

LIST OF PUBLICATIONS – CHRISTIAN PARISOD

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Peer-reviewed international publications

75 papers (20/36 as first/corresponding or senior author)

H-index of 26 / 29 in Clarivate / Google Scholar (4136 / 6200 citations)

© as corresponding author (i.e. responsible for data, analyses and writing)

† for highly cited papers according to Clarivate

α awarded the Stebbins Medal of the International Association of Plant Taxonomists

IF for impact factor according to Clarivate

- © 75. Parisod, 2024, Duplicated gene networks promote ‘hopeful’ phenotypic variation. *Trends in Genetics* 40: 109-111. (IF₂₀₂₂: 11.4)
- 74. Fragnière, Dermelj, Küffer, Sciboz, Müller-Kroehling, Parisod, Kozlowski 2024, Relict of riparian floodplain forests: Natural distribution and ecology of *Ulmus laevis* in Switzerland. *Journal for Nature Conservation* 78: 126574. (IF₂₀₂₂: 2.0)
- 73. Sonnenwyl, Dauphin, Fragnière, Clément, Grünig, Brodbeck, Parisod, Kozlowski & Gugerli 2023, Genetic underpinning of historical afforestation with allochthonous *Pinus cembra* in the northwestern Swiss Alps. *Alpine Botany* xx: in press. (IF₂₀₂₂: 2.7)
- © 72. Bürki, Pulver, Grünig, Certner & Parisod, 2023, Adaptive differentiation on serpentine soil in diploid versus autotetraploid populations of *Biscutella laevigata* (Brassicaceae). *Oikos* XX: XX-XX. (IF₂₀₂₂: 4.3)
- 71. Raimondeau, Bianconi, Pereira, Parisod, Christin & Dunning 2023, Lateral gene transfer generates accessory genes that accumulate at different rates within a grass lineage. *New Phytologist* 240:2072-2084. (IF₂₀₂₂: 10.30)
- 70. Maushe, Ogi, Divakaran, Verdecia Mogena, Himmighofen, Machado, Towbin, Ehlers, Molina, Parisod, Robert, 2023, Stress tolerance in entomopathogenic nematodes: Engineering superior nematodes for precision agriculture. *Journal of Invertebrate Pathology* 199: 107953. (IF₂₀₂₂: 3.4)
- 69. Zeitler, Parisod, Gilbert, 2023, Purging due to self-fertilization does not prevent accumulation of expansion load. *PLoS Genetics* 19:e1010883. (IF₂₀₂₂: 4.5)
- 68. Eggenberg, Champoud, Leibundgut, Parisod, Wyss, Kozlowski, 2023, Calamagrostis lonana (Poaceae): a new grass species from the Pennine Alps (Switzerland). *Candollea* 78: 1-9. (IF₂₀₂₂: 0.6)
- © 67. Metry, Adeyemo, Grünig, Parisod, 2023, Characterization of a sex-determining locus and development of early molecular assays in *Telfairia occidentalis* Hook. F., a dioecious cucurbit. *Genetic Resources and Crop Evolution* 70: 1817–1830. (IF₂₀₂₂: 2.0)
- 66. Roche, Baasch, Runge, Brade, Träger, Parisod, Hensen, 2022, Tracking population genetic signatures of local extinction with herbarium specimens. *Annaly of Botany* 129: 857-868. (IF₂₀₂₂: 4.2)
- © 65. Parisod, Lavergne, Sun & Karedit, 2022, Plant evolutionary ecology in mountain regions in space and time. *Alpine Botany* 131: 1-4. (IF₂₀₂₂: 2.7)
- 64. Shokrollahi, Yousefzadeh, Parisod, Heshmati, Bina, Ali, Amirchakhmaghi, Song, 2022, Phylogenetics and biogeography of *Lilium ledebourii* from the Hyrcanian forest. *Diversity* 14: 137. (IF₂₀₂₂: 2.4)
- © 63. Parisod, 2022, Plant speciation in the face of recurrent climate changes in the Alps. *Alpine Botany* 131: 21-28. (IF₂₀₂₂: 2.7)
- 62. Ermini, Tenaglia, Parisod, Pratta,, 2021, Banana somaclonal variation assessed by Amplified Fragment Length Polymorphism profiles at early cycles of in vitro culture. *Agriscientia* 38: 143-148. (IF₂₀₂₁: 2.5)
- 61. Konečná, Bray, Vlček, Bohutínská, Požárová, Choudhury, Bollmann-Giolai, Flis, Salt, Parisod, Yant, Kolář (2021) Parallel adaptation in autoploid *Arabidopsis arenosa* is dominated by repeated recruitment of shared alleles. *Nature Communication* 12: 4979. (IF₂₀₂₁: 17.7)
- 60. Guillaume, Leempoel, Rochat, Rogivue, Kasser, Gugerli, Parisod & Joost, 2021, Multiscale very high resolution topographic models in alpine ecology: pros and cons of airborne LiDAR and drone-based stereo-photogrammetry technologies. *Remote Sensing* 13: 1588. (IF₂₀₂₁: 5.4)

