona, Pima Co., Mt. Lemon, leg. L.M. Wilson June 2004 (PRA – plants cultivated from seeds)
<i>H. fendleri</i>	FEND1	USA: Arizona, Tucson, Rincon Mts, leg. L.M. Wilson June 2004 (PRA – plants cultivated from seeds)
<i>H. frigidum</i>	Chi.Ecu	Ecuador: Prov. Tungurahua, P.N. Llangantes, leg. Z. Palice 2003, det. F. Schuhwerk (PRA)
<i>H. glaucifolium</i>	bg53	Chile: leg. J. Grau (M)
<i>H. gracile</i>	gracile	USA: Idaho, Shoshone County, Freezout Mountain, leg. L.M. Wilson 22 August 2006 (PRA – plants cultivated from seeds)
<i>H. gronovii</i>	4371	USA: Michigan, Kalamazoo County, leg. L.M. Wilson s.n. (ID)
<i>H. cf guatemalense</i>	GUA3	Guatemala: Quetzaltenango, Santa Maria volcano, leg. K. Krak August 2005 (PRA)
<i>H. horridum</i>	4781	USA: California, Mono County, leg. unknown (WTU)
<i>H. irasuense</i>	4772	Mexico: Chiapas, leg. Villasenor et al. s.n. (MSC)
	ira2-9	Guatemala: San Marcos, Tajumulco volcano, near the summit, leg. K. Krak August 2005, det. F. Schuhwerk (PRA)
<i>H. longiberbe</i>	4783	USA: Oregon, Multnomah County, Oeneta Gorge, leg. L.M. Wilson 8 July 2004 (ID)
<i>H. longipilum</i>	4376	USA: Wisconsin, Adams County, leg. Cochrane 14234 (ID)
<i>H. mexicanum</i>	1093_TA 4773	Guatemala: San Marcos, Tajumulco volcano, leg. K. Krak August 2005, det. F. Schuhwerk (PRA) Mexico: Mexico, leg. Soule 1393 (MSC)
<i>H. patagonicum</i>	pat.Chi	Chile: Refugio Redeto, cultivated at Botanical Garden Munich, culture no. 94-55, voucher from 25.10.1995 (M)
<i>H. scabrum</i>	H911 1002	USA: Michigan I, leg. L.M. Wilson, s.d. (PRA – plants cultivated from seeds) USA: Michigan II, leg. L.M. Wilson, s.d. (PRA – plants cultivated from seeds)
<i>H. scouleri</i> var. <i>albertinum</i>	H903	USA: Idaho, Benewah County, Lindstrom, leg. L.M. Wilson 6 August 2002 (PRA – plants cultivated from seeds)
<i>H. scouleri</i> var. <i>scouleri</i>	4788	USA: Idaho, Idaho County, leg. unknown (ID)
<i>H. stachyoideum</i>	sty.Bol	Bolivia: Prov. Murillo, Dpto Cochabamba, leg. Beck 14565 & Seidel (M)
<i>H. trichodontum</i>	tri.Bol	Bolivia: Prov. Camacho, Dpto La Paz, leg. Beck 4233 (M)
<i>H. triste</i>	4792	USA: Alaska, Skagway, leg. unknown (WTU)
<i>H. venosum</i>	venosum	USA: Michigan, leg. Reznicek 11266 (MICH, GLM 141161)
<i>Hieracium</i> subgen. <i>Hieracium</i>		
<i>Hieracium alpinum</i>	alp.Ukr alp.Boa.2	Ukraine: Chornohora Mts. (Carpathians), Polonina Breskulska ridge, 23 July 2003, leg. P. Mráz & J. Chrtek, 0038/2003 (PRA) Romania: Munții Rodnei, glacial circle on the NE slopes of Mt. Pietrosul Mare, 5 July 2001, leg. P. Mráz, 0187/2001 (PRA)
<i>H. canadense</i>	canad	B&T World Seed, http://www.b-and-t-world-seeds.com/index.html (GLM 157756)
