

Publications 2021

1	Habib N. A., M. Müller, O. Gailing, A. Patzelt, G. Al Issai, K. V. Krutovsky, M. Wiehle 2021 Genetic diversity and differentiation of <i>Olea europaea</i> subsp. <i>cuspidata</i> (Wall. & G. Don) Cif.in the Hajar Mountains of Oman. Genetic Resources and Crop Evolution 68(3): 865–883 https://doi.org/10.1007/s10722-020-01030-2 Published online: 4 October 2020 (IF = 1.071; Q3).
2	Cuervo-Alarcon L., M. Arend, M. Müller, C. Sperisen, R. Finkeldey, K. V. Krutovsky 2021 A candidate gene association analysis identifies SNPs potentially involved in drought tolerance in European beech (<i>Fagus sylvatica</i> L.). Scientific Report 11: 2386. https://doi.org/10.1038/s41598-021-81594-w (IF = 4.122; Q1).
3	Tarieiev A. S., O. Gailing, K. V. Krutovsky 2021 ITS secondary structure reconstruction to resolve taxonomy and phylogeny of the <i>Betula</i> L. genus. PeerJ 9: e10889 https://doi.org/10.7717/peerj.10889 Published online: 23 March 2021 (IF = 2.380; Q1).
4	Perfileva A. I., O. A. Nozhkina, T. V. Ganenko, I. A. Graskova, B. G. Sukhov, A. V. Artem'ev, B. A. Trofimov, K. V. Krutovsky 2021 Selenium nanocomposites in natural matrices as potato recovery agent. International Journal of Molecular Sciences 22(9), 4576; https://doi.org/10.3390/ijms22094576 Published: 27 April 2021 (IF = 4.556; Q1).
5	Nieves-Orduña, H. E., M. Müller, K. V. Krutovsky, O. Gailing. 2021 Geographic patterns of genetic variation among cacao (<i>Theobroma cacao</i> L.) populations based on chloroplast markers. Diversity 2021, 13(6): 249 https://www.mdpi.com/1424-2818/13/6/249/ htm https://doi.org/10.3390/d13060249 Published: 5 June 2021 (IF = 1.402; Q3).
6	Shestibratov K. A., O. Yu. Baranov, E. N. Mescherova, P. S. Kiryanov, S. V. Panteleev, L. V. Mozharovskaya, K. V. Krutovsky, V. E. Padutov 2021 Complete Chloroplast Genome of the Curly Birch (<i>Betula pendula</i> var. <i>carelica</i> (Merckl.) Hämet-Ahti): Structure, Functional Organization, Comparative and Phylogenetic Analysis. Frontiers in Genetics (accepted) https://www.frontiersin.org/articles/10.3389/fgene.2021.625764/abstract (IF = 4.599; Q2).
7	Perfileva A. I., O. M. Tsivileva, O. A. Nozhkina, M. S. Karepova, I. A. Graskova, T. V. Ganenko, B. G. Sukhov, K. V. Krutovsky 2021. Effect of natural polysaccharide matrix-based selenium nanocomposites on <i>Phytophthora cactorum</i> and rhizospheric microorganisms. Nanomaterials 11(9), 2274; https://doi.org/10.3390/nano11092274 Published: 1 September 2021 (Q1/2, IF = 5.076).
8	Tsipidou, Olympia & Leinemann, Ludger & Korakis, Georgios & Finkeldey, Reiner & Gailing, Oliver & Papageorgiou, Aristotelis. (2021). Fine-Scale Spatial Patterns of the Genetic Diversity of European Beech (<i>Fagus sylvatica</i> L.) around a Mountainous Glacial Refugium in the SW Balkans. Forests. 12. 725. 10.3390/f12060725 .
9	Tiebel, Katharina & Leinemann, Ludger & Hosius, Bernhard & Frischbier, Nico & Wagner, Sven. (2021). Verjüngung auf Störungsflächen 2: Wie weit fliegen Salweidensamen? 5. 28-31.
10	Burkardt, Katharina & Pettenkofer, Tim & Ammer, Christian & Gailing, Oliver & Leinemann, Ludger & Seidel, Dominik & Vor, Torsten. (2021). Influence of heterozygosity and competition on morphological tree characteristics of <i>Quercus rubra</i> L.: a new single-tree based approach. New Forests. 52. 1-17. 10.1007/s11056-020-09814-1 .
11	Lütkenhaus A, Caré O, Kuchma O, Moser K, Müller M, Gailing O, Hosius B, Leinemann L. (2021). Die Identifizierung der Europäischen und Japanischen Lärche und ihrer Hybride mit SSR-Genmarkern. AFJZ, eingereicht.

