

Curriculum Vitae – Richard J. Abbott

Professor Emeritus

School of Biology
University of St Andrews
St Andrews
Fife KY16 9TH, UK
Phone: 01334 479221
Email: rja@st-andrews.ac.uk



Degrees

B. Sc. (Hons) Department of Agricultural Botany, University of Bangor 1964-67
D. Phil. Department of Agricultural Science, University of Oxford 1967-71

Positions

Professor Emeritus - University of St Andrews, 2014 onwards
Professor - University of St Andrews, 2004-14
Reader - University of St Andrews, 1999-2004
Senior Lecturer - University of St Andrews, 1993-99
Lecturer - University of St Andrews, 1971-93



Research

- **My research focuses on the biodiversity and evolution of plants, particularly speciation, a primary generator of biodiversity.** I work at the interface of population genetics and molecular systematics, studying adaptation, population divergence, hybridization, mating system evolution, reproductive isolation, speciation and the evolutionary history of Arctic, Alpine, Mediterranean and Temperate species.
- **Published >190 research papers** in a wide range of refereed journals and books, including *Science*, *Nature Communications*, *Proceedings National Academy of Science USA*, *Molecular Plant*, *Trends in Ecology & Evolution*, *Philosophical Transactions of the Royal Society London B*, *Evolution*, *Heredity*, *J. Evolutionary Biology*, *J. Heredity*, *J. Systematics & Evolution*, *Molecular Ecology* and *New Phytologist*. Total citations: 14,636; h-index: 62 (Google Scholar 31/12/2021).
- **Awarded 17 research grants from NERC**, three from the Royal Society, and one each from SERC, BBSRC, Leverhulme Trust, ODA, EU and the French Government (1982 – 2012).
- **Supervised 20 PhD students**
- **Collaborated internationally with many researchers.** An ongoing long-term collaboration with Professor J-Q Liu (Lanzhou and Sichuan Universities) on the evolution of the Qinghai-Tibet flora has produced 28 research papers (since 2004).
- **Discovered a newly originated plant species in the British Isles.** Front page news in *'The Times'*, and reported in most other national newspapers and on radio. One of only 6 plant species known to have originated worldwide within the last 250 years.

National & International Experience

Awards/Service

- Corresponding Member, Botanical Society of America (Awarded to distinguished senior scientists who have made outstanding contributions to plant science and who live and work outside of the USA, 2019)
- President, Botanical Society of Scotland (2006-8)
- Honorary Fellow, Scottish Crop Research Institute / James Hutton Institute (2005-2015)
- Mentor, Gatsby Plant Science Trust (2000-09)
- Member, Genetics Society Committee (1990-94)

Conference organiser

- *History, Evolution and Future of Arctic and Alpine Flora*. Botanical Society of Scotland Int. Symposium (St Andrews 2007)
- *Plant and Animal Speciation: Pattern and Process*. Systematics Association Int. Symposium (Edinburgh 2007)
- *Plants in Cold Climates*. Annals of Botany Int. Symposium (St Andrews 2001)
- *Plant Speciation*. XVI International Botanical Congress Symposium (St Louis 1999)
- *Ecological Genetics Conference* (St Andrews 1998)
- *Plant Molecular Systematics*. Genetics Society Int. Symposium (St Andrews 1992)

External Examiner

- BSc Biology, Genetics, Ecology & Conservation degrees. Edge Hill University (2015-19)
- BSc Biology degree. Stirling University (2012-16)
- MSc Biodiversity & Taxonomy of Plants. Edinburgh University (2007-12)
- BSc Genetics, Environmental Biology degrees. Cardiff University (2004-07)
- BSc Genetics, Genetics & Biochemistry degrees. Aberystwyth University (1997-2000)
- PhD theses at Universities of Aarhus, Addis Ababa (x2), Bangor (x2), Birmingham (x2), Bristol, Cambridge (x4), Cardiff, Dundee, East Anglia, Edgehill, Edinburgh (x3), Essex, Exeter, Liverpool, Newcastle (x2), Oxford (x3), Queen's (Belfast), Queen Mary London (x2), Sheffield, Stellenbosch, Stirling (x2), Stockholm, Swansea, TCD Dublin (x2), Trømsø (x2), Uppsala. (1983-2016).

Research funding panels

- Royal Society University Research Fellowship Awards Panel (Bii) (2011-15)
- IRCSET (Irish Research Council for Science, Engineering and Technology) Assessment Panel for EMBARK initiative (2002-03)
- SEERAD (Scottish Executive Environmental and Rural Development) research organization assessment panel (2002)
- BBSRC Panel for initiative on Gene Flow in Plants (2000)
- NERC Terrestrial Science Peer Review Committee (1998-2001)

Visiting Researcher

- Annually to China - Universities of Peking, Sichuan, Lanzhou (2008-17)
- Washington University, Seattle (July - November 1999)
- University of Connecticut (1991)
- Duke University, N. Carolina (March - September 1982)
- University of Campinas, Brazil (March - September 1977)

Speaker invitations (since 2000)

- **International conferences:** Hybridization - Hamburg (2019); Keynote, XIX International Botanical Congress - Shenzhen, China (2017); Adaptation to Global Change - Seville (2013); Plant Reproductive Ecology - Urumqi, China (2012); SEEDS workshop - Neuchatel, Switzerland (2011); Ecological Genetics Group - Stirling (2010); Hybridization and Polyploidy in Plants - St Malo (2009); Plant Species Concepts and Evolution - Neuchatel (2008); Phylogeography - Lijiang, China (2008); Speciation - American Genetics Association Symposium, Vancouver (2006); XVII Int. Bot. Cong. - Vienna (2005); European Soc. Evolutionary Biol. Conference - Krakow (2005); Fauna & Flora of Atlantic Islands - Dublin (2004); German Botanical Society - Brunswick (2004); Polyploidy, Linnean Society - London (2003); Plant Speciation, *New Phytologist* Symposium - Nova Scotia, Canada (2003); Regulation of Gene Flow in Plants, Royal Society Discussion Meeting - London (2002); Developmental Genetics & Evolution, Systematics Association - London (2000); Environmental Genomics, NERC workshop - Warwick (2000)
- **International research seminars:** Universities of Lanzhou, Sichuan, China (2014); Umea (2013); Lanzhou, Sichuan, Peking, Inst. of Botany Beijing (2012); Uppsala (2011); Leiden, Mainz (2010); Shanghai, Guangzhou, Xi'an, Adelaide, Queensland, Sydney (2009); Georgia, Virginia, Neuchatel, Beijing, Kunming, Lanzhou (2008); Vienna, Salzburg (2007); Washington (Seattle) 2000

Editorial Boards

- **Present:** Senior Editor, *Molecular Ecology* (since 2004); Subject Editor, *Plant Ecology & Diversity* (since 2008); Associate Editor, *Journal of Systematics & Evolution* (since 2009)
- **Past:** Associate Editor, *Journal of Evolutionary Biology* (1988-92), *Heredity* (1992-2003); Editor, *New Phytologist* (2004-09).