- © 59. Wos, Chouhury, Kolar & Parisod, 2021, Transcriptional activity of transposable elements along an elevational gradient in *Arabidopsis arenosa*. *Mobile DNA* 12: 7. (IF₂₀₂₁: 4.7)
- 58. Nowak, Birkeland, Mandáková, Choudhury, Guo, Gustafsson, Gizaw, Schröder-Nielsen, Fracassetti, Brysting, Rieseberg, Slotte, Parisod, Lysak & Brochmann, 2021, The genome of *Draba nivalis* shows signatures of adaptation to the extreme environmental stresses of the Arctic. *Molecular Ecology Resources* 21: 661–676. (IF₂₀₂₁: 8.7)
- © 57. Grünig, Fischer & Parisod, 2021, Hybrid origin of the narrow endemic *Pulmonaria helvetica*. *Annals of Botany* 127: 21–31. (IF₂₀₂₁: 5.0)
- 56. Fragnière, Pittet, Clément, Bétrisey, Gerber, Ronkier, Parisod & Kozłowski, 2020, Climate change and alpine screes: no future for glacial relict *Papaver occidentale* (Papaveraceae) in Western Prealps. *Diversity* 12: 346. (IF₂₀₂₀: 2.5)
- © 55. Pittet, Fragnière, Grünig, Bétrisey, Clément, Gerber, Ronkier, Kozłowski & Parisod, 2020, Genetic structure of the endemic *Papaver occidentale* indicates survival and immigration in the Western Prealps. *Alpine Botany* 130: 129–140. (IF₂₀₂₀: 2.1)
- © 54. Huynh, Broennimann, Guisan, Felber & Parisod, 2020, Eco-genetic additivity of diploids in allopolyploid wild wheats. *Ecology Letters* 23: 663–673. (IF₂₀₂₀: 9.5)
- © 53. Badaeva & Parisod, 2020, Chromosomal evolution among hybridizing wild wheats. *New Phytologist* 226: 1263–1273. (IF₂₀₂₀: 10.2)
- 52. Zhang, Doan, Marques Arce, Hu, Grünig, Parisod, Hibbard, Hervé, Robert, Machado & Erb, 2019, Plant defense resistance in natural enemies of a specialist insect herbivore. *Proceedings of the National Academy of Sciences USA* 116: 23174–23181. (IF₂₀₁₉: 9.4)
- © 51. Huynh, Marcussen, Felber & Parisod, 2019, Hybridization preceded radiation in diploid wheats. *Molecular Phylogenetics and Evolution* 139: 106554. (IF₂₀₁₉: 3.5)
- © 50. Choudhury, Roviglio, Gugerli & Parisod, 2019, Impact of polymorphic transposable elements on linkage disequilibrium along chromosomes. *Molecular Ecology* 28: 1550–1562. (IF₂₀₁₉: 5.2)