12	Khutsishvili S. S., A. I. Perfileva, O. A. Nozhkina, T. V. Ganenko, K. V. Krutovsky. 2021. Novel Nanobiocomposites Based on Natural Polysaccharides as Universal Trophic Low-Dose Micronutrients. <i>International Journal of Molecular Sciences</i> 22(1): 12006. https://doi.org/10.3390/ijms222112006 .
13	Titievsky, A.; Putintseva, Y.A.; Taranenko, E.A.; Baskin, S.; Oreshkova, N.V.; Brodsky, E.; Sharova, A. V.; Sharov, V.V.; Panov, J.; Kuzmin, D.A.; Brodsky, L.; Krutovsky, K.V. 2021. Comparative genomics analysis of repetitive elements in ten gymnosperm species: “dark repeatome” and its abundance in conifer and Gnetum species. <i>Life</i> 11(11): 1234. https://doi.org/10.3390/life11111234 .
14	Dasgupta M. G., A. B. M. Parveen, S. Shanmugavel, V. Dharanishanthi, M. Muthupandi, N. Kumar, S. S. Chauhan, J. Kalaivanan, H. Mohan, K. V. Krutovsky, D. Rajasugunasekar. 2021. Targeted re-sequencing and genome-wide association analysis for wood property traits in breeding population of <i>Eucalyptus tereticornis</i> × <i>E. grandis</i> . <i>Genomics</i> 113(6): 4276-4292. https://doi.org/10.1016/j.ygeno.2021.11.013 .
15	Belokopytova L. V., Zhirnova D. F., Meko D. M., Babushkina E. A., Vaganov E. A., Krutovsky K. V. 2021. Tree rings reveal the impact of soil temperature on larch growth in the forest-steppe of Siberia. <i>Forests</i> 12(12): 1765. https://doi.org/10.3390/f12121765 .
16	Lazic, D.; Hipp, A.L.; Carlson, J.E.; Gailing, O. Use of Genomic Resources to Assess Adaptive Divergence and Introgression in Oaks. <i>Forests</i> 2021, 12, 690. https://doi.org/10.3390/f12060690 .
17	Hurel A., de Miguel M., Dutech C., Desprez-Loustau M.L., Plomion C., Rodríguez-Quilón I., Cyrille A., Guzman T., Alía R., González-Martínez S.C. & K.B. Budde. 2021. Genetic basis of growth, spring phenology, and susceptibility to biotic stressors in maritime pine. <i>Evolutionary Applications</i> , 14: 2750-2772. https://doi.org/10.1111/eva.13309 .
18	Burger K., Müller M., Rogge M. and Gailing O. 2021. Genetic differentiation of indigenous (<i>Quercus robur</i> L.) and late flushing oak stands (<i>Q. robur</i> L. subsp. <i>slavonica</i> (Gayer) Matyas) in western Germany (North-rhine-Westphalia). <i>European Journal of Forest Research</i> 140 (5), 1179-1194. https://doi.org/10.1007/s10342-021-01395-8 .
19	Nieves-Orduña, H.E.; Müller, M.; Krutovsky, K.V.; Gailing, O. Geographic Patterns of Genetic Variation among Cacao (<i>Theobroma cacao</i> L.) Populations Based on Chloroplast Markers. <i>Diversity</i> 2021, 13, 249. https://doi.org/10.3390/d13060249 .
20	Victor Chano, Juan Sobrino-Plata, Carmen Collada, Alvaro Soto. Wood development regulators involved in apical growth in <i>Pinus canariensis</i> . <i>Plant Biology</i> 2021; 23(3): 438-444, DOI: 10.1111/plb.13228.
21	Víctor Chano, Tania Domínguez-Flores, María Dolores Hidalgo-Gálvez, Jesús Rodríguez-Calcerrada, Ignacio Manuel Pérez-Ramos. Epigenetic responses of hare barley (<i>Hordeum murinum</i> subsp. <i>leporinum</i>) to climate change: an experimental, trait-based approach. <i>Heredity</i> 2021; 126: 748-762, DOI: 10.1038/s41437-021-00415-y.
22	Wang, Y., Wang, X., Gailing, O. & D. Xi. 2020. Visual detection of <i>Fusarium proliferatum</i> based on dual-cycle signal amplification and T5 exonuclease. <i>RSC Advances</i> 10: 35131. DOI: 10.1039/d0ra06559e.
23	Di Pietro, R., Conte, A.L., Di Marzio, P., Fortini, P., Farris, E., Gianguzzi L., Müller, M., Rosati, L., Spampinato, G. & O. Gailing. 2021. Does the genetic diversity among pubescent white oaks in southern Italy, Sicily and Sardinia islands support the current taxonomic classification? <i>European Journal of Forest Research</i> 140:355-371. https://doi.org/10.1007/s10342-020-01334-z .