Publications

- **Edited volumes**



Rieseberg L, Abbott RJ, Kane N, Karrenberg S, Ortiz-Barrientos D, Shi S (2020) Plant Evolutionary Adaptation. *Plant Communications* (Special issue, 123 pages).



Daetwyler HD, Abbott RJ (2020) Polyploid Population Genetics and Evolution - from Theory to Practice. *Frontiers in Ecology & Evolution, Frontiers in Genetics, Frontiers in Plant Science* (e-Book, 171 pages).



Abbott RJ, Barton NH, Good JM (2016) Genomics of Hybridization. *Molecular Ecology* (Special issue, 364 pages).



Abbott RJ, Ritchie MG, Hollingsworth PM (2008) Speciation in Plants and Animals: Pattern & Process. *Philosophical Transactions of the Royal Society London B* (Theme issue, 142 pages).



Abbott RJ (2008) History, Evolution and Future of Arctic and Alpine flora. *Plant Ecology & Diversity* (Special issue, 220 pages).

▪ *Journal articles*

2022

193. Milton JJ, Affenzeller M, Abbott RJ, Comes HP (2022) Plant speciation in the Namib desert: origin of a widespread derivative species from a narrow endemic. *Plant Ecology & Diversity* (special issue on *The Ecology and Evolution of Plants in Extreme Environments*, in review).
192. Wang DY, XU XT, Xi ZX, Abbott RJ, Liu JQ (2022) Abiotic niche divergence of hybrid species from their progenitors. *American Naturalist* (in revision).

2021

191. Kadereit J, Abbott RJ (2021) Plant speciation in the Quaternary. *Plant Ecology & Diversity* (early view, doi: 10.1080/17550874.2021.2012849).
190. Xiao H-W, Huang Y-B, Chang Y-H, Chen Y, Abbott RJ, Wei Y-K, Ma Y-P (2021) Occurrence and prevention of delayed autonomous selfing in *Salvia umbratica* (Lamiaceae). *Frontiers in Plant Science* 12: 635310. doi: 10.3389/fpls.2021.635310.
189. Marden E, Abbott RJ, Austerlitz F, Ortiz-Barrientos D, Rieseberg LH (2021) Sharing and reporting benefits from biodiversity research. *Molecular Ecology* 30: 1103-1107.
188. Abbott RJ, Rieseberg LH (2021) Hybrid Speciation. *eLS* (Encyclopedia of Life Sciences) 2: 1-12. doi: 10.1002/9780470015902.a0029379
187. Wang Z, Jiang Y-Z, Hao B, Lu Z-Q, Ma Y, Yang X-Y, Chen N-N, Tian B, Liu B-B, Mao X-X, Ma T, DiFazio SP, Hu Q-J, Abbott RJ, Liu J-Q (2021) Hybrid speciation via inheritance of alternate alleles of parental isolating genes. *Molecular Plant* 14: 208-222.
186. Volis S, Zhang Y-H, Dorman M, Abbott RJ (2021) Incipient speciation in *Oncocycclus* irises: eco-geographic isolation and genetic divergence with no reproductive isolation. *Flora* 275: 151746.

2020

185. Walter G, Abbott RJ, Brennan AC, Bridle J, Chapman MA, Clark J, Filatov D, Nevado B, Ortiz-Barrientos D, Hiscock SJ (2020) *Senecio* as a model system for integrating studies of genotype, phenotype and fitness. *New Phytologist* 226: 326-344.

2019

184. Jighly A, Abbott RJ, Daetwyler HD (2019) Editorial: Polyploid population genetics and evolution: from theory to practice. *Frontiers in Ecology & Evolution* 7: article 460
183. Chen J-H, Huang Y, Brachi B, Yun Q-Z, Zhang W, Lu W, Li H-N, Li W-Q, Sun X-D, Wang G-Y, He J, Zhou Z, Chen K-Y, Ji Y-H, Shi M-M, Sun W-G, Yang Y-P, Zhang R-G, Abbott RJ, Sun H (2019) Genome-wide analysis of Cushion willow provides insights into alpine plant divergence in a biodiversity hotspot. *Nature Communications* 10: article 5230.

182. Deng T, Abbott RJ, Li WQ, Sun H, Volis S (2019) Genetic diversity hotspots and refugia identified by mapping multi-plant species haplotype diversity in China. *Israel Journal of Plant Science* 66: 136-150.
181. Xu X-X, Cheng F-Y, Peng L-P, Sun Y-Q, Hu X-G, Li S-Y, Xian H-L, Jia K-H, Abbott RJ, Mao J-F (2019) Late Pleistocene speciation of three closely related tree peonies endemic to the Qinling-Daba mountains, a major glacial refugium in China. *Ecology & Evolution* 19: 7528-7548.
180. Ma Y-Z, Wang J, Hu Q-J, Li J-L, Sun Y-S, Zhang L, Abbott RJ, Liu J-Q, Mao K-S (2019) Ancient introgression drives adaptation to cooler and drier mountain habitats in a cypress species complex. *Communications Biology* 2: 213.
179. Volis S, Zhang Y-H, Deng T, Dorman M, Blecher M, Abbott RJ (2019) Divergence and reproductive isolation between two closely related allopatric *Iris* species. *Biological Journal of Linnean Society* 127: 377-389.
178. Brennan AC, Hiscock SJ, Abbott RJ (2019) Completing the hybridization triangle: the inheritance of genetic incompatibilities during homoploid hybrid speciation in ragworts (*Senecio*). *AoB Plants* 11: ply078, doi.org/10.1093/aobpla/ply078
177. Abbott RJ (2019) A mixing-isolation-mixing (MIM) model of speciation can potentially explain hotspots of species diversity. *National Science Review* nwy112. doi: 10.1093/nsr/nwy112.
- 2018
176. Sun Y-S, Lu Z-Q, Mao K-S, Zhang L, Wang X-J, Ru D-F, Abbott RJ, Liu J-Q (2018) Reticulate evolution within a spruce (*Picea*) species complex revealed by population genomic analysis. *Evolution* 72: 2669-2681.
175. Ru D-F, Sun Y-S, Wang D-G, Chen Y, Wang T-J, Hu Q-J, Abbott RJ, Liu J-Q (2018) Population genomic analysis reveals that homoploid hybrid speciation can be a lengthy process. *Molecular Ecology* 27: 4875-4887.
174. Abbott RJ, Comes HP, Goodwin ZA, Brennan AC (2018) Hybridisation and detection of a hybrid zone between mesic and desert ragworts (*Senecio*) across an aridity gradient in the eastern Mediterranean. *Plant Ecology & Diversity* 11: 267-281.
173. Wang XJ, Hu QJ, Guo XY, Wang K, Ru DF, German D, Weretilnyk EA, Abbott RJ, Lascoux M, Liu JQ (2018) Demographic expansion and genetic load of the halophyte model plant *Eutrema salsugineum*. *Molecular Ecology* 27: 2943-2955.
172. Ma T, Wang K, Hu Q, Xi Z, Wan D, Wang Q, Feng J, Jiang D, Ahani H, Abbott RJ, Lascoux M, Nevo E, Liu J. (2018) Ancient polymorphisms and divergent hitchhiking contribute to genomic islands of divergence within a poplar species complex. *Proceedings of the National Academy of Sciences USA* 115: E236-E243.
- 2017
171. Comes HP, Coleman M, Abbott RJ (2017) Recurrent origin of peripheral, coastal (sub)species in Mediterranean *Senecio* (Asteraceae). *Plant Ecology & Diversity* 10: 253-271.
170. Abbott RJ (2017) Plant speciation across environmental gradients and the occurrence and

nature of hybrid zones. *Journal of Systematics and Evolution* 55: 238-258.