- © 49. Choudhury, Roviglio (joint first authorship), Zoller, Joost, Felber, Kasser, Gugerli & Parisod (joint last authorship), 2019, Genome-wide variation in nucleotides and transposable elements in alpine populations of *Arabis alpina* (Brassicaceae). *Molecular Ecology Resources* 19: 773–787. (IF₂₀₁₉: 6.3)
- ^a 48. Dunning, Olofsson, Parisod, Choudhury, Moreno-Villena, Yang, Dionora, Quick, Park, Bennetzen, Besnard, Nosil, Osborne & Christin, 2019, Lateral transfers of large DNA fragments spread functional genes among grasses. *Proceedings of the National Academy of Sciences USA* 116: 4416–4425. (IF₂₀₁₉: 9.4)
- 47. Mhiri, Parisod, Daniel, Petit, Lim, Dorlhac de Borne, Kovarik, Leitch & Grandbastien, 2019, Parental transposable element loads influence their dynamics in young *Nicotiana* hybrids and allotetraploids. *New Phytologist* 221: 1619–1633. (IF₂₀₁₉: 8.5)
- 46. Leempoel, Parisod, Geiser & Joost, 2018, Multi-scale landscape genomic models to detect signatures of selection in the alpine plant *Biscutella laevigata*. *Ecology and Evolution* 8: 1794–1806. (IF₂₀₁₈: 2.4)
- 45. Rogivue, Graf, Parisod, Holderegger & Gugerli, 2018, The phylogeographic structure of *Arabis alpina* in the Alps shows consistent patterns across different types of molecular markers and geographic scales. *Alpine Botany* 128: 35–45. (IF₂₀₁₈: 2.7)
- © 44. Choudhury & Parisod, 2017, Jumping genes: genomic ballast or powerhouse of biological diversification. *Molecular Ecology* 26: 4587–4590. (IF₂₀₁₇: 6.1)
- 43. Maccagni, Parisod & Grant, 2017, Phylogeography of the moonwort fern *Botrychium lunaria* (Ophioglossaceae) based on chloroplast DNA in the Central-European Mountain System. *Alpine Botany* 127: 185–196. (IF₂₀₁₇: 2.5)
- © 42. Choudhury, Neuhaus & Parisod, 2017, Resolving fine-grained dynamics of retrotransposons: comparative analysis of inferential methods and genomic resources. *Plant Journal* 90: 979–993. (IF₂₀₁₇: 5.8)
- 41. Prinzing, Ozinga, Brändle, Courty, Hennion, Labandeira, Parisod, Pihain & Bartish, 2017, Benefits from living together? Clades whose species use similar habitats decline less. *New Phytologist* 213: 66–82. (IF₂₀₁₇: 7.4)
- © 40. Parisod & Broennimann, 2016, Towards unified hypotheses of the impact of polyploidy on ecological niches. *New Phytologist* 212: 540–542. (IF₂₀₁₆: 7.3)