24	Yucedag, C., Müller, M. & O. Gailing. 2021. Morphological and genetic variation in natural populations of <i>Quercus vulcanica</i> and <i>Q. frainetto</i> . <i>Plant Systematics and Evolution</i> 307: 8. https://doi.org/10.1007/s00606-020-01737-w .
24	Wiehle, M., Nawaz, M.A., Dahlem, R., Alam, I., Ali Khan, A., Gailing, O., Müller, M. & A. Bürkert. 2021. Pheno-genetic studies of apple varieties in northern Pakistan: A hidden pool of diversity? <i>Scientia Horticulturae</i> 281: 109950. https://doi.org/10.1016/j.scienta.2021.109950 .
25	Zafar, Z., Rasheed, F., Atif, R.M. Maqsood, M. & O. Gailing. 2021. Salicylic acid induced morpho-physiological and biochemical changes triggered the water deficit tolerance in <i>Syzygium cumini</i> L. saplings. <i>Forests</i> 12: 491. https://doi.org/10.3390/f12040491 .
26	Spence E.S., Fant, J., Gailing, O., Griffith, P.M., Havens, K., Hipp, A.L., Kadav, P., Kramer, A. Thompson, P., Toppila, R., Westwood, M., Wood, J., Zumwalde, B.A. & S. Hoban. 2021. Comparing genetic diversity in three threatened oaks. <i>Forests</i> 12: 561. https://doi.org/10.3390/f12050561 .
27	Zafar, Z., Fahad Rasheed, F., Atif, R.M., Javed, M.A., Maqsood, M. & O. Gailing. 2021. Foliar application of salicylic acid improves water stress tolerance in <i>Conocarpus erectus</i> and <i>Populus deltoides</i> saplings: evidence from morphological, physiological, and biochemical changes. <i>Plants</i> 10:1242. https://doi.org/10.3390/plants10061242 .
28	Yücedağ, C., Nuray Çiçek, C. & O. Gailing. 2021. Local adaptation at a small geographic scale observed in <i>Juniperus excelsa</i> populations in southern Turkey. <i>iForest - Biogeosciences and Forestry</i> 14:531-539. doi: 10.3832/ifer3769-014.
29	Burger, K. & O. Gailing. 2021. Die slawonische Stieleiche (<i>Quercus robur</i> subsp. <i>slavonica</i> (Gáyer) Mátyás) als Alternative für den Klimawandel: Experimentelle und genomische Ressourcen. <i>Allgemeine Forst und Jagdzeitung</i> 192: 26-37. DOI-Nummer: 10.23765/afjz0002075.
30	Ohtani, M., Tani, N. Ueno, S., Kondo, T., Leong Lee, S. Ng, K.K.S., Muhammad, N., Finkeldey, R., Gailing, O., Na'iem, M., Indrioko, S., Widiyatno, W., Siregar, I., Kamiya, K., Harada, K., Bibian Diway, B. & Y. Tsumura. 2021. Genetic structure of an important widely distributed tropical forest tree, <i>Shorea parvifolia</i> , in Southeast Asia. <i>Tree Genetics and Genomes</i> 17:44. https://doi.org/10.1007/s11295-021-01525-8 .
31	Isik, A.H. Yucedag, C., Eskicioglu, Ö.C. & O. Gailing. 2021. Identifying of <i>Quercus vulcanica</i> and <i>Q. frainetto</i> growing in different environments through deep learning analysis. <i>Environmental Monitoring and Assessment</i> 193: 768. https://doi.org/10.1007/s10661-021-09565-2 .
32	Lütkenhaus A., Caré O., Kuchma O., Moser K., Müller M., Gailing O., Hosius B. & L. Leinemann. 2021. Die Identifizierung der Europäischen und Japanischen Lärche und ihrer Hybride mit SSR-Genmarkern. <i>Allgemeine Forst und Jagdzeitung</i> 192: 37- 48. DOI-Nummer: 10.23765/afjz0002076.
33	Gailing, O., Budde, K.B. & M. Müller. 2021. Veränderung genetischer Variationsmuster von Waldbäumen unter Gesichtspunkten des Klimawandels. <i>Allgemeine Forst und Jagdzeitung</i> 192: 93-105. DOI-Nummer: 10.23765/afjz0002079.
34	Tsipidou, O., Leinemann, L., Korakis, G., Finkeldey, R., Gailing, O. & A. C. Papageorgiou. 2021. Fine scale spatial patterns of beech genetic diversity around a mountainous glacial refugium in the SW Balkans. <i>Forests</i> 12: 725. https://doi.org/10.3390/f12060725 .
35	Gailing, O., Staton, M., Schlarbaum, S.E., Coggeshall, M.V., Romero-Severson, J., Liang, H. & J. E. Carlson. 2021. Progress and prospects of population genomics of North American hardwoods. <i>Population Genomics: Forest Trees</i> . Springer Nature. Switzerland. https://doi.org/10.1007/13836_2021_99 .

36	Gailing, O., Hipp, A.L., Plomion, C. & J. E. Carlson. 2021. Oak population genomics. Population Genomics: Forest Trees. Springer Nature. Switzerland. https://doi.org/10.1007/13836_2021_100 .
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