<i>H. eriophorum</i>	1221/1 1222/2	France: dépt. Landes, Labenne: plage de Labenne Océan Sud, 27 September 2006, leg. E. Forey, 1221/2006 (PRA) France: dépt. Landes, Seignosse-le-Penon, plage de Estagnols Seignosse, 27 September 2006, leg. E. Forey, 1222/2006 (PRA)
<i>H. intybaceum</i>	inb.Kaer 1069/1	Austria: Kärnten, Turracher Höhe, S. Jagalski 4 (M) Italy: Trentino, Alto Adige, Passo del Tonale, 31 August 2005, leg. J. Chrtek & P. Mráz, 1069/2005 (PRA)

<i>H. kittanae</i>	1228/2	Bulgaria: Central Rhodope Mts., Trigrad gorge, September 2005, leg. P. Ignatova, 1228/2005 (PRA)
<i>H. laniferum</i>	lanif2	Spain: prov. Tarragona, la Sénia, 4 June 2011, leg. J. Chrtek (PRA)
<i>H. lucidum</i>	H. lucidum	Italy: Sicily, distr. Palermo, Sferracavallo, 11 April 2007, leg. J. Chrtek et al., 0054/2007 (PRA)
<i>H. petrovae</i>	1229	Bulgaria: Central Rhodope Mts., Trigrad gorge, 15 October 2005, leg. V. Vladimirov, 1229/2005 (PRA)
<i>H. porrifolium</i>	1052/9	Austria: Kärnten, Karawanks, Bad Eisenkappel, 26 July 2005, leg. J. Chrtek & P. Mráz, 1052/2005 (PRA)
<i>H. prenanthoides</i>	1252	France: dépt. Hautes Alpes, La Grave, below the village, June 2003, leg. P. Mráz, 1252/2003 (PRA)
<i>H. recoderi</i>	1174/4	Spain: Catalunya, prov. Barcelona, Berga, 24 July 2006, leg. J. Chrtek, 1174/2006 (PRA)
<i>H. sparsum</i>	1251/1	Bulgaria: Sofia, Vitoša Mts., NE slope of Mt. Vitoša, 23 June 2006, leg. F. Krahulec & A. Krahulcová, 1251/2006 (PRA)
	spa.sst.2	Bulgaria: Pirin Mts., Mt. Vihren, garden culture Z. Szeląg, 0034/2006 (PRA)
<i>H. stelligerum</i>	1233/1	France: dépt. Ardèche, Vallon Pont d'Arc, October 2006, leg. P. Mráz, 1233/2006 (PRA)
<i>H. tomentosum</i>	1066/8	France: dépt. Alpes Maritimes, Roya Valley, Tende, 28 August 2005, leg. J. Chrtek & P. Mráz, 1066/2005 (PRA)
<i>H. transylvanicum</i>	tra.Boa	Romania: Munții Rodnei, path from the village of Borșa to Mt. Pietrosul Mare, July 2001, leg. P. Mráz (PRC)
	1077/7	Ukraine: Oblast Zakarpatska, Marmaroski Alps, Mt. Berlebachka, 19 September 2005, leg. J. Zahradníček, 1077/2005 (PRA)
<i>H. umbellatum</i>	1021/1	Poland: Województwo pomorskie, Baltic coast, Jantar, 27 June 2002, leg. Z. Szeląg, 1021/2002 (PRA)
	um.AM.1	Germany: Upper Lusatia, SE Schöna-Berzdorf, slagheap, 20 August 2003, leg. S. Bräutigam (GLM 46889)
<i>H. vranceae</i>	Hvran_1-1	Romania: Vrancea, Cheile Tișitei, 28 August 2013, leg. L. Filipaş & M. Bărbos (PRC)
<i>Hispidella hispanica</i>	His.his.2	Spain: Sierra de Guadarrama, leg. J. Pizarro & C. Navarro (PR, no CN 2460)
<i>Pilosella argyrocoma</i>	agy.Gra	Spain: prov. Granada, cultivated in Botanic Garden Munich, H. Merxmüller & W. Gleisner, culture H11
<i>P. lactucella</i>	lac.Jon.1	Germany: Jonsdorf, Oberlausitz, parking lot, June 1999, leg. S. Bräutigam (GLM 140619)
<i>P. pseudopilosella</i>	TU308/2	Spain: Sierra Nevada, between Granada and Pradolano, 2 June 2008, leg. T. Urfus, T. Urfus 308/2 (PRA)