

Free University of Bolzano-Bozen

Faculty of Agricultural, Environmental and Food Sciences

Research Macroarea: Agriculture

Publication list: 2019-2024

2019

1. Aguzzoni, A., Bassi, M., Robatscher, P., Scandellari, F., Tirler, W., & Tagliavini, M. (2019). Intra- and Intertree Variability of the $^{87}\text{Sr}/^{86}\text{Sr}$ Ratio in Apple Orchards and Its Correlation with the Soil $^{87}\text{Sr}/^{86}\text{Sr}$ Ratio. *Journal of Agricultural and Food Chemistry*, 67(20), 5728–5735. <https://doi.org/10.1021/acs.jafc.9b01082>
2. Alam, M. R., Scampicchio, M., Angeli, S., & Ferrentino, G. (2019). Effect of hot melt extrusion on physical and functional properties of insect based extruded products. *Journal of Food Engineering*, 259, 44–51. <https://doi.org/10.1016/j.jfoodeng.2019.04.021>
3. Armbrrecht, L., Lambertz, C., Albers, D., & Gauly, M. (2019). Assessment of welfare indicators in dairy farms offering pasture at differing levels. *Animal*, 13(10), 2336–2347. <https://doi.org/10.1017/S1751731119000570>
4. Bakovic, V., Schuler, H., Schebeck, M., Feder, J. L., Stauffer, C., & Ragland, G. J. (2019). Host plant-related genomic differentiation in the European cherry fruit fly, *Rhagoletis cerasi*. *Molecular Ecology*, 28(20), 4648–4666. <https://doi.org/10.1111/mec.15239>

5. Baric, S. (2019). Duplex TaqMan Real-Time PCR for Rapid Quantitative Analysis of a Phytoplasma in Its Host Plant without External Standard Curves. In R. Musetti & L. Pagliari (Eds.), *Methods in Molecular Biology* (Vol. 1875, pp. 131–141). Springer New York. https://doi.org/10.1007/978-1-4939-8837-2_10
6. Bartho, J.D., Demitri, N., Bellini, D., Flachowsky, H., Peil, A., Walsh, M.A., Benini, S. (2019) The structure of *Erwinia amylovora* AvrRpt2 provides insight into protein maturation and induced resistance to fire blight by *Malus x robusta* 5. *J. Struct. Biol.* <https://doi.org/10.1016/j.jsb.2019.03.010>
7. Bartucca, M. L., Mimmo, T., Cesco, S., Panfili, I., & Del Buono, D. (2019). Effect of metribuzin on nitrogen metabolism and iron acquisition in *Zea mays*. *Chemistry and Ecology*, 35(8), 720–731. <https://doi.org/10.1080/02757540.2019.1641493>
8. Benini, S., Haouz, A., Proux, F., Alzari, P., Wilson, K. (2019) The crystal structure of Rv2991 from *Mycobacterium tuberculosis*: An F420 binding protein with unknown function. *J. Struct. Biol.* <https://doi.org/10.1016/j.jsb.2019.03.006>
9. Bietresato, M., Belotti, R., Von Ellenrieder, K. D., & Mazzetto, F. (2019). A Preliminary Study of Active Stabilization for Agricultural Machines Using a Movable Mass. *ASME International Mechanical Engineering Congress and Exposition (IMECE)*, 4, V004T05A061.
10. Bietresato, M., Caligiuri, C., Bolla, A., Renzi, M., & Mazzetto, F. (2019). Proposal of a Predictive Mixed Experimental- Numerical Approach for Assessing the Performance of Farm Tractor Engines Fuelled with Diesel- Biodiesel-Bioethanol Blends. *Energies*, 12(12), 2287. <https://doi.org/10.3390/en12122287>
11. Bietresato, M., Caligiuri, C., Renzi, M., & Mazzetto, F. (2019). Use of diesel-biodiesel-bioethanol blends in farm tractors: First results obtained with a mixed experimental-

numerical approach. *Energy Procedia*, 158, 965–971.

<https://doi.org/10.1016/j.egypro.2019.01.237>

12. Bietresato, M., Malavasi, M., & Mazzetto, F. (2019). *Set-up of integrated system for real-time detection and recording of many engine parameters of agricultural machines during Dyno tests*. 18, 160–173. <https://doi.org/10.22616/ERDev2019.18.N187>
13. Bietresato, M., & Mazzetto, F. (2019). Definition of the Layout for a New Facility to Test the Static and Dynamic Stability of Agricultural Vehicles Operating on Sloping Grounds. *Applied Sciences*, 9(19), 4135. <https://doi.org/10.3390/app9194135>
14. Boschiero, M., Zanotelli, D., Ciarapica, F. E., Fadanelli, L., & Tagliavini, M. (2019). Greenhouse gas emissions and energy consumption during the post-harvest life of apples as affected by storage type, packaging and transport. *Journal of Cleaner Production*, 220, 45–56. <https://doi.org/10.1016/j.jclepro.2019.01.300>
15. Camacho, M., Garza, D., Gauly, M., & Holtz, W. (2019). Superovulation of Boer goats with different synchronization regimens at different times of the year in the northern temperate zone. *Small Ruminant Research*, 177, 106–110. <https://doi.org/10.1016/j.smallrumres.2019.06.022>
16. Cellini, A., Giacomuzzi, V., Donati, I., Farneti, B., Rodriguez-Estrada, M. T., Savioli, S., Angeli, S., & Spinelli, F. (2019). Pathogen-induced changes in floral scent may increase honeybee-mediated dispersal of *Erwinia amylovora*. *The ISME Journal*, 13(4), 847–859. <https://doi.org/10.1038/s41396-018-0319-2>
17. Daglio, G., Gallo, R., & Mazzetto, F. (2019). Blooming charge assessment in apple orchards for automatic thinning activities. *Die Bodenkultur: Journal of Land Management, Food and Environment*, 70(3), 171–180. <https://doi.org/10.2478/boku-2019-0015>
18. Daglio, G., Gallo, R., Petrera, S., Andergassen, C., Kelderer, M., & Mazzetto, F. (2019). Automated crop monitoring solutions to assess the blooming charge in orchards:

Preliminary results achieved by a prototype mobile lab used on apple trees. *IOP Conference Series: Earth and Environmental Science*, 275(1), 012019.

<https://doi.org/10.1088/1755-1315/275/1/012019>

19. Daş, G., Westermarck, P. O., & Gauly, M. (2019). Diurnal variation in egg excretion by *Heterakis gallinarum*. *Parasitology*, 146(2), 206–212.
<https://doi.org/10.1017/S0031182018001075>
20. De Conti, L., Ceretta, C. A., Melo, G. W. B., Tiecher, T. L., Silva, L. O. S., Garlet, L. P., Mimmo, T., Cesco, S., & Brunetto, G. (2019). Intercropping of young grapevines with native grasses for phytoremediation of Cu-contaminated soils. *Chemosphere*, 216, 147–156. <https://doi.org/10.1016/j.chemosphere.2018.10.134>
21. Di Iorio, E., Colombo, C., Angelico, R., Terzano, R., Porfido, C., Valentinuzzi, F., Pii, Y., Mimmo, T., & Cesco, S. (2019). Iron oxide-humic acid coprecipitates as iron source for cucumber plants. *Journal of Plant Nutrition and Soil Science*, 182(6), 921–933.
<https://doi.org/10.1002/jpln.201800207>
22. Doellman, Schuler, Jean, Hood, Egan, Powell, Glover, Bruzzese, Smith, Yee, Goughnour, Rull, Aluja, & Feder. (2019). Geographic and Ecological Dimensions of Host Plant-Associated Genetic Differentiation and Speciation in the *Rhagoletis cingulata* (Diptera: Tephritidae) Sibling Species Group. *Insects*, 10(9), 275.
<https://doi.org/10.3390/insects10090275>
23. Favaro, R., Bauer, L. M., Rossi, M., D'Ambrosio, L., Bucher, E., & Angeli, S. (2019). Botanical Origin of Pesticide Residues in Pollen Loads Collected by Honeybees During and After Apple Bloom. *Frontiers in Physiology*, 10, 1069.
<https://doi.org/10.3389/fphys.2019.01069>

24. Fischer, C. (2019). Agriculture and tourism sector linkages: Global relevance and local evidence for the case of South Tyrol. *Open Agriculture*, 4(1), 544–553.
<https://doi.org/10.1515/opag-2019-0053>
25. Fischer, C. (2019). Avoiding Malthus 2.0: Why Food Pessimism Leads Nowhere. *American Journal of Biomedical Science & Research*, 6(1), 64–65.
<https://doi.org/10.34297/AJBSR.2019.06.000993>
26. Fischer, C., & Bossi Fedrigotti, V. (2019). Appreciation of small traditional farms by the South Tyrolean population: Value component analysis via structural equation modelling [Wertschätzung bäuerlicher Betriebe in der Südtiroler Bevölkerung: Komponentenanalyse mittels Strukturgleichungsmodellen]. *Journal of the Austrian Society of Agricultural Economics*, 29(23), 195–203. https://doi.org/10.15203/OEGA_29.23
27. Gallo, R., & Mazzetto, F. (2019). A solution for indirect mass assessment of timber during fully suspended yarding operations. *2019 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 333–338.
<https://doi.org/10.1109/MetroAgriFor.2019.8909282>
28. Gallo, R., Ristorto, G., Bojeri, A., Zorzi, N., Daglio, G., Rinaldi, M. F., Sauli, G., & Mazzetto, F. (2019). Assessment of riparian environments through semi-automated procedures for the computation of eco-morphological indicators: Preliminary results of the WEQUAL project. *Die Bodenkultur: Journal of Land Management, Food and Environment*, 70(3), 131–145. <https://doi.org/10.2478/boku-2019-0012>
29. Gallo, R., Ristorto, G., Bojeri, A., Zorzi, N., Rinaldi, M. F., Sauli, G., & Mazzetto, F. (2019). Design a Web Platform to manage environmental monitoring information to be used in multicriteria evaluations of Green Infrastructures. *IOP Conference Series: Earth and Environmental Science*, 275(1), 012005. <https://doi.org/10.1088/1755-1315/275/1/012005>

30. Kaba, J. S., Zerbe, S., Abunyewa, A. A., & Tagliavini, M. (2019). Tracing the nitrogen flow between *Gliricidia* and cocoa trees in intercropping system using the ^{15}N natural abundant method. *Acta Horticulturae*, 1242, 587–592.
<https://doi.org/10.17660/ActaHortic.2019.1242.86>
31. Kaba, J. S., Zerbe, S., Agnolucci, M., Scandellari, F., Abunyewa, A. A., Giovannetti, M., & Tagliavini, M. (2019). Atmospheric nitrogen fixation by gliricidia trees (*Gliricidia sepium* (Jacq.) Kunth ex Walp.) intercropped with cocoa (*Theobroma cacao* L.). *Plant and Soil*, 435(1–2), 323–336. <https://doi.org/10.1007/s11104-018-3897-x>
32. Kitpot, T., Sriwattana, S., Angeli, S., & Thakeow, P. (2019). Evaluation of Quality Parameters and Shelf Life of Thai Pork Scratching “Kaeb Moo”. *Journal of Food Quality*, 2019, 1–9. <https://doi.org/10.1155/2019/2421708>
33. Kühn, S., Fellner, J., & Gauly, M. (2019). Characteristics of the Haflinger Horse from the rider’s point of view and its importance when buying a horse [Eigenschaften des Haflingerpferdes aus Sicht der Reiter und ihre Bedeutung beim Pferdekauf]. *Zuchtskunde*, 91(6), 474–488.
34. Lambertz, C., Pouloupoulou, I., Wuthijaree, K., & Gauly, M. (2019). Anthelmintic efficacy against gastrointestinal nematodes in goats raised under mountain farming conditions in northern Italy. *BMC Veterinary Research*, 15(1), 216. <https://doi.org/10.1186/s12917-019-1968-8>
35. Lambertz, C., Pouloupoulou, I., Wuthijaree, K., & Gauly, M. (2019). Anthelmintic resistance in gastrointestinal nematodes in sheep raised under mountain farming conditions in Northern Italy. *Veterinary Record Open*, 6(1), e000332. <https://doi.org/10.1136/vetreco-2018-000332>

36. Lange, A., Gentz, M., Hahne, M., Lambertz, C., Gauly, M., Burfeind, O., & Traulsen, I. (2020). Effects of Different Farrowing and Rearing Systems on Post-Weaning Stress in Piglets. *Agriculture*, 10(6), 230. <https://doi.org/10.3390/agriculture10060230>
37. Latacz-Lohmann, U., Balmann, A., Birner, R., Christen, O., Gauly, M., Grajewski, R., Martínez, J., Nieberg, H., Pischetsrieder, M., Renner, B., Röder, N., Schmid, J. C., Spiller, A., Taube, F., Voget-Kleschin, L., & Weingarten, P. (2019). On the effective design of agri-environmental and climate protection policy within the framework of the common agricultural policy of the EU(Article) [Zur effektiven Gestaltung der Agrarumwelt- und Klimaschutzpolitik im Rahmen der Gemeinsamen Agrarpolitik der EU]Sonderheft 227, Juli 2019. *Berichte uber Landwirtschaft*, 2019, 1–218. <https://doi.org/10.12767/BUEL.V0I0>
38. Marastoni, L., Pii, Y., Maver, M., Valentinuzzi, F., Cesco, S., & Mimmo, T. (2019). Role of Azospirillum brasilense in triggering different Fe chelate reductase enzymes in cucumber plants subjected to both nutrient deficiency and toxicity. *Plant Physiology and Biochemistry*, 136, 118–126. <https://doi.org/10.1016/j.plaphy.2019.01.013>
39. Marastoni, L., Sandri, M., Pii, Y., Valentinuzzi, F., Brunetto, G., Cesco, S., & Mimmo, T. (2019). Synergism and antagonisms between nutrients induced by copper toxicity in grapevine rootstocks: Monocropping vs. intercropping. *Chemosphere*, 214, 563–578. <https://doi.org/10.1016/j.chemosphere.2018.09.127>
40. Marastoni, L., Sandri, M., Pii, Y., Valentinuzzi, F., Cesco, S., & Mimmo, T. (2019). Morphological Root Responses and Molecular Regulation of Cation Transporters Are Differently Affected by Copper Toxicity and Cropping System Depending on the Grapevine Rootstock Genotype. *Frontiers in Plant Science*, 10, 946. <https://doi.org/10.3389/fpls.2019.00946>

41. Marastoni, L., Tauber, P., Pii, Y., Valentinuzzi, F., Astolfi, S., Simoni, A., Brunetto, G., Cesco, S., & Mimmo, T. (2019). The potential of two different *Avena sativa* L. cultivars to alleviate Cu toxicity. *Ecotoxicology and Environmental Safety*, 182, 109430.
<https://doi.org/10.1016/j.ecoenv.2019.109430>
42. Mazzei, L., Cianci, M., Benini, S., Ciurli, S. (2019) The impact of pH on catalytically critical protein conformational changes: the case of the urease, a nickel enzyme. *Chemistry*
<https://doi.org/10.1002/chem.201902320>
43. Mazzei, L., Cianci, M., Benini, S., Ciurli, S. (2019) The structure of the elusive urease-urea complex unveils a paradigmatic case of metallo-enzyme catalysis. *Angew. Chem. Int. Ed Engl.* <https://doi.org/10.1002/anie.201903565>
44. Mazzetto, F., Gallo, R., Riedl, M., & Sacco, P. (2019). Proposal of an ontological approach to design and analyse farm information systems to support Precision Agriculture techniques. *IOP Conference Series: Earth and Environmental Science*, 275(1), 012008.
<https://doi.org/10.1088/1755-1315/275/1/012008>
45. Mazzetto, F., & Sacco, P. (2019). A methodological proposal to assess the information reliability in the Precision Agriculture decisional chains. *2019 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 317–322.
<https://doi.org/10.1109/MetroAgriFor.2019.8909230>
46. Meyer, G., Maurhofer, M., Frossard, E., Gamper, H. A., Mäder, P., Mészáros, É., Schönholzer-Mauclaire, L., Symanczik, S., & Oberson, A. (2019). *Pseudomonas protegens* CHA0 does not increase phosphorus uptake from ³³P labeled synthetic hydroxyapatite by wheat grown on calcareous soil. *Soil Biology and Biochemistry*, 131, 217–228.
<https://doi.org/10.1016/j.soilbio.2019.01.015>
47. Montagnani, L., Badraghi, A., Speak, A. F., Wellstein, C., Borruso, L., Zerbe, S., & Zanotelli, D. (2019). Evidence for a non-linear carbon accumulation pattern along an

Alpine glacier retreat chronosequence in Northern Italy. *PeerJ*, 7, e7703.