169. Wang K, Wang L-Z, Lenstra JA, Jian J-B, Yang Y-Z, Hu Q-J, Lai D-Y, Qiu Q, Ma T, Du Z, Abbott RJ, Liu J-Q (2017) The genome sequence of the wisent (*Bison bonasus*). *Gigascience* 6: 1-5. doi: 10.1093/gigascience/gix016.
168. Luo X, Hu Q-J, Zhou P-P, Zhang D, Wang Q, Abbott RJ, Liu J-Q (2017) Chasing ghosts: Allopolyploid origin of *Oxyria sinensis* (Polygonaceae) from its only diploid congener and an unknown ancestor. *Molecular Ecology* 26: 3037-3049.

2016

167. Love J, Graham SW, Irwin JA, Ashton PA, Bretagnolle F, Abbott RJ (2016) Self-pollination, style length development and seed set in self-compatible Asteraceae: evidence from *Senecio vulgaris* L. *Plant Ecology & Diversity* 9: 371-379.
166. Alexander-Webber D, Abbott RJ, Chapman MA (2016) Morphological convergence between an allopolyploid and one of its parental species correlates with biased gene expression and DNA loss. *Journal of Heredity* 107: 445-454.
165. Abbott RJ, Barton NH, Good JM (2016) Genomics of hybridization and its evolutionary consequences. *Molecular Ecology* 25: 2325-2332.
164. Irwin JA, Ashton PA, Bretagnolle F, Abbott RJ (2016) The long and the short of it: long-styled florets are associated with higher outcrossing rate in *Senecio vulgaris* and result from delayed self-pollen germination. *Plant Ecology & Diversity* 9: 159-165.

2015

163. Lafon-Placette C, Vallejo-Marín M, Parisod C, Abbott RJ, Köhler C (2015) Current plant speciation research: unravelling the processes and mechanisms behind the evolution of reproductive isolation barriers. *New Phytologist* 209: 29-33
162. Brennan AC, Hiscock SJ, Abbott RJ (2015) The genomic architecture of phenotypic divergence across an altitudinal gradient in *Senecio*. *Annals of Botany Plants* 8: plw doi:10.1093/aobpla/plw022
161. Qiu Q, Wang LZ, Wang K, Yang YZ, Ma T, Wang ZF, Zhang X, Ni ZQ, Hou FJ, Long RJ, Abbott RJ, Lenstra JA, Liu JQ (2015) Yak domestication before 7000 B.P. sustained the early-Neolithic human population expansion on the Qinghai-Tibet Plateau. *Nature Communications* 6: 10283.
160. Wang Q, Liu J-Q, Allen GA, Ma Y-Z, Yue W, Marr KL, Abbott RJ (2015) Arctic plant origins and early formation of circumarctic distributions: a case study of the Mountain sorrel, *Oxyria digyna*. *New Phytologist* 209: 343-353
159. Lowe AJ, Abbott RJ (2015) Hybrid swarms: catalysts for multiple evolutionary events in British and Irish *Senecio*. *Plant Ecology & Diversity* 8: 449-463.

2014

158. Brennan RJ, Woodward G, Seehausen O, Munoz-Fuentes V, Moritz C, Guelmami A, Abbott RJ, Edelaar P (2014) Hybridization due to changing species distributions: adding problems or

solutions to conservation of biodiversity during climate change? *Evolutionary Ecology Research* 16:475-491.

157. Liu B-B, **Abbott RJ**, Lu Z-Q, Tian B, Liu J-Q (2014) Diploid hybrid origin of *Ostryopsis intermedia* (Betulaceae) in the Qinghai-Tibet Plateau triggered by Quaternary climate change. *Molecular Ecology* 23: 3013-3027. DOI: 1111/mec.12783.
156. Wang J, **Abbott RJ**, Ingvarsson PK, Liu JQ (2014) Increased genetic divergence between two closely related fir species in areas of range overlap. *Ecology and Evolution* 4: 1019-1029. DOI: 10.1002/ece3.1007.
155. Brennan AC, Hiscock SJ, Abbott RJ (2014) Interspecific crossing and genetic mapping reveal intrinsic genomic incompatibility between two *Senecio* species that form a hybrid zone on Mount Etna, Sicily. *Heredity* 113: 195-204.
154. Abbott RJ, Brennan AC (2014) Altitudinal gradients, plant hybrid zones, and evolutionary novelty. *Philosophical Transactions of the Royal Society B* 369: 20130346.
153. Sun Y-S, Abbott RJ, Li L-L, Li L, Zou J-B, Liu J-Q (2014) Evolutionary history of Purple cone spruce (*Picea purpurea*) in the Qinghai-Tibet Plateau: homoploid hybrid origin and Pleistocene expansion. *Molecular Ecology* 23:343-359.
152. Li J, Wan Q, Guo Y-P, Abbott RJ, Rao G-Y (2014) Should I stay or should I go: Biogeographic and evolutionary history of a polyploid complex (*Chrysanthemum indicum* complex) in response to Pleistocene climate change in China. *New Phytologist* 201: 1032-1044.

2013

151. Ma T, Wang J-Y, Zhou G-K, Yue Z, Hu Q-J, Chen Y, Liu B-B, Qiu Q, Wang Z, Zhang J, Wang K, Jiang D-C, Gou C-Y, Yu L-L, Zhan D-L, Zhou R, Luo W-C, Yang Y-Z, Pan S-K, Fang D-M, Luo Y-D, Wang X, Wang G-N, Wang J, Wang Q, Lu X, Chen Z, Liu J-C, Lu Y, Yin Y, Yang H-M, **Abbott RJ**, Wu Y-X, Wan D-S, Li J, Yin T-M, Lascoux M, DiFazio SP, Tuskan GA, Wang J, Liu J-Q (2013) Genomic insights into salt adaptation in a desert poplar. (2013) *Nature Communications*. DOI: 10.1038/ncomms3797, 8 pages.
150. Li L, **Abbott RJ**, Liu B-B, Sun Y-S, Li L-L, Zou J-B, Wang X, Miede G, Liu J-Q (2013) Pliocene intraspecific divergence and Plio-Pleistocene range expansions within *Picea likiangensis* (Lijiang spruce), a dominant forest tree of the Qinghai-Tibet Plateau. *Molecular Ecology* 22: 5237-5255.
149. Hegarty M, Coate J, Sherman-Broyles S, **Abbott R**, Hiscock S, Doyle J (2013) Lessons from natural and artificial polyploids in higher plants. *Cytogenetic and Genome Research* 140: 204-225. (DOI: 10.1159/000353361)
148. Wang Q, **Abbott RJ**, Yu Q-S, Liu JQ (2013) Pleistocene climate change and the origin of two desert plants, *Pugionium cornutum* and *P. dolabratum* (Brassicaceae), in northwest China. *New Phytologist* 199: 277-287.
147. Li J, Wan Q, **Abbott RJ**, Rao GY (2013) Geographical distribution of cytotypes in the *Chrysanthemum indicum* complex as evidenced by ploidy level and genome size variation. *Journal of Systematics & Evolution* 51:196-204.
146. **Abbott R**, Albach D, Ansell S, Arntzen JW, Baird SJE, Bierne N, Boughman J, Brelsford A, Buerkle CA, Buggs R, Butlin RK, Diekmann U, Eroukhanoff F, Grill, A, Helms Cahan S, Hermansen JS, Hewitt G, Hudson AG, Jiggins C, Jones J, Keller B, Maczewski T, Mallet J,