- © 39. Geiser, Mandakova, Arrigo, Lysak & Parisod, 2016, Repeated whole-genome duplication, karyotype reshuffling and biased retention of stress-responding genes in Buckler Mustards. *Plant Cell* 28: 17-27. (IF₂₀₁₆: 8.7)
- © 38. Senerchia, Felber, North, Sarr, Guadagnolo & Parisod, 2016, Differential introgression and reorganization of retrotransposons in hybrid zones between wild wheats. *Molecular Ecology* 25: 2518–2528. (IF₂₀₁₆: 6.1)
- © 37. Parisod, 2016, Profiling transposable elements and their epigenetic effects in non-model species. *Methods in Plant Epigenetics*. (IF₂₀₁₆: 1.9)
- 36. Lafon-Placette, Vallejo-Marín, Parisod, Abbott & Köhler, 2016, Current plant speciation research: unraveling the processes and mechanisms behind the evolution of reproductive isolation barriers. *New Phytologist* 209: 29-33. (IF₂₀₁₆: 7.3)
- 35. Leempoel, Parisod, Geiser, Daprà, Vittoz & Joost, 2015, Very high resolution digital elevation models: are multi-scale derived variables ecologically relevant? *Methods in Ecology and Evolution* 6: 1373–1383. (IF₂₀₁₅: 6.6)
- 34. AlKindy, Guyeux, Couchot, Salomon, Parisod & Bahi. 2015, Hybrid genetic algorithm and lasso test approach for inferring well supported phylogenetic trees based on subsets of chloroplastic core genes. *Algorithms Computational Biology* 9199: 83-96. (IF₂₀₁₅: 1.4)
- © 33. Senerchia, Felber & Parisod, 2015, Genome reorganization in F1 hybrids uncovers the role of retrotransposons in reproductive isolation. *Proceedings of the Royal Society B-Biological Sciences* 282: 20142874. (IF₂₀₁₅: 4.8)
- © 32. Bardil, Tayalé & Parisod, 2015, Evolutionary dynamics of retrotransposons following autopolyploidy in the Buckler Mustard species complex. *Plant Journal* 82: 621–631. (IF₂₀₁₅: 6.8)
- 31. Pajkovic, Lappe, Barman, Parisod, Neueunschwander, Goudet, Alvarez, Guadagnolo, Felber & Arrigo, 2014, Wheat alleles introgress into selfing wild relatives: empirical estimates from Approximate Bayesian Computation in *Aegilops triuncialis*. *Molecular Ecology* 23: 5089–5101. (IF₂₀₁₄: 6.5)
- 30. Babst-Kostecka, Parisod, Godé, Vollenweider & Pauwels, 2014, Patterns of genetic divergence among populations of the pseudometallophyte *Biscutella laevigata* from southern Poland. *Plant and Soil* 383: 245-256. (IF₂₀₁₄: 3.0)
- 29. Gustafsson, Skrede, Gussarova, Borgen, Rowe, Rieseberg, Brochmann & Parisod, 2014, Genetics of cryptic speciation within an arctic mustard, *Draba nivalis*. *PLoS ONE* 9: e93834. (IF₂₀₁₄: 3.2)
- © 28. Senerchia, Felber & Parisod, 2014, Contrasting evolutionary dynamics of multiple retrotransposons after independent polyploidy events in wild wheats. *New Phytologist* 202: 975–985. (IF₂₀₁₄: 7.7)
- 27. Parisod, Salmon, Ainouche & Grandbastien, 2014, Detecting epigenetic effects of transposable elements in plants. In *Plant Epigenetics and Epigenomics* (Eds. Spillane & McKeown), Springer, *Methods in Molecular Biology* 112: 211-217. (IF₂₀₁₃: 1.3)
- © 26. Bonchev & Parisod, 2013, Transposable elements and microevolutionary changes in natural populations. *Molecular Ecology Resources* 13: 765-775. (IF₂₀₁₃: 5.6)
- © 25. Tayalé & Parisod, 2013, Natural pathways to polyploidy and consequences for genome organization and genome size. *Cytogenetic and Genome Research* 140: 79-96. (IF₂₀₁₃: 1.9)
- © 24. Senerchia, Wicker, Felber & Parisod, 2013, Evolutionary dynamics of LTR retrotransposons in wild wheats assessed with high throughput sequencing. *Genome Biology and Evolution* 5: 1010-1020. (IF₂₀₁₃: 4.5)
- † 23. Abbott, Albach, Ansell, Arntzen, Baird, Bierne, Boughman, Brelandsford, Buerkle, Buggs, Butlin, Dieckmann, Eroukhmanoff, Grill, Helms Cahan, Hermansen, Hewitt, Hudson, Jiggins, Jones, Keller, Marczewski, Mallet, Martinez-Rodriguez, Möst, Mullen, Nichols, Nolte, Parisod, Pfennig, Rice, Ritchie, Seifert, Smadja, Stelkens, Szymbura, Väinöla, Wolf, Zinner (39 authors; Parisod as discussion leader), 2013, Target Review: Hybridization and speciation. *Journal of Evolutionary Biology* 26: 229–246. (IF₂₀₁₃: 3.5)
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- 20. Parisod, Mihri, Clarkson, Lim, Chase, Leitch & Grandbastien, 2012, Differential impact of Transposable Elements on long-term genome diploidization in the allopolyploid *Nicotiana* section *Repandaee*.