<https://doi.org/10.7717/peerj.7703>

48. Pii, Y., Aldrichetti, A., Valentinuzzi, F., Mimmo, T., & Cesco, S. (2019). *Azospirillum brasilense* inoculation counteracts the induction of nitrate uptake in maize plants. *Journal of Experimental Botany*, 70(4), 1313–1324. <https://doi.org/10.1093/jxb/ery433>
49. Pii, Y., Marastoni, L., Gemassmer, E., Valentinuzzi, F., Mazzetto, F., Mimmo, T., & Cesco, S. (2019). Phytotoxicity alleviation by bacterial species isolated from polycyclic aromatic hydrocarbons (PAHs) contaminated sites. *Environmental Technology & Innovation*, 13, 104–112. <https://doi.org/10.1016/j.eti.2018.11.001>
50. Pouloupoulou, I., Lambertz, C., & Gauly, M. (2019). Are automated sensors a reliable tool to estimate behavioural activities in grazing beef cattle? *Applied Animal Behaviour Science*, 216, 1–5. <https://doi.org/10.1016/j.applanim.2019.04.009>
51. Ramoneda, J., Le Roux, J., Frossard, E., Bester, C., Oettlé, N., Frey, B., & Gamper, H. A. (2019). Insights from invasion ecology: Can consideration of eco-evolutionary experience promote benefits from root mutualisms in plant production? *AoB PLANTS*, 11(6), plz060. <https://doi.org/10.1093/aobpla/plz060>
52. Sacco, P., Gallo, R., & Mazzetto, F. (2019). Data analysis and inference model for automating operational monitoring activities in Precision Farming and Precision Forestry applications. *IOP Conference Series: Earth and Environmental Science*, 275(1), 012013. <https://doi.org/10.1088/1755-1315/275/1/012013>
53. Salvagnin, U., Martens, S., Anfora, G., Angeli, S., Tasin, M., & Malnoy, M. (2019). Control of the grapevine moth *Lobesia botrana* through genetic engineering manipulation of host-plant volatiles. *Acta Horticulturae*, 1248, 201–206. <https://doi.org/10.17660/ActaHortic.2019.1248.29>

54. Sambo, P., Nicoletto, C., Giro, A., Pii, Y., Valentinuzzi, F., Mimmo, T., Lugli, P., Orzes, G., Mazzetto, F., Astolfi, S., Terzano, R., & Cesco, S. (2019). Hydroponic Solutions for Soilless Production Systems: Issues and Opportunities in a Smart Agriculture Perspective. *Frontiers in Plant Science*, 10, 923. <https://doi.org/10.3389/fpls.2019.00923>
55. Schebeck, M., Feldkirchner, L., Stauffer, C., & Schuler, H. (2019). Dynamics of an Ongoing Wolbachia Spread in the European Cherry Fruit Fly, *Rhagoletis cerasi* (Diptera: Tephritidae). *Insects*, 10(6), 172. <https://doi.org/10.3390/insects10060172>
56. Schebeck, M., Schuler, H., Einramhof, B., Avtzis, D. N., Dowle, E. J., Faccoli, M., Battisti, A., Ragland, G. J., Stauffer, C., & Bertheau, C. (2019). The Apennines as a cryptic Pleistocene refugium of the bark beetle *Pityogenes chalcographus* (Coleoptera: Curculionidae). *Biological Journal of the Linnean Society*, 127(1), 24–33. <https://doi.org/10.1093/biolinnean/blz012>
57. Schuler, H., Lopez, J. A., Doellman, M. M., Hood, G. R., Egan, S. P., & Feder, J. L. (2019). Target-Enriched Endosymbiont Sequencing (TEEseq): A New High-Throughput Sequencing Approach Applied to the Comprehensive Characterization of Endosymbionts. In S. J. Brown & M. E. Pfrender (Eds.), *Insect Genomics* (Vol. 1858, pp. 195–212). Springer New York. https://doi.org/10.1007/978-1-4939-8775-7_14
58. Soppelsa, S., Kelderer, M., Casera, C., Bassi, M., Robatscher, P., Matteazzi, A., & Andreotti, C. (2019). Foliar Applications of Biostimulants Promote Growth, Yield and Fruit Quality of Strawberry Plants Grown under Nutrient Limitation. *Agronomy*, 9(9), 483. <https://doi.org/10.3390/agronomy9090483>
59. Stehr, M., Grashorn, M., Dannenberger, D., Tuchscherer, A., Gauly, M., Metges, C. C., & Daş, G. (2019). Resistance and tolerance to mixed nematode infections in relation to performance level in laying hens. *Veterinary Parasitology*, 275, 108925. <https://doi.org/10.1016/j.vetpar.2019.108925>

60. Stehr, M., Zentek, J., Vahjen, W., Zitnan, R., Tuchscherer, A., Gauly, M., Metges, C. C., & Daş, G. (2019). Resistance and tolerance to mixed nematode infections in chicken genotypes with extremely different growth rates. *International Journal for Parasitology*, 49(7), 579–591. <https://doi.org/10.1016/j.ijpara.2019.03.001>
61. Tempesta, M., Gianquinto, G., Hauser, M., & Tagliavini, M. (2019). Optimization of nitrogen nutrition of cauliflower intercropped with clover and in rotation with lettuce. *Scientia Horticulturae*, 246, 734–740. <https://doi.org/10.1016/j.scienta.2018.11.020>
62. Tempesta, M., Gianquinto, G., Hauser, M., & Tagliavini, M. (2019). Potential nitrogen contribution from symbiotic fixation of dwarf pea (*Pisum sativum*) and clover (*Trifolium resupinatum*) in crop rotation and intercropping systems. *Acta Horticulturae*, 1242, 261–266. <https://doi.org/10.17660/ActaHortic.2019.1242.36>
63. Toppel, K., Kaufmann, F., Schön, H., Gauly, M., & Andersson, R. (2019). Effect of pH-lowering litter amendment on animal-based welfare indicators and litter quality in a European commercial broiler husbandry. *Poultry Science*, 98(3), 1181–1189. <https://doi.org/10.3382/ps/pey489>
64. Toppel, K., Spindler, B., Kaufmann, F., Gauly, M., Kemper, N., & Andersson, R. (2019). Foot Pad Health as Part of On-Farm-Monitoring in Turkey Flocks. *Frontiers in Veterinary Science*, 6, 25. <https://doi.org/10.3389/fvets.2019.00025>
65. Valentinuzzi, F., Venuti, S., Pii, Y., Marroni, F., Cesco, S., Hartmann, F., Mimmo, T., Morgante, M., Pinton, R., Tomasi, N., & Zanin, L. (2019). Common and specific responses to iron and phosphorus deficiencies in roots of apple tree (*Malus × domestica*). *Plant Molecular Biology*, 101(1–2), 129–148. <https://doi.org/10.1007/s11103-019-00896-w>
66. Vom Brocke, A. L., Karnholz, C., Madey-Rindermann, D., Gauly, M., Leeb, C., Winckler, C., Schrader, L., & Dippel, S. (2019). Tail lesions in fattening pigs: Relationships with

- postmortem meat inspection and influence of a tail biting management tool. *Animal*, 13(4), 835–844. <https://doi.org/10.1017/S1751731118002070>
67. Wuthijaree, K., Lambertz, C., Vearasilp, T., Anusatsananun, V., & Gauly, M. (2019). Prevalence of Gastrointestinal Helminths in Thai Indigenous Chickens Raised Under Backyard Conditions in Northern Thailand. *Journal of Applied Poultry Research*, 28(1), 221–229. <https://doi.org/10.3382/japr/pfy062>
68. Yıldırım, M., Daş, G., Lambertz, C., & Gauly, M. (2019). Feeding, Resting and Agonistic Behavior of Pregnant Boer Goats in Relation to Feeding Space Allowance. *Annals of Animal Science*, 19(4), 1133–1142. <https://doi.org/10.2478/aoas-2019-0038>
69. Zanin, L., Tomasi, N., Cesco, S., Varanini, Z., & Pinton, R. (2019). Humic Substances Contribute to Plant Iron Nutrition Acting as Chelators and Biostimulants. *Frontiers in Plant Science*, 10, 675. <https://doi.org/10.3389/fpls.2019.00675>
70. Zanutelli, D., Montagnani, L., Andreotti, C., & Tagliavini, M. (2019). Evapotranspiration and crop coefficient patterns of an apple orchard in a sub-humid environment. *Agricultural Water Management*, 226, 105756. <https://doi.org/10.1016/j.agwat.2019.105756>

1. Aguzzoni, A., Bassi, M., Pignotti, E., Robatscher, P., Scandellari, F., Tirler, W., & Tagliavini, M. (2020). Sr isotope composition of Golden Delicious apples in Northern Italy reflects the soil $^{87}\text{Sr} / ^{86}\text{Sr}$ ratio of the cultivation area. *Journal of the Science of Food and Agriculture*, 100(9), 3666–3674. <https://doi.org/10.1002/jsfa.10399>
2. Andreotti, C. (2020). Management of Abiotic Stress in Horticultural Crops: Spotlight on Biostimulants. *Agronomy*, 10(10), 1514. <https://doi.org/10.3390/agronomy10101514>
3. Astolfi, S., Caddeu, F., Coppa, E., Pii, Y., Celletti, S., Cesco, S., & Mimmo, T. (2020). Preliminary evaluation of eggshells as a source of phosphate on hydroponically grown tomato (*Solanum lycopersicum* L.) seedlings. *Journal of Plant Nutrition*, 43(12), 1852–1861. <https://doi.org/10.1080/01904167.2020.1750641>
4. Astolfi, S., Pii, Y., Mimmo, T., Lucini, L., Miras-Moreno, M. B., Coppa, E., Violino, S., Celletti, S., & Cesco, S. (2020). Single and Combined Fe and S Deficiency Differentially Modulate Root Exudate Composition in Tomato: A Double Strategy for Fe Acquisition? *International Journal of Molecular Sciences*, 21(11), 4038. <https://doi.org/10.3390/ijms21114038>
5. Bakovic, V., Schebeck, M., Stauffer, C., & Schuler, H. (2020). Wolbachia-Mitochondrial DNA Associations in Transitional Populations of *Rhagoletis cerasi*. *Insects*, 11(10), 675. <https://doi.org/10.3390/insects11100675>
6. Baric, S., Storti, A., Hofer, M., Guerra, W., & Dalla Via, J. (2020). Molecular Genetic Identification of Apple Cultivars Based on Microsatellite DNA Analysis. I. The Database of 600 Validated Profiles. *Erwerbs-Obstbau*, 62(2), 117–154. <https://doi.org/10.1007/s10341-020-00483-0>

7. Barthel, D., Schuler, H., Galli, J., Borruso, L., Geier, J., Heer, K., Burckhardt, D., & Janik, K. (2020). Identification of Plant DNA in Adults of the Phytoplasma Vector *Cacopsylla picta* Helps Understanding Its Feeding Behavior. *Insects*, 11(12), Article 12.
<https://doi.org/10.3390/insects11120835>
8. Basile, B., Andreotti, C., Rogers, H., & Roupael, Y. (2020). Ushering horticulture into a new era of research-based novelty. *Italus Hortus*, 27, 1
<https://doi.org/10.26353/j.itahort/2020.1.0101>
9. Basile, B., Roupael, Y., Colla, G., Soppelsa, S., & Andreotti, C. (2020). Appraisal of emerging crop management opportunities in fruit trees, grapevines and berry crops facilitated by the application of biostimulants. *Scientia Horticulturae*, 267, 109330.
<https://doi.org/10.1016/j.scienta.2020.109330>
10. Benini, S. (2020) Carbohydrate-active enzymes: Structure, activity, and reaction products. *Int. J. Mol. Sci.*, 21 (8), 2727 <https://doi.org/10.3390/ijms21082727>
11. Benini, S. (2020) Structural and functional characterization of proteins from the fire blight pathogen *Erwinia amylovora*. A review on the state of the art *Journal of Plant Pathology*,
<https://10.1007/s42161-020-00682-4>
12. Bianchi, F., Spitaler, U., Castellan, I., Cossu, C. S., Brigadoi, T., Duménil, C., Angeli, S., Robatscher, P., Vogel, R. F., Schmidt, S., & Eisenstecken, D. (2020). Persistence of a Yeast-Based (*Hanseniaspora uvarum*) Attract-and-Kill Formulation against *Drosophila suzukii* on Grape Leaves. *Insects*, 11(11), Article 11.
<https://doi.org/10.3390/insects11110810>
13. Bietresato, M., Bolla, A., Caligiuri, C., Renzi, M., & Mazzetto, F. (2020). Analysis of cryoscopic behaviour of diesel-biodiesel blends using industrial freezer. *19th International Scientific Conference Engineering for Rural Development*, 19, 1585–1593.
<https://doi.org/10.22616/ERDev.2020.19.TF391>

14. Bietresato, M., Caligiuri, C., Bolla, A., Renzi, M., & Mazzetto, F. (2020). The Response Surface Methodology as a Tool to Evaluate the Effects of Using Diesel-Biodiesel-Bioethanol Blends as Farm Tractor Fuel. In A. Coppola, G. C. Di Renzo, G. Altieri, & P. D'Antonio (Eds.), *Lecture Notes in Civil Engineering* (Vol. 67, pp. 539–549). Springer International Publishing. https://doi.org/10.1007/978-3-030-39299-4_60
15. Bietresato, M., Malavasi, M., & Mazzetto, F. (2020). An Approach to the Development of an Integrated Real-Time Engine Test System for Agricultural Machines: Conceiving, Implementation, Set-up and First Tests. In A. Coppola, G. C. Di Renzo, G. Altieri, & P. D'Antonio (Eds.), *Lecture Notes in Civil Engineering* (Vol. 67, pp. 551–562). Springer International Publishing. https://doi.org/10.1007/978-3-030-39299-4_61
16. Bietresato, M., & Mazzetto, F. (2020). Morphometry as a Key to Investigate the Stability to a Wind-Induced Rollover of Agricultural Equipment for Irrigation. *International Journal of Safety and Security Engineering*, 10(1), 129–139. <https://doi.org/10.18280/ijisse.100117>
17. Bietresato, M., & Mazzetto, F. (2020). Stability Tests of Agricultural and Operating Machines by Means of an Installation Composed by a Rotating Platform (the “Turntable”) with Four Weighting Quadrants. *Applied Sciences*, 10(11), 3786. <https://doi.org/10.3390/app10113786>
18. Bietresato, M., Selmo, F., & Mazzetto, F. (2020). Concurrent engineering approach in design of test equipment for detecting farm tractor mechanical performances: Application to development of hub-adapter. *19th International Scientific Conference Engineering for Rural Development*, 19, 1562–1574. <https://doi.org/10.22616/ERDev.2020.19.TF389>
19. Bietresato, M., Selmo, F., Terzer, T., & Mazzetto, F. (2020). Assessment and classification of farm tractor rims for mechanical testing. *19th International Scientific Conference*

Engineering for Rural Development, 19, 1575–1584.

<https://doi.org/10.22616/ERDev.2020.19.TF390>

20. Bossi Fedrigotti, V., & Fischer, C. (2020). *How should your province be farmed? Willingness-to-pay of the South Tyrolean population for production and marketing*. Austrian Journal of Agricultural Economics and Rural Studies, Vol. 29.17
https://doi.org/10.15203/OEGA_29.17
21. Bossi Fedrigotti, V., & Fischer, C. (2020). Why Per Capita Apple Consumption Is Falling: Insights from the Literature and Case Evidence from South Tyrol. *Horticulturae*, 6(4), 79.
<https://doi.org/10.3390/horticulturae6040079>
22. Bossi Fedrigotti, V., Troiano, S., Fischer, C., & Marangon, F. (2020). Public Preferences for Farmed Landscapes: The Case of Traditional Chestnut Orchards in South Tyrol. *European Countryside*, 12(1), 99–118. <https://doi.org/10.2478/euco-2020-0006>
23. Cardini, A., Pellegrino, E., Del Dottore, E., Gamper, H. A., Mazzolai, B., & Ercoli, L. (2020). HyLength: A semi-automated digital image analysis tool for measuring the length of roots and fungal hyphae of dense mycelia. *Mycorrhiza*, 30(2–3), 229–242.
<https://doi.org/10.1007/s00572-020-00956-w>
24. Celletti, S., Astolfi, S., Guglielmo, N., Colla, G., Cesco, S., & Mimmo, T. (2020). Evaluation of a Legume-Derived Protein Hydrolysate to Mitigate Iron Deficiency in Plants. *Agronomy*, 10(12), 1942. <https://doi.org/10.3390/agronomy10121942>
25. Celletti, S., Pii, Y., Valentinuzzi, F., Tiziani, R., Fontanella, M. C., Beone, G. M., Mimmo, T., Cesco, S., & Astolfi, S. (2020). Physiological Responses to Fe Deficiency in Split-Root Tomato Plants: Possible Roles of Auxin and Ethylene? *Agronomy*, 10(7), 1000.
<https://doi.org/10.3390/agronomy10071000>
26. Cesco, S., Tolotti, A., Nadalini, S., Rizzi, S., Valentinuzzi, F., Mimmo, T., Porfido, C., Allegretta, I., Giovannini, O., Perazzolli, M., Cipriani, G., Terzano, R., Pertot, I., & Pii, Y.

- (2020). Plasmopara viticola infection affects mineral elements allocation and distribution in Vitis vinifera leaves. *Scientific Reports*, 10(1), 18759. <https://doi.org/10.1038/s41598-020-75990-x>
27. Daglio, G., Gallo, R., Rinaldi, M. F., Massa, N., Todeschini, V., & Mazzetto, F. (2020). Use of a Multicopter-UAV Equipped with a Multispectral Camera to Detect Vineyard Diseases: A Case Study on Barbera and Dolcetto Cultivars. In A. Coppola, G. C. Di Renzo, G. Altieri, & P. D'Antonio (Eds.), *Lecture Notes in Civil Engineering* (Vol. 67, pp. 803–809). Springer International Publishing. https://doi.org/10.1007/978-3-030-39299-4_86
28. Daglio, G., Zampieri, D., Gallo, R., & Mazzetto, F. (2020). Development of new system and methodology for the assessment of stressed and missing plants in vineyards: Preliminary study. *2020 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 213–217. <https://doi.org/10.1109/MetroAgriFor50201.2020.9277549>
29. De Conti, L., Cesco, S., Mimmo, T., Pii, Y., Valentinuzzi, F., B Melo, G. W., Ceretta, C. A., Trentin, E., Marques, A. C. R., & Brunetto, G. (2020). Iron fertilization to enhance tolerance mechanisms to copper toxicity of ryegrass plants used as cover crop in vineyards. *Chemosphere*, 243, 125298. <https://doi.org/10.1016/j.chemosphere.2019.125298>
30. De Monte, E., Zanon, T., Vevey, M., & Gauly, M. (2020). Evaluation of the systematic recording of diagnostic data in the Valdostana cattle. *Italian Journal of Animal Science*, 19(1), 1253–1263. <https://doi.org/10.1080/1828051X.2020.1833767>
31. Doellman, M. M., Saint Jean, G., Egan, S. P., Powell, T. H. Q., Hood, G. R., Schuler, H., Bruzzese, D. J., Glover, M. M., Smith, J. J., Yee, W. L., Goughnour, R., Rull, J., Aluja, M., & Feder, J. L. (2020). Evidence for spatial clines and mixed geographic modes of

speciation for North American cherry-infesting *Rhagoletis* (Diptera: Tephritidae) flies.

Ecology and Evolution, 10(23), 12727–12744. <https://doi.org/10.1002/ece3.6667>

32. Feil, S. B., Pii, Y., Valentinuzzi, F., Tiziani, R., Mimmo, T., & Cesco, S. (2020). Copper toxicity affects phosphorus uptake mechanisms at molecular and physiological levels in *Cucumis sativus* plants. *Plant Physiology and Biochemistry*, 157, 138–147.

<https://doi.org/10.1016/j.plaphy.2020.10.023>

33. Fernandez Ferrari, M. C., Favaro, R., Mair, S., Zanutelli, L., Malagnini, V., Fontana, P., & Angeli, S. (2020). Application of *Metarhizium anisopliae* as a potential biological control of *Varroa destructor* in Italy. *Journal of Apicultural Research*, 59(4), 528–538.

<https://doi.org/10.1080/00218839.2020.1736814>

34. Fischer, C., & Bossi Fedrigotti, V. M. C. (2020). Wertschätzung bäuerlicher Betriebe in der Südtiroler Bevölkerung: Komponentenanalyse mittels Strukturgleichungsmodellierung. *Austrian Journal of Agricultural Economics and Rural Studies*, 29(23), 195–203.

https://doi.org/10.15203/OEGA_29.23

35. Fischer, C., & Miglietta, P. P. (2020). The Links between Human Diets and Health and Climate Outcomes in the World's Macro-Regions during the Last 50 Years. *International Journal of Environmental Research and Public Health*, 17(4), Article 4.