Martinez-Rodriguez P, Most M, Mullen S, Nichols R, Nolte AW, Parisod C, Pfennig K, Rice AM, Ritchie MG, Seifert B, Smadja CM, Stelkens R, Szymura JM, Vainola R, Wolf JBW, Zinner D (2013) Hybridization and speciation. *Journal of Evolutionary Biology* 26:229-246.

2012

145. Strijk JS, Richard D, Noyes RD, Strasberg D, Cruaud C, Gavory F, Chase MW, Abbott RJ, Thébaud C (2012) In and out of Madagascar: the role of dispersal to small peripheral islands and insular speciation in the diversification of Indian Ocean daisy trees (*Psiadia*, Asteraceae). *PLoS ONE* 7(8): e42932. doi:10.1371/journal.pone.0042932
144. Hegarty MJ, Abbott RJ, Hiscock SJ (2012) Allopolyploid speciation in action: origin and evolution of *Senecio cambrensis*. In: PS Soltis & DS Soltis (eds.) *Polyploidy and Genome Evolution*. Pp. 245-270. Springer-Verlag, Berlin Heidelberg.
143. Winkler M, Tribsch A, Schneeweiss GM, Brodbeck S, Gugerli F, Holderegger R, Abbott RJ, Schonswetter P (2012) Tales of the unexpected: phylogeography of the arctic-alpine model plant *Saxifraga oppositifolia* (Saxifragaceae) revisited. *Molecular Ecology* 21: 4618-4630.
142. Abbott RJ, Rieseberg LH (2012) Hybrid speciation. In: eLS. John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0001753.pub2
141. Jia DR, Abbott RJ, Liu TL, Mao KS, Wu GL, Bartish IV, Liu JQ (2012) Out of the Qinghai-Tibet Plateau: evidence for the origin and dispersal of Eurasian temperate plants from a phylogeographic study of *Hippophae rhamnoides* (Elaeagnaceae). *New Phytologist* 194: 1123-1133.
140. Ren GP, Abbott RJ, Zhou YF, Zhang LR, Peng YL, Liu JQ (2012) Genetic divergence, range expansion and possible homoploid hybrid speciation among four pine species in northeast China. *Heredity* 108: 552-562.
139. Pelsner PB, Abbott RJ, Comes HP, Milton JJ, Möller M, Looseley ME, Cron GV, Barcelona JF, Kennedy AH, Watson LE, Barone R, Hernández F, Kadereit JW (2012) The genetic ghost of an invasion past: colonization and extinction revealed by historical hybridization in *Senecio*. *Molecular Ecology* 21: 369-387.
138. Brennan AC, Barker D, Hiscock SJ, Abbott RJ (2012) Molecular genetic and quantitative trait divergence associated with recent homoploid hybrid speciation: a study of *Senecio squalidus* (Asteraceae). *Heredity* 108: 87-95.

2011

137. Wang J, Abbott RJ, Peng YL, Du FK, Liu JQ (2011) Species delimitation and biogeography of two fir species (*Abies*) in central China: cytoplasmic DNA variation. *Heredity* 107: 362-370
136. Hegarty MJ, Batstone T, Barker GL, Edwards KJ, Abbott RJ, Hiscock SJ (2011) Nonadditive changes to cytosine methylation as a consequence of hybridization and genome duplication in *Senecio* (Asteraceae). *Molecular Ecology* 20: 105-113.

2010

135. Abbott RJ, Hegarty MJ, Hiscock SJ, Brennan AC (2010) Homoploid hybrid speciation in action. *Taxon* 59: 1375-1386.
134. Chapman MA, Abbott RJ (2010) Introgression of fitness genes across a ploidy barrier. *New Phytologist* 186: 63-71.
133. Zhou YF, Abbott RJ, Jiang ZY, Du FK, Milne RI, Liu JQ (2010) Gene flow and species delimitation: a case study of two pine species with overlapping distributions in southeast China. *Evolution* 64: 2342-2352.
132. Xu, TT, Abbott RJ, Milne RI, Mao KS, Du FK, Wu GL, Zhaxiciren, Miede G, Liu JQ (2010) Phylogeography and allopatric divergence of cypress species (*Cupressus* L.) in the Qinghai-Tibetan Plateau and adjacent regions. *BMC Evolutionary Biology* 10: p. 194 (10 pages).

2009

131. Peredo EL, Revilla MA, Jimenez-Alfaro B, Bueno A, Prieto JAF, Abbott RJ (2009) Historical biogeography of a disjunctly distributed, Spanish alpine plant, *Senecio boissieri* (Asteraceae). *Taxon* 58: 883-892.
130. Brennan AC, Bridle JR, Wang A-L, Hiscock SJ, Abbott RJ (2009) Adaptation and selection in the *Senecio* (Asteraceae) hybrid zone on Mount Etna, Sicily. *New Phytologist* 183: 702-717.
129. Hegarty MJ, Barker GL, Brennan AC, Edwards KJ, Abbott RJ, Hiscock SJ (2009) Extreme changes to gene expression associated with homoploid hybrid speciation. *Molecular Ecology* 18: 877-889.
128. Wang L-Y, Abbott RJ, Zeng W, Chen P, Wang Y-J, Liu J-Q (2009) History and evolution of alpine plants endemic to the Qinghai-Tibetan plateau: *Aconitum gymnantrum* (Ranunculaceae). *Molecular Ecology* 18: 709-721.
127. Abbott RJ, Brennan AC, James JK, Forbes DF, Hegarty MJ, Hiscock SJ (2009) Recent hybrid origin and invasion in the British Isles by a self-incompatible species, Oxford ragwort (*Senecio squalidus* L., Asteraceae) *Biological Invasions* 11: 1145-1158.