PLoS ONE 7: e50352. (IF₂₀₁₂: 3.7)

- © 19. Parisod & Holderegger, 2012, Adaptive landscape genetics: pitfalls and benefits. *Molecular Ecology* 21: 3644–3646. (IF₂₀₁₂: 6.3)
- © 18. Parisod, 2012, Polyploids integrate genomic changes and ecological shifts. *New Phytologist* 193: 297-300. (IF₂₀₁₂: 6.7)
- 17. Holderegger, Thiel-Egenter & Parisod, 2011, Marie Brockmann-Jerosch and her influence on alpine phylogeography. *Alpine Botany* 121: 5-10. (IF₂₀₁₂: 1.8)
- 16. Leempoel, Stucki, Parisod & Joost, 2011, Very high resolution digital elevation models (VHR DEMs) and multiscale landscape genomics analysis applied to an alpine plant species. *SIGSPATIAL* 3: 10-14. (IF₂₀₁₁: 1.0)
- 15. Arrigo, Guadagnuolo, Parisod & Felber, 2011, Gene flow between wheat and wild relatives: empirical evidence from *Aegilops geniculata*, *Aegilops neglecta* and *Aegilops triuncialis*. *Evolutionary Applications* 4: 685–695. (IF₂₀₁₁: 4.9)
- © 14. Parisod, Wipf & Guesewell, 2010, Plant and vegetation responses to a changing environment: an alpine issue. *Botanica Helvetica* 120: 83-84. (IF₂₀₁₀: 0.6)
- 13. Arrigo, Felber, Parisod, Buerki, Alvarez, David & Guadagnuolo, 2010, Origin and expansion of the allotetraploid *Aegilops geniculata*, a wild relative of wheat. *New Phytologist* 184: 1170-1180. (IF₂₀₁₀: 6.5).
- 12. Antonelli, Verola, Parisod & Gustafsson, 2010, Climate cooling promoted the expansion and radiation of a threatened group of South American orchids (Epidendroideae: Laeliinae). *Biological Journal of the Linnean Society* 100: 597–607. (IF₂₀₁₀: 2.2)
- † 11. Lira-Medeiros, Parisod, Aires Cardoso & Cavalcanti Gomes Ferreira, 2010, Epigenetic variation in mangrove plants occurring in natural contrasting environment. *PLoS ONE* 5: e10326. (IF₂₀₁₀: 4.4)
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- †© 9. Parisod, Holderegger & Brochmann, 2010, Evolutionary consequences of autoploidy. *New Phytologist* 186: 5-17. (IF₂₀₁₀: 6.5)
- 8. Parisod, Alix, Just, Petit, Sarilar, Mhiri, Ainouche, Chalhoub & Grandbastien, 2010, Impact of transposable elements in organization and functioning of allopolyploid genomes. *New Phytologist* 186: 37-45. (IF₂₀₁₀: 6.5)
- 7. Parisod, Salmon, Tenaillon, Zerjal, Grandbastien & Ainouche, 2009, Rapid structural and epigenetic reorganization near Transposable Elements in hybrid and allopolyploid genomes of *Spartina*. *New Phytologist* 183: 1003-1015. (IF₂₀₀₉: 6.0)
- 6. Ainouche, Fortune, Salmon, Parisod, Grandbastien, Fukunaga, Ricou & Misson, 2009, Hybridization, polyploidy and invasion: Lessons from *Spartina* (Poaceae). *Biological Invasions* 11: 1159-1173. (IF₂₀₀₉: 3.1)
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- © 4. Parisod, 2008, Postglacial recolonisation of plants in the western Alps of Switzerland. *Botanica Helvetica* 118: 1-12. (IF₂₀₀₈: 0.5)
- © 3. Parisod & Christin, 2008, Genome-wide association to fine-scale ecological heterogeneity within a continuous population of *Biscutella laevigata* (Brassicaceae). *New Phytologist* 178: 436-447. (IF₂₀₀₈: 5.3)
- © 2. Parisod & Besnard, 2007, Glacial *in situ* survival in the Western Alps and polytopic autoploidy in *Biscutella laevigata* L. (Brassicaceae). *Molecular Ecology* 16: 2755-2767. (IF₂₀₀₇: 5.2)
- © 1. Parisod, Trippi & Galland, 2005, Genetic variability and founder effect in the Pitcher Plant, *Sarracenia purpurea*, in populations introduced into Switzerland: from inbreeding to invasion. *Annals of Botany* 95: 277-285. (IF₂₀₀₅: 2.7)