<https://doi.org/10.3390/ijerph17041219>

36. Gallo, R., Marchi, L., Grigolato, S., Cavalli, R., & Mazzetto, F. (2020). A Skyline Deflection Analysis Methodology for Timber Volume Estimation in Yarding Operations. In A. Coppola, G. C. Di Renzo, G. Altieri, & P. D'Antonio (Eds.), *Lecture Notes in Civil Engineering* (Vol. 67, pp. 819–826). Springer International Publishing.

https://doi.org/10.1007/978-3-030-39299-4_88

37. Garza, D., Camacho, M., Gauly, M., & Holtz, W. (2020). Vitrification of Mouse Blastocysts by Open or Closed System and Warming in Sucrose-containing or Sucrosefree Diluent. *Cryoletters*, 41(3), 135–139.
38. Gauly, M., & Ammer, S. (2020). Review: Challenges for dairy cow production systems arising from climate changes. *Animal*, 14, s196–s203.
<https://doi.org/10.1017/S1751731119003239>
39. Gentz, M., Lange, A., Zeidler, S., Lambertz, C., Gauly, M., Burfeind, O., & Traulsen, I. (2020). Tail Lesions and Losses of Docked and Undocked Pigs in Different Farrowing and Rearing Systems. *Agriculture*, 10(4), 130. <https://doi.org/10.3390/agriculture10040130>
40. Gieseke, D., Lambertz, C., & Gauly, M. (2020). Effects of cubicle characteristics on animal welfare indicators in dairy cattle. *Animal*, 14(9), 1934–1942.
<https://doi.org/10.1017/S1751731120000609>
41. Kalcsits, L., Lotze, E., Tagliavini, M., Hannam, K. D., Mimmo, T., Neilsen, D., Neilsen, G., Atkinson, D., Casagrande Biasuz, E., Borruso, L., Cesco, S., Fallahi, E., Pii, Y., & Valverdi, N. A. (2020). Recent Achievements and New Research Opportunities for Optimizing Macronutrient Availability, Acquisition, and Distribution for Perennial Fruit Crops. *Agronomy*, 10(11), 1738. <https://doi.org/10.3390/agronomy10111738>
42. Katzenberger, K., Rauch, E., Erhard, M., Reese, S., & Gauly, M. (2020). Inter-rater reliability of welfare outcome assessment by an expert and farmers of South Tyrolean dairy farming. *Italian Journal of Animal Science*, 19(1), 1079–1090.
<https://doi.org/10.1080/1828051X.2020.1816509>
43. Kolega, S., Miras-Moreno, B., Buffagni, V., Lucini, L., Valentinuzzi, F., Maver, M., Mimmo, T., Trevisan, M., Pii, Y., & Cesco, S. (2020). Nutraceutical Profiles of Two Hydroponically Grown Sweet Basil Cultivars as Affected by the Composition of the

Nutrient Solution and the Inoculation With *Azospirillum brasilense*. *Frontiers in Plant Science*, 11, 596000. <https://doi.org/10.3389/fpls.2020.596000>

44. Köhl, S., Busch, G., & Gauly, M. (2020). How should beef be produced? Consumer expectations and views on local beef production in South Tyrol (Italy). *British Food Journal*, 123(4), 1578–1595. <https://doi.org/10.1108/BFJ-07-2020-0571>
45. Lange, A., Gentz, M., Hahne, M., Lambertz, C., Gauly, M., Burfeind, O., & Traulsen, I. (2020). Effects of Different Farrowing and Rearing Systems on Post-Weaning Stress in Piglets. *Agriculture*, 10(6), 230. <https://doi.org/10.3390/agriculture10060230>
46. Maver, M., Miras-Moreno, B., Lucini, L., Trevisan, M., Pii, Y., Cesco, S., & Mimmo, T. (2020). New insights in the allelopathic traits of different barley genotypes: Middle Eastern and Tibetan wild-relative accessions vs. cultivated modern barley. *PLOS ONE*, 15(4), e0231976. <https://doi.org/10.1371/journal.pone.0231976>
47. Mayr, S., Brozzi, R., Cervellieri, A., Desaler, T., Gallo, R., Gamper, J., Geier, B., Holzner, L., Sacco, P., & Mazzetto, F. (2020). Brotweg—A Path of Bread in an Alpine Environment: New Mechanical Solutions for Grain Processing in Steep Mountain Slopes. In A. Coppola, G. C. Di Renzo, G. Altieri, & P. D’Antonio (Eds.), *Lecture Notes in Civil Engineering* (Vol. 67, pp. 449–456). Springer International Publishing. https://doi.org/10.1007/978-3-030-39299-4_50
48. Mazzetto, F., Gallo, R., & Sacco, P. (2020). Reflections and Methodological Proposals to Treat the Concept of “Information Precision” in Smart Agriculture Practices. *Sensors*, 20(10), 2847. <https://doi.org/10.3390/s20102847>
49. Merzari, F., Goldfarb, J., Andreottola, G., Mimmo, T., Volpe, M., & Fiori, L. (2020). Hydrothermal Carbonization as a Strategy for Sewage Sludge Management: Influence of Process Withdrawal Point on Hydrochar Properties. *Energies*, 13(11), 2890. <https://doi.org/10.3390/en13112890>

50. Nicli, S., Angeli, S., and Zerbe, S. (2020). Serving people and the environment – eco-social agriculture using the example of the alps = Ökosoziale landwirtschaft am beispiel der alpen: Im dienst für mensch und umwelt. *Naturschutz und Landschaftsplanung*, 52(2), 68–75.
51. Pellegrino, E., Gamper, H. A., Ciccolini, V., & Ercoli, L. (2020). Forage Rotations Conserve Diversity of Arbuscular Mycorrhizal Fungi and Soil Fertility. *Frontiers in Microbiology*, 10, 2969. <https://doi.org/10.3389/fmicb.2019.02969>
52. Petrillo, M., Zanutelli, D., Lucchetta, V., Aguzzoni, A., Tagliavini, M., & Andreotti, C. (2020). The use of biochar as soil amendment: Effects on nitrogen and water availability for potted grapevines. *Italus Hortus*, 27, 28–40. <https://doi.org/10.26353/j.itahort/2020.2.2840>
53. Polsinelli, I., Caliendo, R., Demitri, N., Benini, S. (2020) The Structure of Sucrose-Soaked Levansucrase Crystals from *Erwinia tasmaniensis* reveals a Binding Pocket for Levanbiose. *Int. J. Mol. Sci.*, 21(1), 83, <https://doi.org/10.3390/ijms21010083>
54. Preti, M., Knight, A. L., & Angeli, S. (2020). Improved Monitoring of *Grapholita molesta* (Lepidoptera: Tortricidae) in Stone Fruit Orchards with a Pheromone-Kairomone Combination Lure. *Insects*, 11(7), 412. <https://doi.org/10.3390/insects11070412>
55. Ramoneda, J., Le Roux, J. J., Frossard, E., Frey, B., & Gamper, H. A. (2020). Experimental assembly reveals ecological drift as a major driver of root nodule bacterial diversity in a woody legume crop. *FEMS Microbiology Ecology*, 96(6), fiae083. <https://doi.org/10.1093/femsec/fiae083>
56. Ramoneda, J., Roux, J. J. L., Frossard, E., Frey, B., & Gamper, H. A. (2020). Geographical patterns of root nodule bacterial diversity in cultivated and wild populations of a woody legume crop. *FEMS Microbiology Ecology*, 96(10), fiae145. <https://doi.org/10.1093/femsec/fiae145>

57. Reyes, F., Pallas, B., Pradal, C., Vaggi, F., Zanutelli, D., Tagliavini, M., Gianelle, D., & Costes, E. (2020). MuSCA: A multi-scale source–sink carbon allocation model to explore carbon allocation in plants. An application to static apple tree structures. *Annals of Botany*, 126(4), 571–585. <https://doi.org/10.1093/aob/mcz122>
58. Rinaldi, M. F., Gallo, R., Daglio, G., & Mazzetto, F. (2020). An Innovative Methodology to Be More Time-Efficient When Analyzing Data in Precision Viticulture. In A. Coppola, G. C. Di Renzo, G. Altieri, & P. D’Antonio (Eds.), *Lecture Notes in Civil Engineering* (Vol. 67, pp. 783–792). Springer International Publishing. https://doi.org/10.1007/978-3-030-39299-4_84
59. Sabia, E., Gauly, M., Napolitano, F., Cifuni, G. F., & Claps, S. (2020). The effect of different dietary treatments on volatile organic compounds and aromatic characteristics of buffalo Mozzarella cheese. *International Journal of Dairy Technology*, 73(3), 594–603. <https://doi.org/10.1111/1471-0307.12696>
60. Sabia, E., Gauly, M., Napolitano, F., Serrapica, F., Cifuni, G. F., & Claps, S. (2020). Dairy sheep carbon footprint and ReCiPe end-point study. *Small Ruminant Research*, 185, 106085. <https://doi.org/10.1016/j.smallrumres.2020.106085>
61. Sabia, E., Köhl, S., Flach, L., Lambertz, C., & Gauly, M. (2020). Effect of Feed Concentrate Intake on the Environmental Impact of Dairy Cows in an Alpine Mountain Region Including Soil Carbon Sequestration and Effect on Biodiversity. *Sustainability*, 12(5), 2128. <https://doi.org/10.3390/su12052128>
62. Salehi, H., Miras-Moreno, B., Chehregani Rad, A., Pii, Y., Mimmo, T., Cesco, S., & Lucini, L. (2020). Relatively Low Dosages of CeO₂ Nanoparticles in the Solid Medium Induce Adjustments in the Secondary Metabolism and Ionomics Balance of Bean (*Phaseolus vulgaris* L.) Roots and Leaves. *Journal of Agricultural and Food Chemistry*, 68(1), 67–76. <https://doi.org/10.1021/acs.jafc.9b05107>

63. Shtai, W., Tagliavini, M., Holtz, T., Ben Abdelkader, A., Petrillo, M., Zanotelli, D., & Montagnani, L. (2020). Total and diffuse light distribution within the canopy of an apple orchard as affected by reflective ground covers. *Italus Hortus*, 27, 69–84.
<https://doi.org/10.26353/j.itahort/2020.1.6984>
64. Soppelsa, S., Kelderer, M., Testolin, R., Zanotelli, D., & Andreotti, C. (2020). Effect of Biostimulants on Apple Quality at Harvest and After Storage. *Agronomy*, 10(8), 1214.
<https://doi.org/10.3390/agronomy10081214>
65. Spiller, A., Renner, B., Voget-Kleschin, L., Arens-Azevedo, U., Balmann, A., Biesalski, H. K., Birner, R., Bokelmann, W., Christen†, O., Gauly, M., Grethe, H., Latacz-Lohmann, U., Martínez, J., Nieberg, H., Pischetsrieder, M., Qaim, M., Schmid, J. C., Taube, F., & Weingarten, P. (2020). Promoting sustainability in food consumption – Developing an integrated food policy and creating fair food environments. Executive summary and synthesis report: Scientific Report of: Advisory Board on Agricultural Policy, Food and Consumer Health Protection at the Federal Ministry of Food and Agriculture. *Berichte über Landwirtschaft*, 230, 1–813. <https://doi.org/10.12767/buel.vi230.339>
66. Spitaler, U., Bianchi, F., Eisenstecken, D., Castellan, I., Angeli, S., Dordevic, N., Robatscher, P., Vogel, R. F., Koschier, E. H., & Schmidt, S. (2020). Yeast species affects feeding and fitness of *Drosophila suzukii* adults. *Journal of Pest Science*, 93(4), 1295–1309. <https://doi.org/10.1007/s10340-020-01266-y>
67. Tato, L., Islam, M., Mimmo, T., Zocchi, G., & Vigani, G. (2020). Temporal Responses to Direct and Induced Iron Deficiency in *Parietaria judaica*. *Agronomy*, 10(7), 1037.
<https://doi.org/10.3390/agronomy10071037>
68. Tiziani, R., Mimmo, T., Valentinuzzi, F., Pii, Y., Celletti, S., & Cesco, S. (2020). Root Handling Affects Carboxylates Exudation and Phosphate Uptake of White Lupin Roots. *Frontiers in Plant Science*, 11, 584568. <https://doi.org/10.3389/fpls.2020.584568>

69. Tiziani, R., Pii, Y., Celletti, S., Cesco, S., & Mimmo, T. (2020). Phosphorus deficiency changes carbon isotope fractionation and triggers exudate reacquisition in tomato plants. *Scientific Reports*, 10(1), 15970. <https://doi.org/10.1038/s41598-020-72904-9>
70. Valentinuzzi, F., Cavani, L., Porfido, C., Terzano, R., Pii, Y., Cesco, S., Marzadori, C., & Mimmo, T. (2020). The fertilising potential of manure-based biogas fermentation residues: Pelleted vs. liquid digestate. *Heliyon*, 6(2), e03325. <https://doi.org/10.1016/j.heliyon.2020.e03325>
71. Valentinuzzi, F., Pii, Y., Carlo, P., Roberto, T., Fontanella, M. C., Beone, G. M., Astolfi, S., Mimmo, T., & Cesco, S. (2020). Root-shoot-root Fe translocation in cucumber plants grown in a heterogeneous Fe provision. *Plant Science*, 293, 110431. <https://doi.org/10.1016/j.plantsci.2020.110431>
72. Vujinović, T., Zanin, L., Venuti, S., Contin, M., Ceccon, P., Tomasi, N., Pinton, R., Cesco, S., & De Nobili, M. (2020). Biostimulant Action of Dissolved Humic Substances From a Conventionally and an Organically Managed Soil on Nitrate Acquisition in Maize Plants. *Frontiers in Plant Science*, 10, 1652. <https://doi.org/10.3389/fpls.2019.01652>
73. Zanon, T., Costa, A., De Marchi, M., Penasa, M., Koenig, S., & Gauly, M. (2020). Milk yield and quality of Original Brown cattle reared in Italian alpine region. *Italian Journal of Animal Science*, 19(1), 1157–1169. <https://doi.org/10.1080/1828051X.2020.1825997>
74. Zanon, T., Costa, A., De Marchi, M., Penasa, M., König, S., & Gauly, M. (2020). Quality Profile of Single-Breed Alpine Grey and Pinzgauer Bulk Milk. *Agriculture*, 10(7), 283. <https://doi.org/10.3390/agriculture10070283>
75. Zanon, T., König, S., & Gauly, M. (2020). A comparison of animal-related figures in milk and meat production and economic revenues from milk and animal sales of five dairy cattle breeds reared in Alps region. *Italian Journal of Animal Science*, 19(1), 1318–1328. <https://doi.org/10.1080/1828051X.2020.1839361>

76. Zanutelli, D., Vettori, M., Paolazzi, M., Cosner, A., & Fischer, C. (2020). Terraced viticulture of the cembra valley in Italy: Towards the inclusion of sustainable landscape management in quality-oriented development actions [Viticultura en terrazas del Valle de Cembra en Italia: Hacia la inclusión de la gestión sostenible del paisaje en las acciones de desarrollo orientadas a la calidad]. *Pirineos*, 175, 053.
- <https://doi.org/10.3989/pirineos.2020.175003>

1. Aguzzoni, A., Bassi, M., Pignotti, E., Robatscher, P., Scandellari, F., Tirler, W., & Tagliavini, M. (2021). Multi-chemical analysis combined with chemometrics to characterize PDO and PGI Italian apples. *Journal of the Science of Food and Agriculture*, 101(12), 5106–5115. <https://doi.org/10.1002/jsfa.11156>
2. Alzate Zuluaga, M. Y., Milani, K. M. L., Miras-Moreno, M. B., Lucini, L., Valentinuzzi, F., Mimmo, T., Pii, Y., Cesco, S., Rodrigues, E. P., & De Oliveira, A. L. M. (2021). The adaptive metabolomic profile and functional activity of tomato rhizosphere are revealed upon PGPB inoculation under saline stress. *Environmental and Experimental Botany*, 189, 104552. <https://doi.org/10.1016/j.envexpbot.2021.104552>
3. Amaral Carneiro, G., & Baric, S. (2021). *Colletotrichum fioriniae* and *Colletotrichum godetiae* Causing Postharvest Bitter Rot of Apple in South Tyrol (Northern Italy). *Plant Disease*, 105(10), 3118–3126. <https://doi.org/10.1094/PDIS-11-20-2482-RE>
4. Amaral Carneiro, G., & Baric, S. (2021). Single-spore isolation protocol for characterization of postharvest pathogens causing bitter rot of apple in South Tyrol. *Acta Horticulturae*, 1325, 1–6. <https://doi.org/10.17660/ActaHortic.2021.1325.1>
5. Amaral Carneiro, G., Storti, A., & Baric, S. (2021). First Report of *Colletotrichum salicis* Causing Bitter Rot of Apple in Italy. *Plant Disease*, 105(1), 224. <https://doi.org/10.1094/PDIS-04-20-0870-PDN>
6. Angerer, V., Sabia, E., König von Borstel, U., & Gauly, M. (2021). Environmental and biodiversity effects of different beef production systems. *Journal of Environmental Management*, 289, 112523. <https://doi.org/10.1016/j.jenvman.2021.112523>

7. Ani, A. O., Baes, C., Chemineau, P., Gauly, M., Jiménez-Flores, R., Kashiwazaki, N., Kegley, E. B., Kembe, M. A., Loh, T. C., Maiwashe, A., Medina-Villacis, M., & Rosati, A. (2021). Opinion paper: COVID-19 and the livestock sector. *Animal*, 15(2), 100102. <https://doi.org/10.1016/j.animal.2020.100102>
8. Astolfi, S., Celletti, S., Vigani, G., Mimmo, T., & Cesco, S. (2021). Interaction Between Sulfur and Iron in Plants. *Frontiers in Plant Science*, 12, 670308. <https://doi.org/10.3389/fpls.2021.670308>
9. Badra, Z., Larsson Herrera, S., Cappellin, L., Biasioli, F., Dekker, T., Angeli, S., & Tasin, M. (2021). Species-Specific Induction of Plant Volatiles by Two Aphid Species in Apple: Real Time Measurement of Plant Emission and Attraction of Lacewings in the Wind Tunnel. *Journal of Chemical Ecology*, 47(7), 653–663. <https://doi.org/10.1007/s10886-021-01288-5>
10. Baric, S., Guizzardi, G., Stella, F., & Zanker, M. (2021). The application of information technology to diagnose postharvest diseases of apple. *Acta Horticulturae*, 1325, 13–20. <https://doi.org/10.17660/ActaHortic.2021.1325.3>
11. Basile, B., Andreotti, C., Rogers, H., & Roupahel, Y. (2021). Horticultural science in the present era of mounting challenges and opportunities: Italus Hortus one year on. *Italus Hortus*, 28(1), 1. <https://doi.org/10.26353/j.itahort/2021.1.0102>
12. Ben Abdelkader, A., Tagliavini, M., & Zanotelli, D. (2021). Effects of hail nets and reflective ground covers on microclimate and evapotranspiration demand in an apple orchard. *Acta Horticulturae*, 1327, 647–654. <https://doi.org/10.17660/ActaHortic.2021.1327.85>
13. Bertolotti, G.*, Unterholzner, S.J.*, Scintu, D., Salvi, E., Svolacchia, N., Di Mambro, R., Ruta, V., Linhares Scaglia, F., Vittorioso, P., Sabatini, S., ., Costantino, P. and Dello Ioio, R. (2021). A PHABULOSA-Controlled Genetic Pathway Regulates

Ground Tissue Patterning in the Arabidopsis Root. *Current Biology* 31, 420-426.e426.