2008

126. Abbott RJ (2008) Pierre Taberlet – Recipient of 2007 Molecular Ecology prize. *Molecular Ecology* 17: 514-515.
125. Kim M, Cui M-L, Cubas P, Gillies A, Lee K, Chapman MA, Abbott RJ, Coen E (2008) Regulatory genes control a key morphological and ecological trait transferred between species. *Science* 322: 1116-1119.
124. Abbott RJ (2008) History, evolution and future of arctic and alpine flora: overview. *Plant Ecology & Diversity* 1: 129-133.
123. Abbott RJ, Ritchie MG, Hollingsworth PM (2008) Introduction. Speciation in plants and animals: pattern and process. *Philosophical Transactions of the Royal Society of London Series B*. 363: 2965-2969.
122. Hegarty MJ, Barker GL, Brennan AC, Edwards KJ, Abbott RJ, Hiscock SJ (2008) Changes to

gene expression associated with hybrid speciation in plants: Further insights from transcriptomic studies in *Senecio*. *Philosophical Transactions of the Royal Society London B series* 363: 3055-3069.

121. Choong CY, Wickneswari R, Norwati M, Abbott RJ (2008) Phylogeny of *Hopea* (Dipterocarpaceae) inferred from chloroplast DNA and nuclear PgiC sequences. *Molecular Phylogenetics and Evolution* 48: 1238-1243.
120. Chen K-M, Abbott RJ, Milne RI, Tian X-M, Liu J-Q (2008) Phylogeography of *Pinus tabulaeformis* Carr. Pinaceae, a dominant species of coniferous forest in northern China. *Molecular Ecology* 19: 4276-4288.
119. Milne RI, Abbott RJ (2008) Reproductive isolation among two interfertile *Rhododendron* species: low frequency of post-F1 hybrid genotypes in alpine hybrid zones. *Molecular Ecology* 17: 1108-1121.
- 2007
118. Meng L-H, Yang R, Abbott RJ, Miede G, Hu T-H, Liu J-Q (2007) Mitochondrial and chloroplast phylogeography of *Picea crassifolia* Kom. (Pinaceae) in the Qinghai-Tibetan Plateau and adjacent highlands. *Molecular Ecology* 16: 4128-4137.
117. Abbott RJ, Comes HP (2007) Blowin' in the wind - the transition from ecotype to species. *New Phytologist* 175: 197-200.
116. Abbott RJ, Ireland HE, Rogers HJ (2007) Population decline despite high genetic diversity in the new allopolyploid species *Senecio cambrensis* (Asteraceae) *Molecular Ecology* 16: 1023-1033.
- 2006
115. Hegarty MJ, Barker GL, Wilson ID, Abbott RJ, Edwards KJ, Hiscock SJ (2006) Transcriptome shock after interspecific hybridization in *Senecio* is ameliorated by genome duplication. *Current Biology* 16: 1652-1659.
114. Herbert J, Chase MK, Moller M, Abbott RJ (2006) Nuclear and plastid DNA sequences confirm the placement of the enigmatic *Canacomyrica monticola* in Myricaceae. *Taxon* 55: 349-357.
113. Liu JQ, Wang YL, Wang AL, Hideaki U, Abbott RJ (2006) Radiation and diversification within the *Ligularia-Cremathodium-Parasenecio* complex (Asteraceae) triggered by uplift of the Qinghai-Tibetan Plateau. *Molecular Phylogenetics and Evolution* 38: 31-49.
- 2005
112. James JK, Abbott RJ (2005) Recent, allopatric, homoploid hybrid speciation: the origin of *Senecio squalidus* (Asteraceae), in the British Isles from a hybrid zone on Mount Etna, Sicily. *Evolution* 59: 2533-2547.
111. Zhang Q, Chiang TY, Miede G, Liu JQ, Abbott RJ (2005) Phylogeography of the Qinghai-Tibetan Plateau endemic *Juniperus przewalskii* (Cupressaceae) inferred from chloroplast DNA sequence variation. *Molecular Ecology* 14: 3513-3524.
110. Abbott RJ, Ireland HE, Joseph L, Davies MS, Rogers HJ (2005) Recent plant speciation in Britain

- and Ireland: origins, establishment and evolution of four new hybrid species. *Biology & Environment, Proceedings of the Royal Irish Academy B* 105: 173-183.
109. Hegarty MJ, Jones JM, Wilson ID, Barker GL, Coghill JA, Sanchez-Baracaldo P, Liu G, Buggs RJA, Abbott RJ, Edwards KJ, Hiscock SJ (2005) Development of anonymous cDNA microarrays to study changes to the *Senecio* floral transcriptome during hybrid speciation. *Molecular Ecology* 14: 2493-2510.
 108. Chapman MA, Abbott RJ (2005) The origin of a novel form of *Senecio* (Asteraceae) restricted to sand dunes in southern Sicily. *New Phytologist* 166: 1051-1052.
 107. Chapman MA, Forbes DG, Abbott RJ (2005) Pollen competition among two species of *Senecio* (Asteraceae) that form a hybrid zone on Mt Etna Sicily. *American Journal of Botany* 92: 730-735.
- 2004
106. Liu G, Hegarty M, Edwards KJ, Hiscock SJ, Abbott RJ (2004) Isolation and characterization of microsatellite loci in *Senecio* (Asteraceae). *Molecular Ecology Notes* 4: 611-614.
 105. Lowe AJ, Abbott RJ (2004) Reproductive isolation of a new hybrid species, *Senecio eboracensis* Abbott & Lowe. *Heredity* 92: 386-395.
 104. Milne RI, Abbott RJ (2004) Geographic origin and taxonomic status of the invasive Privet, *Ligustrum robustum* (Oleaceae), in the Mascarene Islands, determined by chloroplast DNA and RAPDs. *Heredity* 92: 78-87.
 103. Abbott RJ, Comes HP (2004) Evolution in the Arctic: A phylogeographic analysis of the circumarctic plant *Saxifraga oppositifolia* (Purple saxifrage). *New Phytologist* 161: 211-224.
 102. Abbott RJ, Lowe AJ (2004). Origins, establishment and evolution of two new polyploid species of *Senecio* in the British Isles. *Biological Journal of the Linnean Society* 82: 467-474.
- 2003
101. Milne RI, Terzioglu S, Abbott RJ (2003) Origin and maintenance of *Rhododendron x sochadzeae*, a fertile F1 hybrid that occupies an ecotone between *R. ponticum* and *R. caucasicum* in Turkey. *Turkish Journal of Botany* 28: 93-100.
 100. Abbott RJ (2003) Sex, sunflowers, and speciation. *Science* 301: 1189-1190.
 99. Abbott RJ, Brochmann C (2003) History and evolution of the arctic flora: in the footsteps of Eric Hultén. *Molecular Ecology* 12: 299-313.
 98. Milne RI, Terzioglu S, Abbott RJ (2003) A hybrid zone dominated by fertile F1s: Maintenance of species barriers in *Rhododendron*. *Molecular Ecology* 12: 2719-2729.
 97. Coleman M, Liston A, Kadereit JW, Abbott RJ (2003) Repeat intercontinental dispersal and Pleistocene speciation in disjunct Mediterranean and desert *Senecio* (Asteraceae). *American Journal of Botany* 90: 1446-1454.
 96. Abbott RJ, James JK, Milne RI, Gillies ACM (2003) Plant introductions, hybridization and gene flow. *Philosophical Transactions of Royal Society B* 358: 1123-1132.