<https://doi.org/10.1016/j.cub.2020.10.038>

14. Biała-Leonhard, W., Zanin, L., Gottardi, S., De Brito Francisco, R., Venuti, S., Valentinuzzi, F., Mimmo, T., Cesco, S., Bassin, B., Martinoia, E., Pinton, R., Jasiński, M., & Tomasi, N. (2021). Identification of an Isoflavonoid Transporter Required for the Nodule Establishment of the Rhizobium-Fabaceae Symbiotic Interaction. *Frontiers in Plant Science*, 12, 758213. <https://doi.org/10.3389/fpls.2021.758213>
15. Bietresato, M., Bolla, A., Caligiuri, C., Renzi, M., & Mazzetto, F. (2021). The kinematic viscosity of conventional and bio-based fuel blends as a key parameter to indirectly estimate the performance of compression-ignition engines for agricultural purposes. *Fuel*, 298, 120817. <https://doi.org/10.1016/j.fuel.2021.120817>
16. Bietresato, M., & Mazzetto, F. (2021). A Reasoned Evolutionary Study on the Actual Design of Farm Tractors. In Y. Borgianni, S. Brad, D. Cavallucci, & P. Livotov (Eds.), *Creative Solutions for a Sustainable Development* (Vol. 635, pp. 256–275). Springer International Publishing. https://doi.org/10.1007/978-3-030-86614-3_21
17. Bietresato, M., Selmo, F., Renzi, M., & Mazzetto, F. (2021). Experimental problem of indirectly detecting engine torque delivered by agricultural machines through exhaust gas temperature. *Engineering for Rural Development*, 20, 1236–1243. <https://doi.org/10.22616/ERDev.2021.20.TF271>
18. Bietresato, M., Selmo, F., Renzi, M., & Mazzetto, F. (2021). Some Metrological Observations on the Use of the Exhaust Gas Temperature for the Indirect Measurement of the Torque in Agricultural Engines. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 64–68. <https://doi.org/10.1109/MetroAgriFor52389.2021.9628630>

19. Bietresato, M., Selmo, F., Renzi, M., & Mazzetto, F. (2021). Torque Prediction Model of a CI Engine for Agricultural Purposes Based on Exhaust Gas Temperatures and CFD-FVM Methodologies Validated with Experimental Tests. *Applied Sciences*, 11(9), 3892. <https://doi.org/10.3390/app11093892>
20. Borruso, L., Checcucci, A., Torti, V., Correa, F., Sandri, C., Luise, D., Cavani, L., Modesto, M., Spiezio, C., Mimmo, T., Cesco, S., Di Vito, M., Bugli, F., Randrianarison, R. M., Gamba, M., Rarojason, N. J., Zaborra, C. A., Mattarelli, P., Trevisi, P., & Giacomini, C. (2021). I Like the Way You Eat It: Lemur (*Indri indri*) Gut Mycobiome and Geophagy. *Microbial Ecology*, 82(1), 215–223. <https://doi.org/10.1007/s00248-020-01677-5>
21. Brunelli, D., Daponte, P., & Mazzetto, F. (2021). Welcome Message from the General Chairs. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, i–ii. <https://doi.org/10.1109/MetroAgriFor52389.2021.9628528>
22. Buffagni, V., Ceccarelli, A. V., Pii, Y., Miras-Moreno, B., Rouphael, Y., Cardarelli, M., Colla, G., & Lucini, L. (2021). The Modulation of Auxin-Responsive Genes, Phytohormone Profile, and Metabolomic Signature in Leaves of Tomato Cuttings Is Specifically Modulated by Different Protein Hydrolysates. *Agronomy*, 11(8), 1524. <https://doi.org/10.3390/agronomy11081524>
23. Caliandro, R., Polsinelli, I., Demitri, N., Musiani, F., Martens, S., Benini, S. (2021) The structural and functional characterization of *Malus domestica* double bond reductase MdDBR provides insights towards the identification of its substrates *International Journal of Biological Macromolecules*, 171, pp. 89-99 <https://10.1016/j.ijbiomac.2020.12.190>

24. Carabin, G., Emanuelli, D., Gallo, R., Mazzetto, F., & Vidoni, R. (2021). Development of a Climbing-Robot for Spruce Pruning: Preliminary Design and First Results. In G. Venture, J. Solis, Y. Takeda, & A. Konno (Eds.), *ROMANSY 23—Robot Design, Dynamics and Control* (Vol. 601, pp. 100–108). Springer International Publishing. https://doi.org/10.1007/978-3-030-58380-4_13
25. Carmona, F. J., Dal Sasso, G., Ramírez-Rodríguez, G. B., Pii, Y., Delgado-López, J. M., Guagliardi, A., & Masciocchi, N. (2021). Urea-functionalized amorphous calcium phosphate nanofertilizers: Optimizing the synthetic strategy towards environmental sustainability and manufacturing costs. *Scientific Reports*, 11(1), 3419. <https://doi.org/10.1038/s41598-021-83048-9>
26. Ceccarelli, A. V., Miras-Moreno, B., Buffagni, V., Senizza, B., Pii, Y., Cardarelli, M., Rouphael, Y., Colla, G., & Lucini, L. (2021). Foliar Application of Different Vegetal-Derived Protein Hydrolysates Distinctively Modulates Tomato Root Development and Metabolism. *Plants*, 10(2), 326. <https://doi.org/10.3390/plants10020326>
27. Celletti, S., Bergamo, A., Benedetti, V., Pecchi, M., Patuzzi, F., Basso, D., Baratieri, M., Cesco, S., & Mimmo, T. (2021). Phytotoxicity of hydrochars obtained by hydrothermal carbonization of manure-based digestate. *Journal of Environmental Management*, 280, 111635. <https://doi.org/10.1016/j.jenvman.2020.111635>
28. Celletti, S., Lanz, M., Bergamo, A., Benedetti, V., Basso, D., Baratieri, M., Cesco, S., & Mimmo, T. (2021). Evaluating the Aqueous Phase From Hydrothermal Carbonization of Cow Manure Digestate as Possible Fertilizer Solution for Plant Growth. *Frontiers in Plant Science*, 12, 687434. <https://doi.org/10.3389/fpls.2021.687434>
29. Cesco, S., Lucini, L., Miras-Moreno, B., Borruso, L., Mimmo, T., Pii, Y., Puglisi, E., Spini, G., Taskin, E., Tiziani, R., Zangrillo, M. S., & Trevisan, M. (2021). The hidden

effects of agrochemicals on plant metabolism and root-associated microorganisms.

Plant Science, 311, 111012. <https://doi.org/10.1016/j.plantsci.2021.111012>

30. Cesco, S., Pii, Y., Borruso, L., Orzes, G., Lugli, P., Mazzetto, F., Genova, G., Signorini, M., Brunetto, G., Terzano, R., Vigani, G., & Mimmo, T. (2021). A Smart and Sustainable Future for Viticulture Is Rooted in Soil: How to Face Cu Toxicity. *Applied Sciences*, 11(3), 907. <https://doi.org/10.3390/app11030907>
31. Chizzali, S., Aguzzoni, A., Pignotti, E., Zelger, J., Voto, G., Zignale, P., Tagliavini, M., Tirlir, W., & Robatscher, P. (2021). Sr isotope ratio in vegetable crops and apple trees depends on that of the soil environment while is unaffected by the genotype. *Italus Hortus*, 28(3), 49. <https://doi.org/10.26353/j.itahort/2021.3.4958>
32. Correa, F., Torti, V., Spiezio, C., Checcucci, A., Modesto, M., Borruso, L., Cavani, L., Mimmo, T., Cesco, S., Luise, D., Randrianarison, R. M., Gamba, M., Rarojason, N. J., Sanguinetti, M., Di Vito, M., Bugli, F., Mattarelli, P., Trevisi, P., Giacomini, C., & Sandri, C. (2021). Disentangling the Possible Drivers of Indri indri Microbiome: A Threatened Lemur Species of Madagascar. *Frontiers in Microbiology*, 12, 668274. <https://doi.org/10.3389/fmicb.2021.668274>
33. Daglio, G., Gallo, R., Petrera, S., Andergassen, C., Kelderer, M., & Mazzetto, F. (2021). Preliminary results on the blooming charge assessment in apple orchards using a prototype of mobile lab. *Acta Horticulturae*, 1311, 319–326. <https://doi.org/10.17660/ActaHortic.2021.1311.40>
34. Daş, G., Auerbach, M., Stehr, M., Sürle, C., Metges, C. C., Gauly, M., & Rautenschlein, S. (2021). Impact of Nematode Infections on Non-specific and Vaccine-Induced Humoral Immunity in Dual-Purpose or Layer-Type Chicken Genotypes. *Frontiers in Veterinary Science*, 8, 659959. <https://doi.org/10.3389/fvets.2021.659959>

35. Dierks, J., Blaser-Hart, W. J., Gamper, H. A., Nyoka, I. B., Barrios, E., & Six, J. (2021). Trees enhance abundance of arbuscular mycorrhizal fungi, soil structure, and nutrient retention in low-input maize cropping systems. *Agriculture, Ecosystems & Environment*, 318, 107487. <https://doi.org/10.1016/j.agee.2021.107487>
36. Dierks, J., Blaser-Hart, W. J., Gamper, H. A., & Six, J. (2021). Mycorrhizal fungi-mediated uptake of tree-derived nitrogen by maize in smallholder farms. *Nature Sustainability*, 5(1), 64–70. <https://doi.org/10.1038/s41893-021-00791-7>
37. Đurović, G., Alawamleh, A., Carlin, S., Maddalena, G., Guzzon, R., Mazzoni, V., Dalton, D. T., Walton, V. M., Suckling, D. M., Butler, R. C., Angeli, S., De Cristofaro, A., & Anfora, G. (2021). Liquid Baits with *Oenococcus oeni* Increase Captures of *Drosophila suzukii*. *Insects*, 12(1), 66. <https://doi.org/10.3390/insects12010066>
38. Egger, G., Sacco, P., Chaltsev, D., & Mazzetto, F. (2021). farMAS: Multi-Agent based farm activity planning and execution system. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 411–415. <https://doi.org/10.1109/MetroAgriFor52389.2021.9628826>
39. Feil, S. B., Rodegher, G., Gaiotti, F., Alzate Zuluaga, M. Y., Carmona, F. J., Masciocchi, N., Cesco, S., & Pii, Y. (2021). Physiological and Molecular Investigation of Urea Uptake Dynamics in *Cucumis sativus* L. Plants Fertilized With Urea-Doped Amorphous Calcium Phosphate Nanoparticles. *Frontiers in Plant Science*, 12, 745581. <https://doi.org/10.3389/fpls.2021.745581>
40. Flach, L., Köhl, S., Lambertz, C., DeMonte, E., & Gauly, M. (2021). Effect of low and high concentrate supplementation on health and welfare indicators in different breeds in small-scale mountain dairy farms. *Journal of Dairy Research*, 88(2), 139–146. <https://doi.org/10.1017/S0022029921000273>

41. Flach, L., Köhl, S., Lambertz, C., & Gauly, M. (2021). Environmental impact and food production of small-scale mountain dairy farms at different supplementation levels. *Journal of Cleaner Production*, 310, 127429.
<https://doi.org/10.1016/j.jclepro.2021.127429>
42. Gaiotti, F., Lucchetta, M., Rodegher, G., Lorenzoni, D., Longo, E., Boselli, E., Cesco, S., Belfiore, N., Lovat, L., Delgado-López, J. M., Carmona, F. J., Guagliardi, A., Masciocchi, N., & Pii, Y. (2021). Urea-Doped Calcium Phosphate Nanoparticles as Sustainable Nitrogen Nanofertilizers for Viticulture: Implications on Yield and Quality of Pinot Gris Grapevines. *Agronomy*, 11(6), 1026.
<https://doi.org/10.3390/agronomy11061026>
43. Gallo, R., Visser, R., & Mazzetto, F. (2021). Developing an Automated Monitoring System for Cable Yarding Systems. *Croatian Journal of Forest Engineering*, 42(2), 213–225. <https://doi.org/10.5552/crojfe.2021.768>
44. Gauly, M., Chemineau, P., Rosati, A., & Sartin, J. (2021). COVID-19 pandemic—How and why animal production suffers? *Animal Frontiers*, 11(1), 3–5.
<https://doi.org/10.1093/af/vfaa059>
45. Giovanni, C., Mazzetto, F., & Renato, V. (2021). Design and evaluation of a branch sensing system for a climbing and pruning robot. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 454–459.
<https://doi.org/10.1109/MetroAgriFor52389.2021.9628768>
46. Grella, M., Marucco, P., Manzone, M., Gallo, R., Mazzetto, F., & Balsari, P. (2021). Indoor test bench measurements of potential spray drift generated by multi-row sprayers. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 356–361.
<https://doi.org/10.1109/MetroAgriFor52389.2021.9628652>

47. Horgan, MJ., P.I. Sigg, I. Palmieri, L. Martinidou, E. Martens, S. Fusani, P. Siewert, B. Temml, V. Albertini, E. Gauly, M. Jansen-Dürr, P. Stuppner, H. (2021). Alpine Sow-Thistle Against Nematodes: A Dual Approach to Anthelmintic Discovery. *Planta Medica*, 87(15), PC2-6. <https://doi.org/10.1055/s-0041-1736816>
48. Ibba, P., Tronstad, C., Moschetti, R., Mimmo, T., Cantarella, G., Petti, L., Martinsen, Ø. G., Cesco, S., & Lugli, P. (2021). Supervised binary classification methods for strawberry ripeness discrimination from bioimpedance data. *Scientific Reports*, 11(1), 11202. <https://doi.org/10.1038/s41598-021-90471-5>
49. Lange, A., Hahne, M., Lambertz, C., Gauly, M., Wendt, M., Janssen, H., & Traulsen, I. (2021). Effects of Different Housing Systems during Suckling and Rearing Period on Skin and Tail Lesions, Tail Losses and Performance of Growing and Finishing Pigs. *Animals*, 11(8), 2184. <https://doi.org/10.3390/ani11082184>
50. Maver, M., Escudero-Martinez, C., Abbott, J., Morris, J., Hedley, P. E., Mimmo, T., & Bulgarelli, D. (2021). Applications of the indole-alkaloid gramine modulate the assembly of individual members of the barley rhizosphere microbiota. *PeerJ*, 9, e12498. <https://doi.org/10.7717/peerj.12498>
51. Michelini, S., Tomada, S., Kadison, A.E., Pichler, F., Hinz, F., Zejfart, M., Iannone, F., Lazazzara, V., Sanoll, C., Robatscher, P., Pedri, U. (2021). Modeling malic acid dynamics to ensure quality, aroma and freshness of Pinot blanc wines in South Tyrol (Italy). *OENO One*, 55, 159-179. DOI: 10.20870/oeno-one.2021.55.2.4570
52. Mugnai, G., Borruso, L., Mimmo, T., Cesco, S., Luongo, V., Frunzo, L., Fabbicino, M., Pirozzi, F., Cappitelli, F., & Villa, F. (2021). Dynamics of bacterial communities and substrate conversion during olive-mill waste dark fermentation: Prediction of the metabolic routes for hydrogen production. *Bioresource Technology*, 319, 124157. <https://doi.org/10.1016/j.biortech.2020.124157>

53. Parisi, G., Abbracchio, M. P., Ciliberto, G., Tagliavini, M., Metzlauff, K., & Schulman, A. (2021). Italy: Scientists petition against biodynamic farming law. *Nature*, 595(7867), 352–352. <https://doi.org/10.1038/d41586-021-01886-z>
54. Pascuzzi, S., & Mazzetto, F. (2021). Feasibility study of using laser technology for calibrating orchard sprayer machinery. First results. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 367–371. <https://doi.org/10.1109/MetroAgriFor52389.2021.9628610>
55. Penna, D., Zanotelli, D., Scandellari, F., Aguzzoni, A., Engel, M., Tagliavini, M., & Comiti, F. (2021). Water uptake of apple trees in the Alps: Where does irrigation water go? *Ecohydrology*, 14(6), e2306. <https://doi.org/10.1002/eco.2306>
56. Preti, M., Favaro, R., Knight, A. L., & Angeli, S. (2021). Remote monitoring of *Cydia pomonella* adults among an assemblage of nontargets in sex pheromone-kairomone-baited smart traps. *Pest Management Science*, 77(9), 4084–4090. <https://doi.org/10.1002/ps.6433>
57. Preti, M., Knight, A. L., Favaro, R., Basoalto, E., Tasin, M., & Angeli, S. (2021). Comparison of New Kairomone-Based Lures for *Cydia pomonella* (Lepidoptera: Tortricidae) in Italy and USA. *Insects*, 12(1), 72. <https://doi.org/10.3390/insects12010072>
58. Preti, M., Knight, A. L., Mujica, M. V., Basoalto, E., Favaro, R., & Angeli, S. (2021). Developing female removal for *Cydia pomonella* (Lepidoptera: Tortricidae) in organic pear in the USA and Italy. *Journal of Applied Entomology*, 145(9), 856–868. <https://doi.org/10.1111/jen.12918>
59. Preti, M., Knight, A. L., Mujica, M. V., Basoalto, E., Larsson Herrera, S., Tasin, M., & Angeli, S. (2021). Development of multi-component non-sex pheromone blends to

- monitor both sexes of *Cydia pomonella* (Lepidoptera: Tortricidae). *Journal of Applied Entomology*, 145(8), 822–830. <https://doi.org/10.1111/jen.12898>
60. Preti, M., Moretti, C., Scarton, G., Giannotta, G., & Angeli, S. (2021). Developing a smart trap prototype equipped with camera for tortricid pests remote monitoring. *Bulletin of Insectology*, 74(1), 147–160.
 61. Preti, M., Verheggen, F., & Angeli, S. (2021). Insect pest monitoring with camera-equipped traps: Strengths and limitations. *Journal of Pest Science*, 94(2), 203–217. <https://doi.org/10.1007/s10340-020-01309-4>
 62. Quagliata, G., Celletti, S., Coppa, E., Mimmo, T., Cesco, S., & Astolfi, S. (2021). Potential Use of Copper-Contaminated Soils for Hemp (*Cannabis sativa* L.) Cultivation. *Environments*, 8(11), 111. <https://doi.org/10.3390/environments8110111>
 63. Ramoneda, J., Le Roux, J., Stadelmann, S., Frossard, E., Frey, B., & Gamper, H. A. (2021). Soil microbial community coalescence and fertilization interact to drive the functioning of the legume–rhizobium symbiosis. *Journal of Applied Ecology*, 58(11), 2590–2602. <https://doi.org/10.1111/1365-2664.13995>
 64. Sacco, P., Gargano, E. R., Cornella, A., Don, D., & Mazzetto, F. (2021). Digital sustainability in smart agriculture. *2021 IEEE International Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 471–475. <https://doi.org/10.1109/MetroAgriFor52389.2021.9628838>
 65. Scagliola, M., Valentinuzzi, F., Mimmo, T., Cesco, S., Crecchio, C., & Pii, Y. (2021). Bioinoculants as Promising Complement of Chemical Fertilizers for a More Sustainable Agricultural Practice. *Frontiers in Sustainable Food Systems*, 4, 622169. <https://doi.org/10.3389/fsufs.2020.622169>
 66. Schillaci, C., Perego, A., Valkama, E., Märker, M., Saia, S., Veronesi, F., Lipani, A., Lombardo, L., Tadiello, T., Gamper, H. A., Tedone, L., Moss, C., Pareja-Serrano, E.,

- Amato, G., Kühl, K., Dămătîrcă, C., Cogato, A., Mzid, N., Eeswaran, R., ... Acutis, M. (2021). New pedotransfer approaches to predict soil bulk density using WoSIS soil data and environmental covariates in Mediterranean agro-ecosystems. *Science of The Total Environment*, 780, 146609. <https://doi.org/10.1016/j.scitotenv.2021.146609>
67. Schuler, H., Elsler, D., & Fischnaller, S. (2021). Population genetics of the brown marmorated stink bug *Halyomorpha halys* in the early phase of invasion in South Tyrol (Northern Italy). *Bulletin of Entomological Research*, 111(4), 394–401. <https://doi.org/10.1017/S0007485320000553>
68. Shahzad, M. A., Abubakr, S., & Fischer, C. (2021). Factors Affecting Farm Succession and Occupational Choices of Nominated Farm Successors in Gilgit-Baltistan, Pakistan. *Agriculture*, 11(12), 1203. <https://doi.org/10.3390/agriculture11121203>
69. Shahzad, M. A., Ahmed, V., & Fischer, C. (2021). Status and determinants of other gainful activities by farmers in mountainous rural regions of Gilgit-Baltistan, Pakistan. *Journal of Mountain Science*, 18(10), 2520–2539. <https://doi.org/10.1007/s11629-021-6673-y>
70. Signorini, M., Borruso, L., Randall, K. C., Dumbrell, A. J., Pii, Y., Mimmo, T., & Cesco, S. (2021). Soil heterogeneity within a vineyard impacts the beta but not the alpha microbial agro-diversity. *Applied Soil Ecology*, 166, 104088. <https://doi.org/10.1016/j.apsoil.2021.104088>
71. Sottocornola, G., Baric, S., Stella, F., & Zanker, M. (2021). Case study on the development of a recommender for apple disease diagnosis with a knowledge-based bayesian network. In V. W. A. et al. (Ed.), Workshop proceedings of the 3rd edition of knowledge-aware and conversational recommender systems (KaRS) and the 5th

edition of recommendation in complex environments (ComplexRec). CEUR-WS.org, <http://ceur-ws.org/Vol-2960/paper13.pdf>.

72. Tiziani, R., Mimmo, T., Valentinuzzi, F., Pii, Y., Celletti, S., & Cesco, S. (2021). Corrigendum: Root Handling Affects Carboxylates Exudation and Phosphate Uptake of White Lupin Roots. *Frontiers in Plant Science*, 12. <https://www.frontiersin.org/articles/10.3389/fpls.2021.681263>
73. Tiziani, R., Puschenreiter, M., Smolders, E., Mimmo, T., Herrera, J. C., Cesco, S., & Santner, J. (2021). Millimetre-resolution mapping of citrate exuded from soil-grown roots using a novel, low-invasive sampling technique. *Journal of Experimental Botany*, 72(10), 3513–3525. <https://doi.org/10.1093/jxb/erab123>
74. Valentinuzzi, F., Pii, Y., Borruso, L., Mimmo, T., Puglisi, E., Trevisan, M., & Cesco, S. (2021). Epiphytic Microbial Community and Post-Harvest Characteristics of Strawberry Fruits as Affected by Plant Nutritional Regime with Silicon. *Agronomy*, 11(12), 2407. <https://doi.org/10.3390/agronomy11122407>
75. Wolfe, T. M., Bruzzese, D. J., Klasson, L., Corretto, E., Lečić, S., Stauffer, C., Feder, J. L., & Schuler, H. (2021). Comparative genome sequencing reveals insights into the dynamics of *Wolbachia* in native and invasive cherry fruit flies. *Molecular Ecology*, 30(23), 6259–6272. <https://doi.org/10.1111/mec.15923>
76. Zanon, T., Costa, A., De Marchi, M., Penasa, M., König, S., & Gauly, M. (2021). Bulk milk quality as affected by cattle breed composition of the herd in mountain area. *Annals of Animal Science*, 21(1), 361–374. <https://doi.org/10.2478/aoas-2020-0067>
77. Zanon, T., De Monte, E., & Gauly, M. (2021). Effects of cattle breed and production system on veterinary diagnoses and administrated veterinary medicine in alpine dairy

farms. *Italian Journal of Animal Science*, 20(1), 1126–1134.

<https://doi.org/10.1080/1828051X.2021.1953410>

78. Zanon, T., Gruber, S., & Gauly, M. (2021). Charakterprüfung bei Haflingerpferden.

Züchtungskunde, 93, 310–319.

79. Zanutelli, D., Tagliavini, M., Petrillo, M., & Andreotti, C. (2021). Foliar and root

uptake of N deriving from simulated atmospheric N depositions in potted apple

(*Malus domestica*) trees. *Italus Hortus*, 28(3), 13–24.

<https://doi.org/10.26353/j.itahort/2021.3.1324>

80. Zuliani, A., Contiero, B., Schneider, M. K., Arsenos, G., Bernués, A., Dovic, P.,

Gauly, M., Holand, Ø., Martin, B., Morgan-Davies, C., Zollitsch, W., & Cozzi, G.

(2021). Topics and trends in Mountain Livestock Farming research: A text mining

approach. *Animal*, 15(1), 100058. <https://doi.org/10.1016/j.animal.2020.100058>

81. Zuliani, A., Contiero, B., Schneider, M. K., Arsenos, G., Bernués, A., Dovic, P.,

Gauly, M., Holand, Ø., Martin, B., Morgan-Davies, C., Zollitsch, W., & Cozzi, G.

(2021). Topics and trends in Mountain Livestock Farming research: A text mining

approach. *Animal*, 15(1), 100058. <https://doi.org/10.1016/j.animal.2020.100058>

82. Zuluaga, M. Y. A., Milani, K. M. L., Miras-Moreno, B., Lucini, L., Valentinuzzi, F.,

Mimmo, T., Pii, Y., Cesco, S., Rodrigues, E. P., & Oliveira, A. L. M. D. (2021).

Inoculation with plant growth-promoting bacteria alters the rhizosphere functioning of

tomato plants. *Applied Soil Ecology*, 158, 103784.

<https://doi.org/10.1016/j.apsoil.2020.103784>

1. Abraham, J., Angeli, S., Antwi, J. B., & Rodriguez-Saona, C. (2022). Editorial: Research Advances on *Drosophila suzukii*. *Frontiers in Ecology and Evolution*, 10, 897222. <https://doi.org/10.3389/fevo.2022.897222>
2. Aguzzoni, A., Engel, M., Zanotelli, D., Penna, D., Comiti, F., & Tagliavini, M. (2022). Water uptake dynamics in apple trees assessed by an isotope labeling approach. *Agricultural Water Management*, 266, 107572. <https://doi.org/10.1016/j.agwat.2022.107572>
3. Ahmad, F., & Baric, S. (2022). Genetic diversity of *Cryphonectria parasitica* causing chestnut blight in South Tyrol (northern Italy). *European Journal of Plant Pathology*, 162(3), 621–635. <https://doi.org/10.1007/s10658-021-02425-2>
4. Ahmad, F., & Baric, S. (2022). Microsatellite Analysis Revealing High Genetic Diversity of the Chestnut Blight Fungus in South Tyrol (Northern Italy). *Forests*, 13(2), 344. <https://doi.org/10.3390/f13020344>
5. Altana, A., Becce, L., Avancini, E., Lugli, P., Petti, L., & Mazzetto, F. (2022). Cost-effective tracing techniques for the rapid characterization of spray deposition and drift through electrical conductivity and fluorescence. *2022 IEEE Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 164–168. <https://doi.org/10.1109/MetroAgriFor55389.2022.9964955>
6. Alzate Zuluaga, M. Y., Miras-Moreno, B., Monterisi, S., Rouphael, Y., Colla, G., Lucini, L., Cesco, S., & Pii, Y. (2022). Integrated Metabolomics and Morpho-Biochemical Analyses Reveal a Better Performance of *Azospirillum brasilense* over Plant-Derived Biostimulants in Counteracting Salt Stress in Tomato. *International Journal of Molecular Sciences*, 23(22), 14216. <https://doi.org/10.3390/ijms232214216>

7. Amaral Carneiro, G., Walcher, M., & Baric, S. (2022). *Cadophora luteo-olivacea* isolated from apple (*Malus domestica*) fruit with post-harvest side rot symptoms in northern Italy. *European Journal of Plant Pathology*, 162(1), 247–255.
<https://doi.org/10.1007/s10658-021-02388-4>
8. Amaral Carneiro, G., Walcher, M., Storti, A., & Baric, S. (2022). Phylogenetic Diversity and Phenotypic Characterization of *Phlyctema vagabunda* (syn. *Neofabraea alba*) and *Neofabraea kienholzii* Causing Postharvest Bull's Eye Rot of Apple in Northern Italy. *Plant Disease*, 106(2), 451–463. <https://doi.org/10.1094/PDIS-04-21-0687-RE>
9. Andreotti, C., Roupael, Y., Colla, G., & Basile, B. (2022). Rate and Timing of Application of Biostimulant Substances to Enhance Fruit Tree Tolerance toward Environmental Stresses and Fruit Quality. *Agronomy*, 12(3), 603.
<https://doi.org/10.3390/agronomy12030603>
10. Bartkowiak, P., Castelli, M., Crespi, A., Niedrist, G., Zanotelli, D., Colombo, R., & Notarnicola, C. (2022). Land Surface Temperature Reconstruction Under Long-Term Cloudy-Sky Conditions at 250 m Spatial Resolution: Case Study of Vinschgau/Venosta Valley in the European Alps. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 15, 2037–2057.
<https://doi.org/10.1109/JSTARS.2022.3147356>
11. Basile, B., Andreotti, C., Rogers, H., & Roupael, Y. (2022). Sustainability as the main driver of present-day horticultural advancement. *Italus Hortus*, 29(1), 0.
<https://doi.org/10.26353/j.itahort/2022.1.000>
12. Becce, L., Amin, S., Carabin, G., & Mazzetto, F. (2022). Preliminary spray nozzle characterization activities through shadowgraphy at the AgroForestry Innovation Lab

(AFI-Lab). 2022 *IEEE Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 136–140. <https://doi.org/10.1109/MetroAgriFor55389.2022.9965106>

13. Ben Abdelkader, A., Benyahia, F., Bastos Campos, F., Asensio, D., Andreotti, C., Tagliavini, M., & Zanutelli, D. (2022). Apple tree transpiration during cycles of progressive drought as assessed via continuous gravimetric and xylem sap flux measurements. *Italus Hortus*, 29(2), 35–46.
<https://doi.org/10.26353/j.itahort/2022.2.3546>
14. Ben Abdelkader, A., Thalheimer, M., Petrillo, M., Tagliavini, M., & Zanutelli, D. (2022). Automatic irrigation scheduling based on soil water potential thresholds allows water savings in a highly productive apple orchard. *Acta Horticulturae*, 1346, 563–570. <https://doi.org/10.17660/ActaHortic.2022.1346.71>
15. Bernhardt, H., Treiber, M., Paulus, C., Gronauer, A., Mazzetto, F., Mandler, A., & Herlin, A. H. (2022). Development of a Life Long Learning concept for smart farming. 2022 *Houston, Texas July 17-20, 2022*. 2022 Houston, Texas July 17-20, 2022. <https://doi.org/10.13031/aim.202200130>
16. Bietresato, M., & Mazzetto, F. (2022). A Novel Facility For Statically Testing The Stability Of Vehicles: Technical Features And Possibilities. *International Journal of Transport Development and Integration*, 6(2), 107–121. <https://doi.org/10.2495/TDI-V6-N2-107-121>
17. Bouaicha, O., Mimmo, T., Tiziani, R., Praeg, N., Polidori, C., Lucini, L., Vigani, G., Terzano, R., Sanchez-Hernandez, J. C., Illmer, P., Cesco, S., & Borruso, L. (2022). Microplastics make their way into the soil and rhizosphere: A review of the ecological consequences. *Rhizosphere*, 22, 100542. <https://doi.org/10.1016/j.rhisph.2022.100542>
18. Bouaicha, O., Tiziani, R., Maver, M., Lucini, L., Miras-Moreno, B., Zhang, L., Trevisan, M., Cesco, S., Borruso, L., & Mimmo, T. (2022). Plant species-specific

impact of polyethylene microspheres on seedling growth and the metabolome.

Science of The Total Environment, 840, 156678.

<https://doi.org/10.1016/j.scitotenv.2022.156678>

19. Bruzzese, D. J., Schuler, H., Wolfe, T. M., Glover, M. M., Mastroni, J. V., Doellman, M. M., Tait, C., Yee, W. L., Rull, J., Aluja, M., Hood, G. R., Goughnour, R. B., Stauffer, C., Nosil, P., & Feder, J. L. (2022). Testing the potential contribution of *Wolbachia* to speciation when cytoplasmic incompatibility becomes associated with host-related reproductive isolation. *Molecular Ecology*, 31(10), 2935–2950.

<https://doi.org/10.1111/mec.16157>

20. Callesen, T. O., Gonzalez, C. V., Bastos Campos, F., Zanotelli, D., Tagliavini, M., & Montagnani, L. (2022). Gross and net primary productivity in a vineyard assessed by eddy covariance and biometric measurements. *Acta Horticulturae*, 1355, 423–430.

<https://doi.org/10.17660/ActaHortic.2022.1355.54>

21. Calvert, M. B., Doellman, M. M., Feder, J. L., Hood, G. R., Meyers, P., Egan, S. P., Powell, T. H. Q., Glover, M. M., Tait, C., Schuler, H., Berlocher, S. H., Smith, J. J., Nosil, P., Hahn, D. A., & Ragland, G. J. (2022). Genomically correlated trait combinations and antagonistic selection contributing to counterintuitive genetic patterns of adaptive diapause divergence in *Rhagoletis* flies. *Journal of Evolutionary Biology*, 35(1), 146–163. <https://doi.org/10.1111/jeb.13952>

22. Carabin, G., Becce, L., Mandler, A., & Mazzetto, F. (2022). Primary Production Prediction from Aerial Spectrographic Survey. *2022 IEEE Workshop on Metrology for Agriculture and Forestry (MetroAgriFor)*, 350–355.

<https://doi.org/10.1109/MetroAgriFor55389.2022.9964747>

23. Carlini, L., Tancreda, G., Iobbi, V., Caicci, F., Bruno, S., Esposito, A., Calzia, D., Benini, S., Bisio, A., Manni, L., Schito, A., Traverso, C. E., Ravera, S., and Panfoli I.

(2022). The Flavone Cirsiliol from *Salvia x jamensis* Binds the F1 Moiety of ATP Synthase, Modulating Free Radical Production. *Cells*, 11 (19), 3169.

<https://doi.org/10.3390/cells11193169>

24. Caselli, A., Favaro, R., Petacchi, R., & Angeli, S. (2022). Infestation of the gall midge *Dasineura oleae* provides first evidence of induced plant volatiles in olive leaves. *Bulletin of Entomological Research*, 112(4), 481–493. Scopus.

<https://doi.org/10.1017/S0007485321001000>

25. Dombrowski, O., Brogi, C., Hendricks Franssen, H.-J., Zanotelli, D., & Bogen, H. (2022). CLM5-FruitTree: A new sub-model for deciduous fruit trees in the Community Land Model (CLM5). *Geoscientific Model Development*, 15(13), 5167–5193. <https://doi.org/10.5194/gmd-15-5167-2022>

26. Engel, M., Frentress, J., Penna, D., Andreoli, A., Van Meerveld, I., Zerbe, S., Tagliavini, M., & Comiti, F. (2022). How do geomorphic characteristics affect the source of tree water uptake in restored river floodplains? *Ecohydrology*, 15(4), e2443.

<https://doi.org/10.1002/eco.2443>

27. Escudero-Martinez, C., Coulter, M., Alegria Terrazas, R., Foito, A., Kapadia, R., Pietrangeli, L., Maver, M., Sharma, R., Aprile, A., Morris, J., Hedley, P. E., Maurer, A., Pillen, K., Naclerio, G., Mimmo, T., Barton, G. J., Waugh, R., Abbott, J., & Bulgarelli, D. (2022). Identifying plant genes shaping microbiota composition in the barley rhizosphere. *Nature Communications*, 13(1), 3443.

<https://doi.org/10.1038/s41467-022-31022-y>

28. Favaro, R., Roved, J., Haase, A., & Angeli, S. (2022). Impact of Chronic Exposure to Two Neonicotinoids on Honey Bee Antennal Responses to Flower Volatiles and Pheromonal Compounds. *Frontiers in Insect Science*, 2, 821145.