95. Holderegger R, Abbott RJ (2003) Phylogeography of the arctic-alpine *Saxifraga oppositifolia* (Saxifragaceae) and some related taxa based on cpDNA and ITS sequence variation. *American Journal of Botany* 90: 931-936.
94. Holderegger R, Stehlik I, Lewis Smith RI, Abbott RJ (2003) Populations of Antarctic Hairgrass (*Deschampsia antarctica*) show low genetic diversity. *Arctic, Antarctic and Alpine Research* 35: 214-217.
93. Lowe AJ, Abbott RJ (2003) Evolution in action. *Planet Earth* Summer: 24-25.
92. Coleman M, Abbott RJ (2003). Possible causes of morphological variation in an endemic Moroccan groundsel *Senecio leucanthemifolius* var. *casablancae*: evidence from cpDNA and RAPDs. *Molecular Ecology* 12: 423-434.
91. Lowe AJ, Abbott RJ (2003) A new British species, *Senecio eboracensis* (Asteraceae), another hybrid derivative of *S. vulgaris* L. and *S. squalidus* L. *Watsonia* 24: 375-388.

2002

90. Milne RI, Abbott RJ (2002) The origin and evolution of Tertiary relict floras. *Advances in Botanical Research* 38: 281-314.
89. Holderegger R, Stehlik I, Abbott RJ (2002). Molecular analysis of the Pleistocene history of *Saxifraga oppositifolia* in the Alps. *Molecular Ecology* 11: 1409-1418.
88. Abbott RJ, Forbes DG (2002). Extinction of the Edinburgh lineage of the allopolyploid neospecies *Senecio cambrensis* Rosser (Asteraceae). *Heredity* 88: 267-269.
87. Gillies ACM, Cubas P, Coen ES, Abbott RJ (2002) Making rays in the Asteraceae: genetics and evolution of variation for radiate versus discoid flower heads. In Cronk, Q.C.B., Bateman, R.M. and Hawkins, J.A. (eds.) *Developmental Genetics and Plant Evolution*. Taylor & Francis, London. pp. 233-246.
86. Abbott RJ, James JK, Forbes DG, Comes HP (2002) Hybrid origin of the Oxford ragwort, *Senecio squalidus* L.: morphological and allozyme differences between *S. squalidus* and *S. rupestris* Waldst. and Kit. *Watsonia* 24: 17-29.

2001

85. Comes HP, Abbott RJ (2001) Molecular phylogeography, reticulation and lineage sorting in the Mediterranean species complex of *Senecio* sect. *Senecio* (Asteraceae). *Evolution* 55: 1943-1962.
84. Abbott RJ (2001) Book review. Levin D.A. (2001). *The Origin, Expansion and Demise of Plant Species*. OUP. *Heredity*, 87: 125.
83. Coleman M, Forbes DG, Abbott RJ (2001) A new subspecies of *Senecio mohavensis* (Compositae) reveals an Old-New World species disjunction. *Edinburgh. J. Botany* 58: 384-403.

2000

82. Abbott RJ, Smith LC, Milne RI, Crawford RMM, Wolff K, Balfour J (2000) Molecular analysis of

plant migration and evolution in the Arctic. *Science* 289: 1343-1346.

81. Lowe AJ, Abbott RJ (2000) Routes of origin of two recently evolved hybrid taxa: *Senecio vulgaris* var. *hibernicus* and York radiate groundsel (Asteraceae). *American Journal of Botany* 87: 1159-1167.
80. Milne RI, Abbott RJ (2000) Origin and evolution of invasive naturalised material of *Rhododendron ponticum* L. in the British Isles. *Molecular Ecology* 9: 541-556.
79. Comes HP, Abbott RJ (2000) RAPD and phenotypic analyses across a major phylogeographic break in the Mediterranean ragwort *Senecio gallicus* (Asteraceae). *Molecular Ecology* 9: 61-76.
78. Abbott RJ, James JK, Irwin JA, Comes HP (2000) Hybrid origin of the Oxford ragwort, *Senecio squalidus* L. *Watsonia* 23: 123-138.
77. Stehlik I, Holderegger R, Schneller JJ, Abbott RJ, Bachmann K (2000) Molecular biogeography and population genetics of alpine plant species. *Bull. Geobot. Inst. ETH* 66: 47-59.

1999

76. Comes HP, Abbott RJ (1999) Population genetic structure and gene flow across arid versus mesic environments: A comparative study of two *Senecio* species from the Near East. *Evolution* 53: 36-54.
75. Gillies AM, Abbott RJ (1999) Development and use of isozyme analysis for examining genetic diversity in *Stylosanthes*, a tropical forage legume. *Plant Genetic Resources Newsletter* 117: 12-19.
74. Milne RI, Abbott RJ, Wolff K, Chamberlain D (1999) Hybridization among sympatric species of *Rhododendron* (Ericaceae) in Turkey: Morphological and molecular evidence. *American Journal of Botany* 86: 1776-1785.
73. Comes HP, Abbott RJ (1999) Reticulate evolution in the Mediterranean species complex of *Senecio* sect *Senecio*: Uniting phylogenetic and population-level approaches. In: Hollingsworth P, Bateman R & Gornall R (eds.) *Molecular Systematics and Plant Evolution*, pp. 171-198, Taylor & Francis, London U.K.

1998

72. Abbott RJ, Bretagnolle FC, Thébaud C (1998) Evolution of a polymorphism for outcrossing rate in *Senecio vulgaris*: Influence of germination behaviour. *Evolution* 52: 1593-1601.
71. Comes HP, Abbott RJ (1998) The relative importance of historical events and gene flow on the population structure of a Mediterranean ragwort, *Senecio gallicus*. *Evolution* 52: 390-402.
70. Estrella J, Phillips S, Gillies ACM, Abbott RJ, Sorensen M (1998) Genetic variation and relationships in agronomically important species of Yam Bean (*Pachyrhizus* DC) based on RAPD markers. In Sorensen, M, Estrella, JE, Hamann, OJ & Rios Ruiz, SA (eds) *Proc. 2nd Int. Symp. on Tuberous Legumes*, pp. 43-59, RVAU, Copenhagen, Denmark.
69. Gillies ACM, Abbott RJ (1998) Evaluation of randomly amplified polymorphic DNA for species identification and phylogenetic analysis in *Stylosanthes* (Fabaceae). *Plant Syst. & Evol.* 211: 201-216.