<https://doi.org/10.3389/finsc.2022.821145>

29. Genova, G., Della Chiesa, S., Mimmo, T., Borruso, L., Cesco, S., Tasser, E., Matteazzi, A., & Niedrist, G. (2022). Copper and zinc as a window to past agricultural land-use. *Journal of Hazardous Materials*, 424, 126631.
<https://doi.org/10.1016/j.jhazmat.2021.126631>
30. Gieseke, D., Lambertz, C., & Gauly, M. (2022). Effects of Housing and Management Factors on Selected Indicators of the Welfare Quality® Protocol in Loose-Housed Dairy Cows. *Veterinary Sciences*, 9(7), 353. <https://doi.org/10.3390/vetsci9070353>
31. Gorfer, M., Borruso, L., Deltedesco, E., Gichuhi, E. W., Menge, D. M., Makihara, D., Praeg, N., Cesco, S., Mimmo, T., Merbold, L., & Leitner, S. (2022). The effect of environmental parameters and fertilization practices on yield and soil microbial diversity in a Kenyan paddy rice field. *Applied Soil Ecology*, 176, 104495.
<https://doi.org/10.1016/j.apsoil.2022.104495>
32. Hornauer, S., Stamler, L., Zanon, T., Gauly, M., & Winter, D. (2022). Untersuchungen zur Ausbildung und Vermarktung von Pferden der Rasse Haflinger in Südtirol. *Züchtungskunde*, 94, 206–216.
33. Knight, A. L., Preti, M., Basoalto, E., Mujica, M. V., Favaro, R., & Angeli, S. (2022). Combining female removal with mating disruption for management of *Cydia pomonella* in apple. *Entomologia Generalis*, 42(2), 309–321.
<https://doi.org/10.1127/entomologia/2021/1316>
34. Linder, M. O., Sidali, K. L., Fischer, C., Gauly, M., & Busch, G. (2022). Assessing Italians' Preferences for Mountain Beef Production Using a Best–Worst Scaling Approach. *Mountain Research and Development*, 42(3).
<https://doi.org/10.1659/MRD-JOURNAL-D-21-00021.1>
35. Markellou, E., Kapaxidi, E., Karamaouna, F., Samara, M., Kyriakopoulou, K., Anastasiadou, P., Vavoulidou, E., Meidanis, M., Machera, K., Mandoulaki, A.,

- Margaritopoulou, T., Giovannini, O., Tomada, S., Pertot, I., Puopolo, G. (2022). Evaluation of plant protection efficacy in field conditions and side effects of *Lysobacter capsici* AZ78, a biocontrol agent of *Plasmopara viticola*. *Biocontrol Science and Technology*, 32, 930-951. DOI: 10.1080/09583157.2022.2064431
36. Maver, M., Trevisan, F., Miras-Moreno, B., Lucini, L., Trevisan, M., Cesco, S., & Mimmo, T. (2022). The interplay between nitrogenated allelochemicals, mineral nutrition and metabolic profile in barley roots. *Plant and Soil*, 479(1–2), 715–730. <https://doi.org/10.1007/s11104-022-05553-8>
37. Oliveira Linder, M., Laura Sidali, K., Fischer, C., Bossi Fedrigotti, V., Begalli, D., & Busch, G. (2022). Assessing preferences for mountain wine and viticulture by using a best-worst scaling approach: Do mountains really matter for Italians? *Wine Economics and Policy*, 11(1), 15–29. <https://doi.org/10.36253/wep-10342>
38. Poggesi, S., Darnal, A., Ceci, A. T., Longo, E., Vanzo, L., Mimmo, T., & Boselli, E. (2022). Fusion of 2DGC-MS, HPLC-MS and Sensory Data to Assist Decision-Making in the Marketing of International Monovarietal Chardonnay and Sauvignon Blanc Wines. *Foods*, 11(21), 3458. <https://doi.org/10.3390/foods11213458>
39. Polsinelli I, Salomone-Stagni M, Benini S (2022). *Erwinia tasmaniensis* levansucrase shows enantiomer selection for (S)-1,2,4-butanetriol . *Acta Crystallographica. Section F, Structural Biology Communications*, vol. 78, p. 289-296. <https://doi.org/10.1107/S2053230X2200680X>
40. Pouloupoulou, I., Horgan, M. J., B., Siller, M., Palmieri, L., Martinidou, E., S., Fusani P., Temml, V., Stuppner, H., Gauly, M. (2022). In vitro evaluation of the effects of methanolic plant extracts on the embryonation rate of *Ascaridia galli* eggs. *Journal Veterinary Research Communication*, DOI: 10.1007/s11259-022-09958-9

41. Razem, M., Ding, Y., Morozova, K., Mazzetto, F., & Scampicchio, M. (2022). Analysis of Phenolic Compounds in Food by Coulometric Array Detector: A Review. *Sensors*, 22(19), 7498. <https://doi.org/10.3390/s22197498>
42. Rehmann, G., Spitaler, U., Sahle, K., Cossu, C. S., Donne, L. D., Bianchi, F., Eisenstecken, D., Angeli, S., Schmidt, S., & Becher, P. G. (2022). Behavioral manipulation of *Drosophila suzukii* for pest control: High attraction to yeast enhances insecticide efficacy when applied on leaves. *Pest Management Science*, 78(3), 896–904. <https://doi.org/10.1002/ps.6699>
43. Schwalbert, R., Milanesi, G. D., Stefanello, L., Moura-Bueno, J. M., Drescher, G. L., Marques, A. C. R., Kulmann, M. S. D. S., Berghetti, A. P., Tarouco, C. P., Machado, L. C., Cesco, S., Brunetto, G., & Nicoloso, F. T. (2022). How do native grasses from South America handle zinc excess in the soil? A physiological approach. *Environmental and Experimental Botany*, 195, 104779. <https://doi.org/10.1016/j.envexpbot.2022.104779>
44. Serni, E., Tomada, S., Haas, F., Robatscher, P. (2022). Characterization of phenolic profile in dried grape skin of *Vitis vinifera* L. cv. Pinot Blanc with UHPLC-MS/MS and its development during ripening. *Journal of Food Composition and Analysis*, 114, 104731. DOI: 10.1016/j.jfca.2022.104731
45. Sottocornola, G., Baric, S., Nocker, M., Stella, F., & Zanker, M. (2022). Picture-based and conversational decision support to diagnose post-harvest apple diseases. *Expert Systems with Applications*, 189, 116052. <https://doi.org/10.1016/j.eswa.2021.116052>
46. Spitaler, U., Cossu, C. S., Delle Donne, L., Bianchi, F., Rehmann, G., Eisenstecken, D., Castellan, I., Duménil, C., Angeli, S., Robatscher, P., Becher, P. G., Koschier, E. H., & Schmidt, S. (2022). Field and greenhouse application of an attract-and-kill formulation based on the yeast *Hanseniaspora uvarum* and the insecticide spinosad to

control *Drosophila suzukii* in grapes. *Pest Management Science*, 78(3), 1287–1295.

<https://doi.org/10.1002/ps.6748>

47. Štarhová Serbina, L., Gajski, D., Malenovský, I., Corretto, E., Schuler, H., & Dittmer, J. (2022). Wolbachia infection dynamics in a natural population of the pear psyllid *Cacopsylla pyri* (Hemiptera: Psylloidea) across its seasonal generations. *Scientific Reports*, 12(1), 16502. <https://doi.org/10.1038/s41598-022-20968-0>
48. Štarhová Serbina, L., Gajski, D., Pafčo, B., Zurek, L., Malenovský, I., Nováková, E., Schuler, H., & Dittmer, J. (2022). Microbiome of pear psyllids: A tale about closely related species sharing their endosymbionts. *Environmental Microbiology*, 24(12), 5788–5808. <https://doi.org/10.1111/1462-2920.16180>
49. Tempesta, M., Pennisi, G., Gianquinto, G., Hauser, M., & Tagliavini, M. (2022). Contribution of cauliflower residues to N nutrition of subsequent lettuce crops grown in rotation in an Italian Alpine environment. *Agronomy for Sustainable Development*, 42(2), 25. <https://doi.org/10.1007/s13593-022-00756-w>
50. Tomada, S., Agati, G., Serni, E., Michelini, S., Lazazzara, V., Pedri, U., Sanoll, C., Matteazzi, A., Robatscher, P., Haas, F. (2022). Non-destructive fluorescence sensing for assessing microclimate, site and defoliation effects on flavonol dynamics and sugar prediction in Pinot blanc grapes. *PLoS One*, 17, e0273166. DOI: 10.1371/journal.pone.0273166
51. Trentin, E., Cesco, S., Pii, Y., Valentinuzzi, F., Celletti, S., Feil, S. B., Zuluaga, M. Y. A., Ferreira, P. A. A., Ricachenevsky, F. K., Stefanello, L. O., De Conti, L., Brunetto, G., & Mimmo, T. (2022). Plant species and pH dependent responses to copper toxicity. *Environmental and Experimental Botany*, 196, 104791. <https://doi.org/10.1016/j.envexpbot.2022.104791>

52. Wenter, A., Zanutelli, D., Tagliavini, M., & Andreotti, C. (2022). Thresholds of soil and plant water availability that affect leaf transpiration, stomatal conductance and photosynthesis in grapevines. *Acta Horticulturae*, 1335, 605–612.
<https://doi.org/10.17660/ActaHortic.2022.1335.76>
53. Wolfe, T., Hembach, S., Petrašiūnas, A., Juzėnas, S., Stauffer, C., & Schuler, H. (2022). First report of the American eastern cherry fruit fly *Rhagoletis cingulata* (Loew) (Diptera: Tephritidae) in Lithuania. *BioInvasions Records*, 11(4), 893–899.
<https://doi.org/10.3391/bir.2022.11.4.08>
54. Yazwinski, T. A., Höglund, J., Permin, A., Gauly, M., & Tucker, C. (2022). World association for the advancement of veterinary parasitology (WAAVP): Second edition of guidelines for evaluating the efficacy of anthelmintics in poultry. *Veterinary Parasitology*, 305, 109711. <https://doi.org/10.1016/j.vetpar.2022.109711>
55. Zanon, T., & Gauly, M. (2022). Der Effekt von Hitzestress auf die Leistung und Fruchtbarkeit von Milchkühen und Schweinen. *Züchtungskunde*, 94(4), 275–286.
56. Zanon, T., Komainda, M., Ammer, S., Isselstein, J., & Gauly, M. (2022). Diverse Feed, Diverse Benefits: The Multiple Roles of Feed Diversity at Pasture on Ruminant Livestock Production: A Review. *Journal of Veterinary Science and Animal Husbandry*, 10(1), 1–20.
57. Zanutelli, D., Capacci, V., Gambarotto, L., & Tagliavini, M. (2022). Mineral nutrient uptake in the production cycle of knip-type apple trees in the nursery. *Acta Horticulturae*, 1333, 177–184. <https://doi.org/10.17660/ActaHortic.2022.1333.23>
58. Zanutelli, D., Montagnani, L., Andreotti, C., & Tagliavini, M. (2022). Water and carbon fluxes in an apple orchard during heat waves. *European Journal of Agronomy*, 134, 126460. <https://doi.org/10.1016/j.eja.2022.126460>

59. Zuecco, G., Amin, A., Frentress, J., Engel, M., Marchina, C., Anfodillo, T., Borga, M., Carraro, V., Scandellari, F., Tagliavini, M., Zanutelli, D., Comiti, F., & Penna, D. (2022). A comparative study of plant water extraction methods for isotopic analyses: Scholander-type pressure chamber vs. cryogenic vacuum distillation. *Hydrology and Earth System Sciences*, 26(13), 3673–3689. <https://doi.org/10.5194/hess-26-3673-2022>

2023

1. Albani, S., Polsinelli, I., Mazzei, L., Musiani, F., Benini, S. (2023). Determination and Kinetic Characterization of a New Potential Inhibitor for AmsI Protein Tyrosine Phosphatase from the Apple Pathogen *Erwinia amylovora*. *Molecules*, 28, 7774. <https://doi.org/10.3390/molecules28237774>
2. Ali A., Altana A., Becce L., Lugli P., Petti L., Mazzetto F. (2023). Enhancing Spray Drift Deposition Analysis: Towards Real-Time Estimation through Resistive Measurements and Optical Tracers. *IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor – Proceedings*. DOI: 10.1109/MetroAgriFor58484.2023.10424388
3. Allegretta I., Squeo G., Gattullo C.E., Porfido C., Cicchetti A., Caponio F., Cesco S., Nicoletto C., Terzano R. (2023). TXRF spectral information enhanced by multivariate analysis: A new strategy for food fingerprint. *Food Chemistry*. 401. DOI: 10.1016/j.foodchem.2022.134124
4. Alrhoun, M., Zanon, T., Pouloupoulou, I., Katzenberger, K., Gauly, M. (2023). Associated risk factors for skin alterations in dairy cattle kept on small scale mountain farms. *Plos One* 18(8), e0285394 <https://doi.org/10.1371/journal.pone.0285394>
5. Altana A., Becce L., Lugli P., Petti L., Mazzetto F. (2023). Uranine as a Tracer for Rapid Detection of Spray Deposition. *Lecture Notes in Civil Engineering*. 337 LNCE. DOI: 10.1007/978-3-031-30329-6_25
6. Altmann, B.A., Geisler, S., Morthost, F., Angeli, S., Bortolini, S., Gauly, M., Hummel, J., Sünder, A., Mörlein, D., TRaulsen, I., Ammer, S. (2023). Animal performance and meat quality of two slow-growing chicken genotypes fed insects reared on municipal organic waste. *Journal of Insects as Food and Feed* 9, 1445-1459. <https://doi.org/10.1163/23524588-20230035>

7. Andergassen C., D. A. Hey, D. Pichler, M. Peterlin, M. Kelderer, P. Robatscher, M. Tagliavini. 2023. Summer pruning and pneumatic preharvest-defoliation affect the light distribution within the canopy and improve the fruit quality of two bicolored apple cultivars. *Europ. J. Hort. Sci.* 88(5). <https://doi.org/10.17660/eJHS.2023/032>
8. Andreotti C., F. Benyahia , M. Petrillo , V. Lucchetta , B. Volta, K. Cameron , G. Targetti , M. Tagliavini , Damiano Zanotelli. 2023. Comparing defoliation and canopy sprays to delay ripening of Sauvignon blanc grapes. *Scientia Horticulturae*.
<https://doi.org/10.1016/j.scienta.2023.112736>
9. Bacher F.,A. Aguzzoni,S.Chizzali,E. Pignotti,H. Puntscher,P. Zignale, G. Voto, M.Tagliavini, W. Tirler, P. Robatscher. (2023). Geographic tracing of cereals from South Tyrol (Italy) and neighboring regions via $^{87}\text{Sr}/^{86}\text{Sr}$ isotope analysis. *Food Chemistry*.
<https://doi.org/10.1016/j.foodchem.2022.134890>
10. Basile, B., Andreotti, C., Rogers, H., Rouphael, Y. (2023). The role of horticultural research in mitigating global food and economic crises. *Italus hortus* 30(1), 1-2.
<https://doi.org/10.26353/j.itahort/2023.1.0102>
11. Becce L., Carabin G., Mazzetto F. (2023). Agroforestry Innovations Lab Activities on Sprayer Performance and Certification. *Lecture Notes in Civil Engineering*. 337 LNCE.
DOI: 10.1007/978-3-031-30329-6_31
12. Becce L., Mazzi G., Ali A., Bortolini M., Gambaro A., Mazzetto F. (2023). Nozzle Characterisation to Support Aerosol Spray Drift Measurement in a Semi-Controlled Environment. *IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor – Proceedings*. DOI: 10.1109/MetroAgriFor58484.2023.10424145
13. Benyahia, F., Bastos Campos F. A. Ben Abdelkader, B. Basile, M. Tagliavini, C. Andreotti and D. Zanotelli. (2023). Assessing Grapevine Water Status by Integrating Vine

Transpiration, Leaf Gas Exchanges, Chlorophyll Fluorescence and Sap Flow

Measurements. *Agronomy*. 2023, 13, 464. <https://doi.org/10.3390/agronomy13020464>

14. Boevé, J.-L., Sonet, G., Jacobson, H.R., Angeli, S. (2023) Cypress terpenes in sawfly larva of *Susana cupressi* (Hymenoptera: Symphyta: Tenthredinoidea). *The Science of Nature*, 110(2), 13. <https://doi.org/10.1007/s00114-023-01841-0>
15. Callesen T. O., C. V. Gonzalez, F. Bastos Campos, D. Zanutelli, M. Tagliavini, L. Montagnani. 2023. Understanding carbon sequestration, allocation, and ecosystem storage in a grassed vineyard. *Geoderma Regional*. 34. <https://doi.org/10.1016/j.geodrs.2023.e00674>
16. Campos Bastos F., TO Callesen, G. Alberti., L. Montagnani, M. Tagliavini, D. Zanutelli. (2023). Meteorological drivers of vineyard water vapour loss and water use efficiency during dry days. 2023. *IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor 2023 – Proceedings*. DOI: 10.1109/MetroAgriFor58484.2023.10424371
17. Cantarella G., Madagalam M., Merino I., Ebner C., Ciocca M., Polo A., Ibba P., Bettotti P.; Mukhtar A., Shkodra B., Inam A.K.M.S., Johnson A.J., Pouryazdan A., Paganini M., Tiziani R., Mimmo T., Cesco S., Münzenrieder N., Petti L., Cohen N., Lugli P. (2023) Laser-Induced, Green and Biocompatible Paper-Based Devices for Circular Electronics. *Advanced Functional Materials*. 33. DOI: 10.1002/adfm.202210422
18. Carlini L., Esposito, A., Ambrosino, L., Bharti, S., Invernizzi, L., M., Piazza, S., Benini, S. (2023). The ams proteins and the amylovoran biosynthetic pathway: an extensive bioinformatic study. *Journal of Plant Pathology* <https://doi.org/10.1007/s42161-023-01532-9>

19. Carabin G., Becce L., Mazzetto F. (2023). Development and Experimental Evaluation of a Tractor Roll-Over Stability Model. Lecture Notes in Civil Engineering. 337 LNCE. DOI: 10.1007/978-3-031-30329-6_44
20. Carabin G., Leitner S., Mazzetto F., Vidoni R., Bietresato M. (2023). Cutting systems evaluation for a tree-pruning robot. 2023 IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor 2023 – Proceedings. DOI: 10.1109/MetroAgriFor58484.2023.10424067
21. Caselli, A., Favaro, R., Petacchi, R., Valicenti, M., Angeli, S. (2023) The cuticular hydrocarbons of *Dasineura oleae* show differences between sex, adult age and mating status. *Journal of Chemical Ecology*, 49, 369–383. <https://doi.org/10.1007/s10886-023-01428-z>
22. Cesco S., Sambo P., Borin M., Basso B., Orzes G., Mazzetto F. (2023). Smart agriculture and digital twins: Applications and challenges in a vision of sustainability. *European Journal of Agronomy*. 146. DOI: 10.1016/j.eja.2023.126809
23. Ciro A., Manuela C., Mauro M., Tanja M., Petti L. (2023). A Novel Automatic Method for Primary Roots Length Measurements in *Arabidopsis thaliana*. 2023 IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor – Proceedings. DOI: 10.1109/MetroAgriFor58484.2023.10424201
24. Coppa E., Celletti S., Sestili F., Mimmo T., Garcia Molina M.D., Cesco S., Astolfi S. (2023). Interaction between Sulfate and Selenate in Tetraploid Wheat (*Triticum turgidum* L.) Genotypes. *International Journal of Molecular Sciences*. 24. DOI: 10.3390/ijms24065443
25. Cullinan C., Malfertheiner C., Prechsl U., Tagliavini M., Janik K. (2023) Diagnosis of ‘Ca. Phytoplasma mali’ infection in *Malus domestica* via in-field spectroscopy and the

factors affecting its success. *Acta Horticulturae*. 1382 DOI:

10.17660/ActaHortic.2023.1382.10

26. Darnal A., Poggesi S., Ceci A.T., Mimmo T., Boselli E., Longo E. (2023). Effects of pre- and post-fermentative practices on oligomeric cyclic and non-cyclic condensed tannins in wine from Schiava grapes. *Current Research in Food Science*. 6. DOI:10.1016/j.crfs.2023.100513
27. Darnal A., Poggesi S., Ceci A.T., Mimmo T., Boselli E., Longo E. (2023). Interactive effect of pre-fermentative grape freezing and malolactic fermentation on the anthocyanins profile in red wines prone to colour instability. *European Food Research and Technology*. 249. DOI: 10.1007/s00217-023-04270-5
28. Grillini, G., Sacchi, G., Streifeneder, T., Fischer, C. (2023). Differences in sustainability outcomes between agritourism and non-agritourism farms based on robust empirical evidence from the Tyrol/Trentino mountain region. *Journal of Rural Studies*, Vol. 104, No. 103152. 13 pages. <https://doi.org/10.1016/j.jrurstud.2023.103152>
29. Favaro, R., Andriolo, A., Sieder, C., Angeli, S. (2023) Potential of Scots pine for a push strategy against the European spruce bark beetle *Ips typographus*. *Forests*, 14 (9), 1727. <https://doi.org/10.3390/f14091727>
30. Favaro, R., Garrido, P. M., Bruno, D., Braglia, C., Alberoni, D., Baffoni, L., Tettamanti, G., Porrini, M. P., Di Gioia, D., Angeli, S. (2023) Combined effect of a neonicotinoid insecticide and a fungicide on honeybee gut epithelium and microbiota, adult survival, colony strength and foraging preferences. *Science of the Total Environment*, 905: 167277. <https://doi.org/10.1016/j.scitotenv.2023.167277>
31. Feil S.B., Zuluaga M.Y.A., Cesco S., Pii Y. (2023). Copper toxicity compromises root acquisition of nitrate in the high affinity range. *Frontiers in Plant Science*. 13 DOI: 10.3389/fpls.2022.1034425

32. Fischer, C. (2023). Ensuring satisfaction in rural youth soccer: The consequences of age-unbalanced teams, and suggested remedies. *International Sports Studies*, Vol. 45, No. 1, 59–73. <https://doi.org/10.30819/iss.45-1.06>
33. Giuliani N., A. Aguzzoni, D. Penna and M. Tagliavini. 2023. Estimating uptake and internal transport dynamics of irrigation water in apple trees using deuterium-enriched water. *Agricultural and Water Management*. 289. <https://doi.org/10.1016/j.agwat.2023.108532>
34. Haug. A.L., Biegert K., McCormick R., Keutgen N., Tagliavini M., Keutgen A. (2023). Mulching as alternative orchard floor management in apple orchards positively affects water availability and weed control. *Acta Horticulturae*. 1373. DOI: 10.17660/ActaHortic.2023.1373.25
35. Holighaus, L., Zanon, T., Kemper, N., Gauly, M. (2023). First evaluation of the practicability of the CLASSYFARM welfare assessment protocol in Italian small-scale mountain dairy farms - a case study. *Italian Journal of Animal Science* 22(1), 995-1007
36. Höglund, J., Daş, G., Tarbiat, B., Geldhof, P., Jansson, D.S., Gauly, M. 2023. *Ascaridia galli* - An old problem that requires new solutions. *International Journal for Parasitology: Drugs and Drug Resistance* 23, 1-9. <https://doi.org/10.1016/j.ijpddr.2023.07.003>
37. Leitner S., Perez M., Carabin G., Renzi M., Spinelli R, Mazzetto F., Vidoni R. (2023). Tower yarder powertrain performance simulation analysis: electrification study. *European Journal of Forest Research*. 142. DOI: 10.1007/s10342-023-01553-0
38. Leitner S., Perez M., Carabin G., Renzi M., Vidoni R., Mazzetto F. (2023). Requirements and Challenges in the Design and Potential of Smart and Efficient Winch Assisted Forestry Machinery. *Lecture Notes in Civil Engineering*. 337 LNCE. DOI: 10.1007/978-3-031-30329-6_67

39. Mandler A., Carabin G., Becce L., Liberatori S., Bernhardt H., Treiber M., Paulus C., Gronauer A., Herlin A., Mazzetto F. (2023). LLL Strategies for New Educational Approaches in Smart Agriculture from an Agricultural Engineering Perspective in Italy *Lecture Notes in Civil Engineering*. 337 LNCE. DOI: 10.1007/978-3-031-30329-6_71
40. Mandler A., Nicolosi F.F., Becce L., Mazzetto F., Carabin G. (2023). INNOVATIVE ENGINEERING EDUCATION IN THE WAKE OF SMART AGRICULTURE. REVISION OF THE AGRICULTURAL ENGINEERING CURRICULUM. SEFI 2023 - *51st Annual Conference of the European Society for Engineering Education: Engineering Education for Sustainability, Proceedings*. DOI: 10.21427/0YDX-QG96
41. Martinidou, E., Palmieri, L., Sordo, M., Masuero, D., Ourda, M., Delucchi, L., Fusani, P., Tremml, V., Pouloupoulou, I., Gauly, M., Horgan, M.J., Siewert, B., Stuppner, H., Martens, S. (2023). Assessment of the chemical and genetic variability among accessions of *Cicerbita alpina* (L.) Wallr., an alpine plant with anthelmintic properties. *Frontiers in Plant Science* 14, 1269613 <https://doi.org/10.3389/fpls.2023.1269613>
42. Mazzetto F., Carabin G., Becce L., Mandler A., Sacco P. (2023). Technological Solutions for Implementing Sustainable Cereal-Based Value-Chains in High Mountain Areas. *Lecture Notes in Civil Engineering*. 337 LNCE. DOI: 10.1007/978-3-031-30329-6_75
43. Miribung, G., Canfora, I., Gauly, M., Lintner, M.M. (2023). Editorial: Animal Welfare from a transdisciplinary perspective. *Animal* 17(4), 100977. <https://doi.org/10.1016/j.animal.2023.100977>
44. Monterisi S., Garcia-Perez P., Buffagni V., Zuluaga M.Y.A., Ciriello M., Formisano L., El-Nakhel C., Cardarelli M., Colla G., Roupahel Y., Cristofano F., Cesco S., Lucini L., Pii Y. (2023). Unravelling the biostimulant activity of a protein hydrolysate in lettuce

- plants under optimal and low N availability: a multi-omics approach. *Physiologia Plantarum*. 276. DOI: 10.1111/ppl.14357
45. Monterisi S., Zuluaga M.Y.A., Porceddu A., Cesco S., Pii Y. (2023). The Application of High-Resolution Melting Analysis to trnL (UAA) Intron Allowed a Qualitative Identification of Apple Juice Adulterations. *Food*. 12. DOI: 10.3390/foods12071437
 46. Mu, Z. Asensio, D., Sardans, J., Ogaya, R., Llusia, J., Filella, I., Liu, L., Wang, X., Peñuelas, J. (2023). Chronic drought alters extractable concentrations of mineral elements in Mediterranean forest soils. *Science of the Total Environment* 905:167062.
<https://doi.org/https://doi.org/10.1016/j.scitotenv.2023.167062>
 47. Pouloupoulou, I., Zanon, T., Alrhoun, M., Katzenberger, K., Holighaus, L., Gauly, M. (2023). Development of a benchmarking tool to assess the welfare of dairy cattle on small scale farms. *Journal of Dairy Science* 106(9), 6464-6475 <https://doi.org/10.3168/jds.2022-22592>
 48. Oladosu, O.J., Hennies, M., Stehr, M., Metges, C.C., Gauly, M., Daş, G. (2023). Pattern and repeatability of ascarid-specific antigen excretion through chicken faeces, and the diagnostic accuracy of coproantigen measurements as compared with McMaster egg counts and plasma and egg yolk antibody measurements in laying hens. *Parasites & Vectors* 16, 175. <https://doi.org/10.1186/s13071-023-05782-5>
 49. Pascuzzi S., Manetto G., Mazzetto F., Cerruto E. (2023). Measure of spray deposition in a 'tendone' vineyard produced by an air blast sprayer machine. 2023 IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor 2023 – Proceedings. DOI: 10.1109/MetroAgriFor58484.2023.10424293
 50. Porfido C., Köpke K., Allegretta I., Bandte M., von Barga S., Rybak M., Falkenberg G., Mimmo T., Cesco S., Büttner C., Terzano R. (2023). Combining micro- and portable-XRF as a tool for fast identification of virus infections in plants: The case study of ASa-Virus in *Fraxinus ornus* L. *Talanta* . 262. DOI: 10.1016/j.talanta.2023.124680

51. Rascio I., Gattullo C.E., Porfido C., Allegretta I., Spagnuolo M., Tiziani R., Celletti S., Cesco S., Mimmo T., Terzano R. (2023). Fire-induced effects on the bioavailability of potentially toxic elements in a polluted agricultural soil: implications for Cr uptake by durum wheat plants. *Environmental Science and Pollution Research*. 30. DOI: 10.1007/s11356-022-22471-5
52. Reyes F., M. Tagliavini and D. Gianelle. 2023. A hierarchical dataset of vegetative and reproductive growth in apple tree organs under conventional and non-limited carbon resources. *Data in Brief*. Volume 47, 10901.
53. Sacco P.; Don D.; Becce L.; Carabin G.; Mandler A.; Mazzetto F. (2023). Sustainability Performance of Mountain Food Value Chains. Lecture Notes in Civil Engineering. 337 LNCE. DOI: 10.1007/978-3-031-30329-6_92.
54. Sannino C., Borruso L., Mezzasoma A., Turchetti B., Ponti S., Buzzini P., Mimmo T., Guglielmin M. (2023). The Unusual Dominance of the Yeast Genus *Glaciozyma* in the Deeper Layer in an Antarctic Permafrost Core (Adélie Cove, Northern Victoria Land) Is Driven by Elemental Composition. *Journal of Fungi*. 9. DOI: 10.3390/jof9040435
55. Sarrou, E., Martinidou, E., Palmieri, L., Pouloupoulou, I., Triikka, F., Masuero, D., Gauly, M., Ganopoulos, I., Chatzopoulou, P., Martens, S. (2023). High throughput pre-breeding evaluation of Greek oregano (*Origanum vulgare* L. subsp. *hirtum*) reveals multi-purpose genotypes for different industrial uses. *Journal of Applied Research on Medical and Aromatic Plants*. 37, 100516. <https://doi.org/10.1016/j.jarmap.2023.100516>
56. Scintu, D., Scacchi, E., Cazzaniga, F., Vinciarelli, F., De Vivo, M., Shtin, M., Svolacchia, N., Bertolotti, G., Unterholzner, S.J., Del Bianco, M., Timmermans, M., Di Mambro, R., Vottorioso, P., Sabatini, S., Costantino, P. and Dello Ioio, R. (2023). microRNA165 and 166 modulate response of the Arabidopsis root apical meristem to salt stress. *Communications Biology* 6, 834, <https://doi.org/10.1038/s42003-023-05201-6>

57. Shatin, M., Polverari, L., Svolacchia, N., Bertolotti, G., Unterholzner, S.J., Di Mambro, R., Costantino, P., Dello Ioio, R., and Sabatini, S. (2023). The Mutual Inhibition between PLETHORAs and ARABIDOPSIS RESPONSE REGULATORS Controls Root Zonation. *Plant Cell and Physiology* 64, 317-324, <https://doi.org/10.1093/pcp/pcad001>
58. Signorini M., Midolo G., Cesco S., Mimmo T., Borruso L. (2023). A Matter of Metals: Copper but Not Cadmium Affects the Microbial Alpha-Diversity of Soils and Sediments — a Meta-analysis. *Microbial Ecology*. 86. 10.1007/s00248-022-02115-4 <https://doi.org/10.1080/1828051X.2023.2259220>
59. Sodini M., T. Callesen, M. Canton, L. Tezza, F. Bastos Campos, D. Zanutelli, P. Tarolli, P. Sivilotti, A. Pitacco, M. Tagliavini. 2023. Major threats caused by climate change to grapevine. *Italus Hortus*. Vol. 30 (2023), Pages 1-24. doi: 10.26353/j.itahort/2023.2.0124
60. Sottocornola, G., Baric, S., Nocker, M., Stella, F., Zanker, M. (2023). DSSApple: A hybrid expert system for the diagnosis of post-harvest diseases of apple. *Smart Agricultural Technology*, 3, 100070. DOI: 10.1016/j.atech.2022.100070
61. Soppelsa, S., Van Hemelrijck, W., Bylemans, D., & Andreotti, C. (2023). Essential oils and chitosan applications to protect apples against postharvest diseases and to extend shelf life. *Agronomy*, 13(3), 822. <https://doi.org/10.3390/agronomy13030822>
62. Sottocornola, G., Baric, S., Stella, F., Zanker, M. (2023). Development of a knowledge-based expert system for diagnosing post-harvest diseases of apple. *Agriculture*, 13, 177. DOI: 10.3390/agriculture13010177
63. Tiziani R., Pranter M., Valentinuzzi F., Pii Y., L. Borruso, Cesco S., Mimmo T. (2023). Unraveling plant adaptation to single and combined nutrient deficiencies in a dicotyledonous and a monocotyledonous plant species. *Plant Science*. 335. DOI: 10.1016/j.plantsci.2023.111793
64. Trevisan F., Tiziani R., Hall R.D., Cesco S., Mimmo T. (2023). $\delta^{13}\text{C}$ as a tool for iron and phosphorus deficiency prediction in crops. *Plant Direct*. 7. DOI: 10.1002/pld3.487

65. Wild, M., Gauly, M., Zanon, T., Isselstein, J., Komainda, M. (2023). Tracking free-ranging sheep to evaluate interrelations between selective grazing, movement patterns and the botanical composition of alpine summer pastures in northern Italy. *Pastoralism* 13:25
<https://doi.org/10.1186/s13570-023-00287-3>
66. Zanon, T., Degano, L., Gauly, M., Sartor, P., Cozzi, G. (2023). Case study of the market situation of calves from Alpine dairy farms and the effect of dams' grazing during the last three months of gestation on auction parameters. *Italian Journal of Animal Science* 22(1), 925-933.
<https://doi.org/10.1080/1828051X.2023.2251988>
67. Zanon, T., Fuerst-Waltl, B., Gruber, S., Gauly, M. (2023). Estimation of the genetic parameters for temperament in Haflinger horses based on the results of a character test using a pedigree-based relationship matrix. *Italian Journal of Animal Science* 22(1), 798-804.
<https://doi.org/10.1080/1828051X.2023.2247013>
68. Zanon, T., Angerer, V., Kühn, S., Gauly, M. (2023). Case study on the economic perspectives of small Alpine beef cattle farms for assessing the future development of beef production in mountain regions. *Züchtungskunde* 95(4), 221-240.
69. Zanon, T., Alrhoun, M., Katzenberger, K., Pouloupoulou, I., Gauly, M. (2023). Identifying housing and management factors associated with lameness in small-scaled mountain dairy farms with different housing systems. *Livestock Science* 274, 105284
<https://doi.org/10.1016/j.livsci.2023.105284>
70. Zanon, T., Fichter, G., Mittermair, P., Nocker, L., Gauly, M., Peratoner, G. (2023). Quantifying methane emissions under field conditions under two different dairy production scenarios: Low-Input vs. High-Input milk production. *Journal of Dairy Science* 106(7), 4711-4724.
<https://doi.org/10.3168/jds.2022-22804>
71. Zanutelli D., Ben Abdelkader A., Thalheimer M., Brignach A., Giuliani N., Asensio D., Andreotti C., Tagliavini M. (2023). Drivers of apple tree transpiration rates assessed by sap flow sensors. *Acta Horticulturae*. 1373. DOI: 10.17660/ActaHortic.2023.1373.4

72. Zuluaga M.Y.A., Cardarelli M., Rouphael Y., Cesco S., Pii Y., Colla G. (2023). Iron nutrition in agriculture: From synthetic chelates to biochelates. *Scientia Horticulturae*. 312. DOI: 10.1016/j.scienta.2023.111833
73. Zuluaga M.Y.A., de Oliveira A.L.M., Valentinuzzi F., Jayme N.S., Monterisi S., Fattorini R., Cesco S., Pii Y. (2023). An insight into the role of the organic acids produced by *Enterobacter* sp. strain 15S in solubilizing tricalcium phosphate: in situ study on cucumber. *BMC Microbiology*. 23. DOI: 10.1186/s12866-023-02918-6.
74. Zuluaga M.Y.A., Monterisi S., Rouphael Y., Colla G., Lucini L., Cesco S., Pii Y. (2023). Different vegetal protein hydrolysates distinctively alleviate salinity stress in vegetable crops: A case study on tomato and lettuce. *Frontiers in Plant Science*. 14: DOI: 10.3389/fpls.2023.1077140

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1. Afzal, A., Syed, S., Nawaz, H.H., Mustafa, R., Aziz, M., Khan, M., Khan, A., Javed, U., Rehman, A.U., Altaf, R., Shakil, Q. (2024). Unraveling the genetic and geographic diversity of *Puccinia striiformis* f. sp. *tritici* (Pst) populations for effective control of stripe rust in global wheat production. *Pakistan Journal of Agricultural Research*, 37, 88-101. DOI: 10.17582/JOURNAL.PJAR/2024/37.2.88.101
2. Ahmad, F., Tomada, S., Poonsiri, T., Baric, S. (2024) Molecular genetic variability of *Cryphonectria hypovirus* 1 associated with *Cryphonectria parasitica* in South Tyrol (northern Italy). *Frontiers in Microbiology*, 15, 1291542. DOI: <https://doi.org/10.3389/fmicb.2024.1291542>
3. Alzate Zuluaga M.Y., Fattorini R., Cesco S., Pii Y. (2024) . Plant-microbe interactions in the rhizosphere for smarter and more sustainable crop fertilization: the case of PGPR-based biofertilizers. *Frontiers in Plant Science*. 15. DOI: 10.3389/fmicb.2024.1440978
4. Alrhoun, M., Zanon, T., Katzenberger, K., Holighaus, L., Gauly, M. (2024). Exploring the heights: Impact of altitude on dairy milk composition. *Journal of Dairy Science-Communications* <https://doi.org/10.3168/jdsc.2023-0448>
5. Alrhoun, M., Gauly, M., Pouloupoulou, I. (2024). Seasonal prevalence and geographical distribution of claw health in dairy cows: Investigation of the causal relationship with breed. *Journal of Dairy Science* 180(1), 980-995. <https://doi.org/10.3168/jds.2024-25204>
6. Amin S., Becce L., Ali A., Mazzetto F. (2024). Experimental Method for the Assessment of ISO Reference Nozzles by N60 Shadowgraph. 2024 IEEE International Workshop on Metrology for Agriculture and Forestry, MetroAgriFor – Proceedings. DOI: 10.1109/MetroAgriFor63043.2024.10948849