1997

68. Abbott RJ, Harris SA & Lowe AJ (1997) Interspecific hybridization and the origin of new plant taxa in Scotland. *Botanical J. Scotland* 49: 247-256.
67. Wolff K, El-Akkad S, Abbott RJ (1997) Population substructure in *Alkanna orientalis* L. Boiss. (Boraginaceae) in the Sinai desert, in relation to pollinator behaviour. *Molecular Ecology* 6: 365-372.
66. Comes HP, Kadereit JW, Pohl A, Abbott RJ (1997). Chloroplast DNA and isozyme evidence on the evolution of *Senecio vulgaris* L. (Compositae). *Plant Systematics & Evolution* 206: 375-392.
65. Todd CD, Walker AM, Wolff K, Northcott SJ, Walker AF, Ritchie MG, Hoskins R, Abbott RJ, Hazon N (1997) Genetic differentiation of populations of the copepod sea louse *Lepeophtheirus salmonis* (Kroyer) ectoparasitic on wild and farmed salmonids around the coasts of Scotland: evidence from RAPD markers. *J. Mar. Biol. Assn. UK* 210: 251-274.
64. Harris SA, Abbott RJ. (1997). Isozyme analysis of the origin of a new endemic orchid species, *Epipactis youngiana*, in the British Isles. *Heredity* 79: 402-407.

1996

63. Gillies ACM, Abbott RJ (1996). Phylogenetic relationships within the genus *Stylosanthes* based on chloroplast DNA restriction analysis. *Plant Systematics & Evolution* 200: 193-211.
62. Abbott RJ, Lowe AJ (1996) A review of hybridization and evolution in British *Senecio* In: Hind, D.J.N. & Beentje, H.J. (eds.). *Compositae: Systematics*. Proceedings of the International Compositae Conference, Kew, 1994. Royal Botanic Gardens, Kew. pp. 679-689.
61. Lowe AJ, Abbott RJ (1996) Origin of the new allopolyploid species *Senecio cambrensis* and its relationship to the Canary Islands endemic *Senecio teneriffae*. *American J. Botany* 83: 1365-1372.
60. Gribel R, Abbott RJ (1996) Genetics of cytosolic phosphoglucose isomerase (PGI) variation in the Amazonian tree *Pseudobombax munguba* (Bombacaceae). *Heredity* 76: 531-538.

1995

59. Abbott RJ, Milne RI (1995) Origins and evolutionary effects of invasive weeds. In: Stirton, C. (ed.) *Weeds in a Changing World*. British Crop Protection Council. pp. 53-64.
58. Kadereit JW, Comes HP, Curnow DJ, Irwin JA, Abbott RJ (1995) Chloroplast DNA and isozyme analysis of the progenitor-derivative species relationship between *Senecio nebrodensis* L. and *S. viscosus* L. *American J. Botany* 82: 1179-1185.
57. Abbott RJ, Chapman HM, Crawford RMM, Forbes DG (1995) Molecular diversity and derivations of populations of *Silene acaulis* and *Saxifraga oppositifolia* from the high Arctic and more southerly latitudes. *Molecular Ecology* 4: 199-207.
56. Thébaud C, Abbott RJ (1995) Characterization of invasive *Conyza* species (Asteraceae) in Europe: quantitative trait and isozyme analysis. *American J. Botany* 82: 360-368.

55. Damgaard C, Abbott RJ (1995) Positive correlations between selfing rate and pollen-ovule ratio within plant populations. *Evolution* 49: 214-217.
54. Abbott RJ, Curnow DJ, Irwin JA (1995) Molecular systematics of *Senecio squalidus* and its close diploid relatives. In: Hind DJN, Jeffrey C & Pope GV (eds.). *Advances in Compositae Systematics*. Kew, Royal Botanic Gardens pp. 223-237.
53. Glover BJ, Abbott RJ (1995) Low genetic diversity in the Scottish endemic *Primula scotica* Hook. *New Phytologist* 129: 147-153.

1994

52. Abbott RJ (1994) Reply to Thacker. *Trends in Ecology and Evolution* 9: 486.
51. Crawford RMM, Abbott RJ (1994) Pre-adaptation of Arctic plants to climate change. *Botanica Acta* 5: 271-278.
50. Gillies ACM, Abbott RJ (1994) Molecular analysis of genetic diversity and evolutionary relationships in *Stylosanthes* In: de Leeuw, P.N., Mohammed-Saleem, M.A. & Nyamu, A.M. (eds.) *Stylosanthes as a Forage and Fallow Crops*. Int. Livestock Centre, Addis Ababa, Ethiopia. pp. 37-53.
49. Glover BJ, Gillies ACM, Abbott RJ (1994) Use of the polymerase chain reaction to investigate the delimitation of two agronomically important species of *Stylosanthes*. *Bot. J. Scotland* 47: 83-96.
48. Harris SA, Hughes CE, Abbott RJ, Ingram R (1994) Genetic variation in *Leucaena leucocephala* Lamb. de Wit. (Leguminosae; Mimosoidae). *Silvae Genetica* 43: 151-163.
47. Harris SA, Hughes CE, Ingram R, Abbott RJ (1994) A phylogenetic analysis of *Leucaena* (Leguminosae: Mimosoidae). *Plant Systematics & Evolution* 191: 1-26.
46. Abbott RJ (1994) Ecological risks of transgenic crops. *Trends Ecology & Evolution* 9: 280-282.

1993

45. Abbott RJ (1993). Book review. Mogie, M. (1992). *The Evolution of Asexual Reproduction in Plants* by M. Mogie. Chapman-Hall. *New Phytologist* 125: 223.
44. Abbott RJ, Forbes DG (1993) Outcrossing rate and self-incompatibility in the colonizing species *Senecio squalidus* L. *Heredity* 71: 155-159.
43. Crawford RMM, Chapman HM, Abbott RJ, Balfour J (1993) Potential impact of climatic warming on Arctic vegetation. *Flora* 188: 367-381.

1992

42. Harris SA, Maberly SC, Abbott RJ (1992) Genetic variation within and between populations of *Myriophyllum alterniflorum* D.C. *Aquatic Botany* 44: 1-21.
41. Abbott RJ (1992) Plant invasions, interspecific hybridization and the evolution of new plant taxa. *Trends Ecology & Evolution* 7: 401-405.

40. Irwin JA, Abbott RJ (1992) Morphometric and isozyme evidence for the hybrid origin of a new radiate groundsel in York, England. *Heredity* 69: 431-439.
39. Chalmers KJ, Waugh R, Walters J, Forster BP, Nevo E, Abbott RJ, Powell W (1992) Grain isozyme and ribosomal DNA variability in *Hordeum spontaneum* populations from Israel. *Theoretical & Applied Genetics* 84: 313-322.
38. Ashton PA, Abbott RJ (1992) Isozyme evidence and the origin of *Senecio vulgaris* L. (Compositae). *Plant Systematics & Evolution* 179: 167-174.
37. Abbott RJ, Irwin JA, Ashton PA (1992) Genetic diversity for esterases in the recently evolved stabilised introgressant, *Senecio vulgaris* L. var. *hibernicus* Syme, and its parental taxa *S. vulgaris* L. var. *vulgaris* L. and *S. squalidus* L. *Heredity* 68: 547-556.
36. Ren Z-S, Abbott RJ (1992) Seed dormancy in *Senecio vulgaris*. *Acta Botanica Yunnanica* 14: 80-86.
35. Abbott RJ, Ashton PA, Forbes DG (1992) Introgressive origin of the radiate groundsel *Senecio vulgaris* L. var. *hibernicus* Syme: *Aat-3* evidence. *Heredity* 68: 425-435.
34. Ashton PA, Abbott RJ (1992) Multiple origins and genetic diversity in the newly arisen allopolyploid species, *Senecio cambrensis* (Compositae). *Heredity* 68: 25-32.
- 1991
33. Abbott RJ (1991) A morph ratio cline for keel petal colour in *Lotus corniculatus* L. along the north coast of Scotland. *Botanical J. Scotland* 46: 131-135.
32. Ren Z, Abbott RJ (1991) Seed dormancy in Mediterranean *Senecio vulgaris*. *New Phytologist* 117: 673-678.
31. Abbott RJ, Horrill JC (1991) Survivorship and fecundity of the radiate and non-radiate morphs of Groundsel, *Senecio vulgaris* L., raised in pure stand and mixture. *J. Evolutionary Biology* 4: 241-257.
- 1990
30. Abbott RJ, Irwin JA, Forbes DG (1990) Absence of a radiate morph bearing self-incompatible ray florets from Edinburgh populations of *Senecio vulgaris* L. *Heredity* 64: 391-393.
- 1989
29. Abbott RJ, Gomes MF (1989) Population genetic structure and outcrossing rate of *Arabidopsis thaliana*. *Heredity* 62: 411-418.
28. Abbott RJ (1989) Population genetics and plant breeding: Homage to R.W. Allard. *Trends in Ecology & Evolution* 4: 5-6.
27. Abbott RJ, Gomes MF (1989) Outcrossing rates in natural populations of *Arabidopsis thaliana*. *Arabidopsis Inf. Serv.* 25: 85-88.

1988

26. Abbott RJ, Irwin J (1988) Pollinator movements and the polymorphism for outcrossing rate at the ray floret locus in Groundsel, *Senecio vulgaris* L. *Heredity* 60: 295-298.
25. Abbott RJ, Horrill JC, Noble GDG (1988) Germination behaviour of the radiate and non-radiate morphs of groundsel, *Senecio vulgaris* L. *Heredity* 60: 15-20.

1987

24. Ross MD, Abbott RJ (1987) Fitness, sexual asymmetry, functional sex and selfing in *Senecio vulgaris* L. *Evolutionary Trends in Plants* 1: 21-28.
23. Marshall DF, Abbott RJ (1987) Morph differences in seed output and the maintenance of the polymorphism for capitulum type and outcrossing rate in *Senecio vulgaris* L. *Trans. Bot. Soc. Edinb.* 45: 107-119.
22. Gomes MF, Abbott RJ (1987) Genotypic diversity in British populations of *Arabidopsis thaliana* based on a survey of isozyme variation. *Arabidopsis Inf. Serv.* 23: 25-30.

1986

21. Caligari PDS, Brown J, Abbott RJ (1986) Selection for yield and yield components in the early generations of a potato breeding programme. *Theoretical Appl. Genet.* 73: 218-222.
20. Abbott RJ (1986) Life history variation associated with the polymorphism for capitulum type and outcrossing rate in *Senecio vulgaris* L. *Heredity* 56: 381-391.

1985

19. Abbott RJ (1985) Maintenance of a polymorphism for outcrossing in a predominantly selfing plant. In: J Haeck & JW Woldendorp (eds.) *Structure and Functioning of Plant Populations*, 2: 277-286. N. Holland, Amsterdam.
18. Abbott RJ, Schmitt J. (1985) Effect of environment on percentage female ray florets per capitulum and outcrossing potential in a self-compatible composite (*Senecio vulgaris* L. var. *hibernicus* Syme). *New Phytologist* 101: 219-229.

1984

17. Marshall DF, Abbott RJ (1984) Polymorphism for outcrossing frequency at the ray floret locus in *Senecio vulgaris* L. III. Causes. *Heredity* 53: 145-149.
16. Marshall DF, Abbott RJ (1984) Polymorphism for outcrossing frequency at the ray floret locus in *Senecio vulgaris* L. II. Confirmation. *Heredity* 52: 331-336.

1983

15. Abbott RJ, Ingram R, Noltie HJ (1983) Discovery of *Senecio cambrensis* Rosser in Edinburgh.

Watsonia 14: 407-408.

14. Abbott RJ, Noltie HJ, Ingram R (1983) The origin and distribution of *Senecio cambrensis* Rosser in Edinburgh. *Trans. Bot. Soc. Edinb.* 44: 103-106.

1982

13. Marshall DF, Abbott RJ (1982). Polymorphism for outcrossing frequency at the ray floret locus in *Senecio vulgaris* L. I. Evidence. *Heredity* 48: 227-235.

1981

12. Pool PA, Ingram R, Abbott RJ, Jennings DL, Topham PD (1981) Karyotype variation in *Rubus* with particular reference to *R. idaeus* L. and *R. coreanus* Miquel. *Cytologia* 46: 125-132.

11. Abbott RJ (1981) The keel petal colour polymorphism of *Lotus corniculatus* L. in Scotland. *New Phytologist* 88: 549-553.

10. Abbott RJ (1981) Polymorphism for cyanogenesis in *Lotus corniculatus* on links and machair in Outer Hebrides. *Transactions Botanical Society Edinburgh* 43: 337-342.

1980

9. Gibbs PE, Leitao-Filho HF, Abbott RJ (1980) Application of the point-centred quarter method in a floristic survey of an area of gallery forest at Mogi-Guacu, S.P., Brazil. *Revista Brasil. Bot.* 3: 17-22.

8. Ingram R, Weir J, Abbott RJ (1980) New evidence concerning the origin of inland radiate Groundsel *S. vulgaris* L. var. *hibernicus* Syme. *New Phytologist* 84: 543-546.

7. Marshall DF, Abbott RJ (1980) On the frequency of introgression of the radiate (T_r) allele from *Senecio squalidus* L. into *Senecio vulgaris* L. *Heredity* 45: 133-135.

1979

6. Abbott RJ (1979) Janzen's Dandelions: A criticism. *American Naturalist* 114: 152-155.

1977

5. Abbott RJ (1977) A quantitative association between soil moisture content and the frequency of the cyanogenic form of *Lotus corniculatus* L. at Birsay, Orkney. *Heredity* 38: 397-400.

1976

4. Campbell JM, Abbott RJ (1976) Variability of outcrossing frequency in *Senecio vulgaris* L. *Heredity* 36: 267-274.

3. Abbott RJ (1976) Variation within Common Groundsel, *Senecio vulgaris* L. II. Local differences within cliff populations on Puffin Island. *New Phytologist* 76: 165-172.
2. Abbott RJ (1976) Variation within Common Groundsel, *Senecio vulgaris* L. I. Genetic response to spatial variations of the environment. *New Phytologist* 76: 153-164.

1974

1. Abbott RJ (1974) Patterns of morphological and physiological variation between and within populations from disparate habitats of *Senecio vulgaris* L. an inbreeding species. D.Phil. Thesis, University of Oxford.
-