7. Asensio, D., Zuccarini, P., Sardans, J., Marañón-Jiménez, S., Mattana, S., Ogaya, R., Mu, Z., Llusà, J., Peñuelas, J. (2024). Soil biomass-related enzyme activity indicates minimal functional changes after 16 years of persistent drought treatment in a Mediterranean holm oak forest. *Soil Biol Biochemistry* 189:109281.
[https://doi.org/https://doi.org/10.1016/j.soilbio.2023.109281](https://doi.org/10.1016/j.soilbio.2023.109281)
8. Baric, S., DallaVia, J. (2024). Prevalence and severity of chestnut blight in South Tyrol (northern Italy) three decades after inoculation of hypovirulent strains of *Cryphonectria parasitica*. *Acta Horticulturae*, 1400, 103-110. DOI: 10.17660/ActaHortic.2024.1400.12
9. Basile B., S. M.P. Carvalho, G. Corrado, C. Andreotti, H. Rogers. (2024) Navigating the frontiers of smart horticulture: innovations and challenges. *Italus Hortus*. DOI: 10.26353/j.itahort/2024.1.140142
10. Bastos F., Callesen, O.T., Alberti G., Montagnani L., Tagliavini M., Zanutelli D., 2024. Meteorological Drivers of Vineyard Water Vapor Loss and Water use Efficiency During dry Days. *IEEE Transactions on Agrifood Electronics*. DOI: 10.1109/TAFE.2024.3466552
11. Becce L., Mazzi G., Ali A., Bortolini M., Gregoris E., Feltracco M., Barbaro E., Contini, D., Mazzetto F., Gambaro A. (2024). Wind Tunnel Evaluation of Plant Protection Products Drift Using an Integrated Chemical–Physical Approach. *Atmosphere*. 15. DOI: 10.3390/atmos15060656
12. Bjeljic, M., Spitaler, U., Mori, N., Fusillo, M., Bombardini, E., Preti, M., Caruso, S., Vaccari, G., Eben, A., Lentola, A., Angeli, S., Schmidt, S. (2024) Canopy strip applications of *Hanseniaspora uvarum* combined with spinosad reduces insecticide use without compromising *Drosophila suzukii* control in cherry. *Crop Protection*, 186, 106868. <https://doi.org/10.1016/j.cropro.2024.106868>

13. Benettin P., M. Tagliavini, C. Andreotti, F. S. Manca di Villahermosa, M. Verdone, A. Dani, D. Penna. (2024). Ecohydrological Dynamics and Temporal Water Origin in a European Mediterranean Vineyard. *Ecohydrology*. <https://doi.org/10.1002/eco.2711>
14. Bouaicha O.; Maver M.; Mimmo T.; Cesco S.; Borruso L. (2024). Microplastic influences the ménage à trois among the plant, a fungal pathogen, and a plant growth-promoting fungal species. *Ecotoxicology and Environmental Safety*. 279. DOI: 10.1016/j.ecoenv.2024.116518.
15. Brighenti S., M. Tagliavini, F. Comiti, A. Aguzzoni, N. Giuliani, A. Ben Abdelkader, Penna D., D. Zanutelli. 2024. Drip irrigation frequency leads to plasticity in root water uptake by apple trees. *Agricultural Water Management*. <https://doi.org/10.1016/j.agwat.2024.108870>
16. Brunetto G., Simão D.G., Tabaldi L.A., Ferreira P.A.A., Trentin E., Marchezan C., Tiecher T.L., Girotto E., De Conti L., Lourenzi C.R., Silva K.R., Marques A.C.R., Morsch L., Kokkonen A.A., Cesco S., Mimmo T. (2024). Heavy Metal Stress Response in Plants and Their Adaptation. *Latin American Viticulture Adaptation to Climate Change: Perspectives and Challenges of Viticulture Facing up Global Warming*. DOI: 10.1007/978-3-031-51325-1_5.
17. Carabin G., Becce L., Mandler A., Nicolosi F., Mazzetto F. (2024). Experimental Validation of the Influence of Obstacles on Tractor Rollover Stability. *Lecture Notes in Civil Engineering*. 521 LNCE. DOI: 10.1007/978-3-031-63504-5_15
18. Carnio, V., Favaro, R., Preti, M., Angeli, S. (2024) Assessing the impact of aggregation pheromone traps on spatial distribution of *Halyomorpha halys* damage in apple orchards. *Insects*, 15 (10), 791. <https://doi.org/10.3390/insects15100791>

19. Castellan, I., Duménil, C., Reherrmann, G., Eisenstecken, D., Bianchi, F., Robatscher, P., Spitaler, U., Favaro, R., Schmidt, S., Becher, P.G., Angeli, S. (2024) Chemical and electrophysiological characterisation of headspace volatiles from yeasts attractive to *Drosophila suzukii*. *Journal of Chemical Ecology*, 50(11), 830-846.
20. Ceci A.T., Darnal A., Poggesi S., Betnga P.F.T., Longo E., Nicolodi R., Davis R., Walsh M., O'Connor K.E., Altieri E.A., Trevisan F., Mimmo T., Boselli E. (2024). Enhancing the stability of a red organic wine through hydroxytyrosol supplementation at bottling: A time-dependent analysis. *Applied Food Research*. 4. DOI: 10.1016/j.afres.2024.100513
21. Cesco S., Ascoli D., Bailoni L., Bischetti G.B., Buzzini P., Cairoli M., Celi L., Corti G., Marchetti M., Mugnozza G.S., Orlandini S. Porceddu A., Gigliotti G., Mazzetto F. (2024). Smart management of emergencies in the agricultural, forestry, and animal production domain: Tackling evolving risks in the climate change era. *International Journal of Disaster Risk Reduction*. 114. DOI: 10.1016/j.ijdr.2024.105015
22. Criscuoli I., Panzacchi P., Tognetti R., Petrillo M., Zanutelli D., Andreotti C., Loesch M., Raifer B., Tonon G., Ventura M. Effects of woodchip biochar on temperature sensitivity of greenhouse gas emissions in amended soils within a mountain vineyard. *Geoderma regional* 38, e00847. DOI: 10.1016/j.geodrs.2024.e00847
23. Favaro, R., Berka, M., Pettersson, M., Thöming, G., Arce, C. C. M., Inácio, M. L., Turlings, T. C. J., Faria, J. M. S., Jung, T., Bazin, D., Pozzebon, A., Angeli, S., Cappellin, L. (2024) The use of volatile organic compounds in preventing and managing invasive plant pests and pathogens. *Frontiers in Horticulture*, review, 3, 1379997.
<https://doi.org/10.3389/fhort.2024.1379997>

24. Fennine, C., Favaro, R., Khomenko, I., Biasioli, F., Cappellin, L., Angeli, S. (2024) Diel rhythm of volatile emissions from males and females of the olive fruit fly *Bactrocera oleae* using PTR-ToF and GC-MS. *Journal of Insect Physiology*, 153, 104596. <https://doi.org/10.1016/j.jinsphys.2023.104596>
25. Fracasso I., Zacccone C., Oskolkov N., Da Ros L., Dinella A., Belelli Marchesini L., Buzzini P., Sannino C., Turchetti B., Cesco S., Le Roux G., Tonon G., Vernesi C., Mimmo T., Ventura M., Borruso L. (2024). Exploring different methodological approaches to unlock paleobiodiversity in peat profiles using ancient DNA. *Science of the Total Environment*. 908. DOI: 10.1016/j.scitotenv.2023.168159.
26. Ferreira P.A.A., Milanesi G.D., Santana N.A., Tarouco C.P., Machado L.C., da Silva I.C.B., Coronas M.V., Brunetto G., Cesco S.; Mimmo T., Nicoloso F.T. (2024). Nutritional, Physiological, and Enzymatic Responses of Native Grasses from the Pampa Biome Cultivated Under Excess Zinc. *Journal of Soil Science and Plant Nutrition*. 24. DOI: 10.1007/s42729-024-01644-w
27. Genova G., Borruso L., Signorini M., Mitterer M., Niedrist G., Cesco S., Felderer B., Cavani L., Mimmo T. (2024). Analyzing soil enzymes to assess soil quality parameters in long-term copper accumulation through a machine learning approach. *Applied Soil Ecology*. 195. DOI: 10.1016/j.apsoil.2023.105261
28. Grillini, G., Sacchi, G., Streifeneder, T., Fischer, C. (2024): Comparative Analysis of Alpine Agritourism in Trentino, Tyrol, and South Tyrol: Regional Variations and Prospects. *Open Agriculture*, Vol. 9, No. 1, 20220281. <https://doi.org/10.1515/opag-2022-0281>
29. Lozano-González J.M.; Zuluaga M.Y.A., Lucena J.J., López-Rayó S., Monterisi S., Cesco S., Pii Y. (2024). Cultivating resilience: Harnessing pyoverdine-producing

Pseudomonas to contrast iron deficiency in cucumber plants. *Plant Stress*. Doi: 14.
10.1016/j.stress.2024.100565

30. Medel-Jiménez F, Krexner T, Gronauer A, Kral I (2024). Life cycle assessment of four different precision agriculture technologies and comparison with a conventional scheme. *Journal of Cleaner Production*, Volume 434, 1 January 2024, 140198, Elsevier Ltd
<https://doi.org/10.1016/j.jclepro.2023.140198>
31. Meyer, N., Sacchi, G., Sartori, C., Fischer, C. (2024): Establishing Alternative Grain Networks: a comparison of case experiences in South Tyrol, Italy and Colorado, United States. *Journal of Agriculture, Food Systems, and Community Development*. Vol. 13, No. 3, 337–361.
<https://doi.org/10.5304/jafscd.2024.133.029>
32. Monterisi S., Zhang L., Garcia-Perez P., Alzate Zuluaga M.Y., Ciriello M., El-Nakhel C., Buffagni V., Cardarelli M., Colla G., Rouphael Y., Cesco S., Lucini L., Pii Y. (2024). Integrated multi-omic approach reveals the effect of a Graminaceae-derived biostimulant and its lighter fraction on salt-stressed lettuce plants. *Scientific Reports*. 14. DOI: 10.1038/s41598-024-61576-4
33. Mu, Z., Asensio, D., Sardans, J., Ogaya, R., Llusà, J., Filella, I., Tie, L., Liu, L., Tariq, A., Zeng, F., Peñuelas, J. (2024). Effects of long-term nighttime warming on extractable soil element composition in a Mediterranean shrubland. *Science of the Total Environment* 951:175708. <https://doi.org/https://doi.org/10.1016/j.scitotenv.2024.175708>
34. Nawaz, H.H., Keklik, G., Bibi, Y., Iqbal, J., REHMAN, A.U., Hussain, M., Toufeeq, S., Azad, R., Khan, K.A., Farid, A., Qayyum, A. (2024). Eco-friendly management of *Helicoverpa armigera* using entomopathogenic fungi: a sustainable approach. *Turkish Journal of Agriculture and Forestry*, 48, 470-489. DOI: 10.55730/1300-011X.3194
35. Oyieng, E., Ojango, J.M.K., Gauly, M., Mrode, R., Dooso, R., Okeyo, A.M., Kalinda, C., König, S. (2024). Evaluating reproduction traits in a crossbreeding program between

indigenous and exotic sheep in semi-arid lands. *Animal* 19(1), 101391.

<https://doi.org/10.1016/j.animal.2024.101391>

36. Oskolkov N., Sandionigi A., Götherström A., Canini F., Turchetti B., Zucconi L., Mimmo T., Buzzini P., Borruso L. (2024). Unraveling the ancient fungal DNA from the Iceman gut. *BMC genomics*. 25 DOI: 10.1186/s12864-024-11123-2
37. Pii Y., Orzes G., Mazzetto F., Sambo P., Cesco S. (2024). Advances in viticulture via smart phenotyping: current progress and future directions in tackling soil copper accumulation. *Frontiers in Plant Science*, 15 . DOI: 10.3389/fpls.2024.1459670
38. Pilotto L., Zuluaga M.Y.A., Scalera F., Piccirillo C., Marchiol L., Civilini M., Pii Y., Cesco S., Fellet G. (2024). Sustainable crop fertilization by combining biogenic nano-hydroxyapatite and P solubilizing bacteria: Observations on barley. *Plant Nano Biology*. 9. DOI: 10.1016/j.plana.2024.100091
39. Poonsiri, T., Dell'Accantera, D., Loconte, V., Casnati, A., Cervoni, L., Arcovito, A., Benini, S., Ferrari, A., Cipolloni, M., Cacioni, E., et al. (2024). 3-O-Methyltolcapone and Its Lipophilic Analogues Are Potent Inhibitors of Transthyretin Amyloidogenesis with High Permeability and Low Toxicity. *Int. J. Mol. Sci.*, 25, 479.
<https://doi.org/10.3390/ijms25010479>
40. Pouloupoulou, I., Hadjipavlou, G., Gamper, H., Lazereg, M., Yetişgin, S.O., Mohamed, A., Gauly, M., Gaki, D., Goussios, D., Faraslis, I., Tsiokos, D., Santeramo, F., Marques-dos-Santos, C., Rosati, A., Bebeli, P.J., Khalil, W.K.B., Hadjigeorgiou, I. (2024). Restoring grazing agroecosystems in Mediterranean less favoured areas for resilience and productivity: experts opinion. *Agriculture & Food Security* 13, 48. <https://doi.org/10.1186/s40066-024-00501-4>

41. Rafiq, M., Shoaib, A., Javaid, A., Parveen, S., Hassan, M.A., Nawaz, H.H., Cheng, C. (2024). Application of Asteraceae biomass and biofertilizers to improve potato crop health by controlling black scurf disease. *Frontiers in Plant Science*, 15, 1437702. DOI: 10.3389/fpls.2024.1437702
42. Krexner T, Bauer A, Gronauer A, Mikovits C, Schmidt J, Kral I (2024). Environmental life cycle assessment of a stilted and vertical bifacial crop-based agrivoltaic multi land-use system and comparison with a mono land-use of agricultural land. *Renewable and Sustainable Energy Reviews*, Volume 196, May 2024, 114321, <https://doi.org/10.1016/j.rser.2024.114321>
43. Klinke, P.M., Zanon, T., Van Beeck Calkoen, S., Gauly, M. (2024). Classifying Alpine Pastures for Legally Ensured Applicability of Herd Protection Measures on Alpine Pastures. *Züchtungskunde* 96(6), 456-473.
44. Shtai, W., Asensio, D., Kadison, A., Schwarz, M., Raifer, B., Andreotti, C., Hammerle, A., Zanutelli, D., Haas, F., Niedrist, G., Wohlfahrt, G., Tagliavini, M.. (2024). Soil water availability modulates the response of grapevine leaf gas exchange and PSII traits to a simulated heat wave. *Plant and Soil*. <https://doi.org/10.1007/s11104-024-06536-7>
45. Shtai, W., Asensio, D., Wohlfahrt, G., Tagliavini, M. (2024). Assessing the levels of soil water availability that minimize the damage of heatwaves to potted grapevines. *Italus Hortus*. 31, 95-109. doi: 10.26353/j.itahort/2024.1.95109
46. Soppelsa S., A. Cellini, I. Donati, G. Buriani, F. Spinelli, C. Andreotti. (2024). Green Alternatives for the Control of Fungal Diseases in Strawberry: In-Field Optimization of the Use of Elicitors, Botanical Extracts and Essential Oils. *Horticulture* . 10 . DOI: 10.3390/horticulturae10101044
47. Tomada, S., Staffler, E., Dionis, G., Baric, S., Di Francesco, A. (2024). *Cadophora luteo-olivacea* on apple and kiwifruit: characterization of selected strains and evaluation of fungicides for their control. *European Journal of Plant Pathology*, 169, 99–111. <https://doi.org/10.1007/s10658-023-02811-y>

48. Trevisan F., Tiziani R., Cesco S., Mimmo T. (2024). Timing matters: Exudates collection duration impacts tomato root exudome under nutrient deficiencies. *Rhizosphere*. 30. DOI: 10.1016/j.rhisph.2024.100874.
49. Sartori G., Thalheimer M., Mimmo T., Cesco S. (2024). The Development of Soil Science in Trentino-Alto Adige. *In Soil Science in Italy: 1861 to 2024*. DOI: 10.1007/978-3-031-52744-9_24.
50. Thalheimer M., Aguzzoni A., Wittemann M. S., Carlino U., Tagliavini M. 2024. Root water uptake and water transport to above-ground organs compensate for winter water losses and prevent shoot dehydration in apple trees. *Agricultural Water Management*. 291, 108622. <https://doi.org/10.1016/j.agwat.2023.108622>
51. Trevisan F., Waschgler F., Tiziani R., Cesco S., Mimmo T. (2024). Exploring glycine root uptake dynamics in phosphorus and iron deficient tomato plants during the initial stages of plant development. *BMC Plant Biology*. 24. DOI: 10.1186/s12870-024-05120-6
52. Schwalbert R., Stefanello L., Krug A., Garlet L., Dotto L., Nunes F., Hindersmann J., Tassinari A., Kulmann M., Mimmo T., Brunetto G., Nicoloso F. (2024). Exploring the impact of copper excess on soybean genotypes: insights from root morphology and plant ionome. *New Zealand Journal of Crop and Horticultural Science*. DOI: 10.1080/01140671.2024.2355966
53. Valentinuzzi F., Fracasso I., Bani A., Graf H., Pii Y., Dumbrell A., Cavani L., Cesco S., Borruso L., Mimmo T. (2024). Enhancing Soil-Grown Strawberry Fruit Quality through the Synergistic Influence of Beneficial Microorganisms and Digestate. *Journal of Soil Science and Plant Nutrition*. 24. DOI: 10.1007/s42729-024-02068-2
54. Zanon, T., Oian, A., Mantovani, R., Gauly, M. (2024). Do veterinary diagnoses coming from electronic recording system of veterinary treatments have the potential to be used for breeding in

small populations? The case of the dual-purpose Alpine Grey cattle breed *Animal* 18, 101351.

<https://doi.org/10.1016/j.animal.2024.101351>

55. Zanon, T., Pouloupoulou, I., Gauly, M. (2024). Population monitoring for milk composition, metabolic status, and economic revenues from milk sales of local dual-purpose cattle breeds in Mountain Area *Züchtungskunde* 96(6), 409-421.
56. Zanon, T., Alrhoun, M., Gauly, M. (2024). Assessing the impact of biosecurity practices and animal welfare in small-scale mountain dairy farming *Scientific Reports* 14, 13294.
<https://doi.org/10.1038/s41598-024-63841-y>
57. Zanon, T., Franciosi, E., Cologna, N., Goss, A., Mancini, A., Gauly, M. (2024). Alpine grazing management, breed and diet effects on coagulation properties, composition, and microbiota of dairy cow milk by commercial mountain based herds *Journal of Dairy Science* 107(10), 7648-7658. <https://doi.org/10.3168/jds.2023-24347>
58. Zanon, T., Holighaus, L., Alrhoun, M., Kemper, N., Gauly, M. (2024). Exploring the impact of biosecurity measures on Somatic Cell Score in mountain dairy farms considering the CLASSYFARM system *Animal* 18(6), 101188 <https://doi.org/10.1016/j.animal.2024.101188>
59. Sabia, E., Zanon, T., Braghieri, A., Pacelli, C., Angerer, V., Gauly, M. (2024). Effect of slaughter age on environmental efficiency on beef cattle in marginal area including soil carbon sequestration: A case of study in Italian Alpine area. *Science of the Total Environment* 918:170798.
<https://doi.org/10.1016/j.scitotenv.2024.170798>