

Publications Catalog: Wheat Panel Applications

1. Hou J, Liu Y, Hao C, et al. Starch Metabolism in Wheat: Gene Variation and Association Analysis Reveal Additive Effects on Kernel Weight. *Front Plant Sci.* 2020;11:562008. DOI: [10.3389/fpls.2020.562008](https://doi.org/10.3389/fpls.2020.562008)
2. Shaukat M, Sun M, Ali M, et al. Genetic Gain for Grain Micronutrients and Their Association with Phenology in Historical Wheat Cultivars Released between 1911 and 2016 in Pakistan. *Agronomy.* 2021; 11(6):1247. <https://doi.org/10.3390/agronomy11061247>
3. Guo H, Du Q, Xie Y, et al. Identification of Rice Blast Loss-of-Function Mutant Alleles in the Wheat Genome as a New Strategy for Wheat Blast Resistance Breeding. *Front Genet.* 2021;12:623419. <https://doi.org/10.3389/fgene.2021.623419>
4. Qiu D, Huang J, Guo G, et al. The Pm5e Gene Has No Negative Effect on Wheat Agronomic Performance: Evidence From Newly Established Near-Isogenic Lines. *Front Plant Sci.* 2022;13:918559. DOI: [10.3389/fpls.2022.918559](https://doi.org/10.3389/fpls.2022.918559)
5. Qiao L, Li H, Wang J, et al. Analysis of Genetic Regions Related to Field Grain Number per Spike From Chinese Wheat Founder Parent Linfen 5064. *Front Plant Sci.* 2022;12:808136. Published 2022 Jan 5. <https://doi.org/10.3389/fpls.2021.808136>
6. Zheng X, Qiao L, Liu Y, et al. Genome-Wide Association Study of Grain Number in Common Wheat From Shanxi Under Different Water Regimes. *Front Plant Sci.* 2022;12:806295. DOI: [10.3389/fpls.2021.806295](https://doi.org/10.3389/fpls.2021.806295)
7. Huang S, Zhang Y, Ren H, et al. Epistatic interaction effect between chromosome 1BL (Yr29) and a novel locus on 2AL facilitating resistance to stripe rust in Chinese wheat Changwu 357-9. *Theor Appl Genet.* 2022;135(7):2501-2513. <https://doi.org/10.1007/s00122-022-04133-9>
8. Wang J, Yang C, Zhao W, et al. Genome-wide association study of grain hardness and novel Puroindoline alleles in common wheat. *Mol Breed.* 2022;42(7):40. <https://doi.org/10.1007/s11032-022-01303-x>
9. Du X, Feng X, Li R, et al. Cytogenetic identification and molecular marker development of a novel wheat-Leymus mollis 4Ns(4D) alien disomic substitution line with resistance to stripe rust and Fusarium head blight. *Front Plant Sci.* 2022;13:1012939. DOI: [10.3389/fpls.2022.1012939](https://doi.org/10.3389/fpls.2022.1012939)
10. Zhou C, Xiong H, Fu M, et al. Genetic mapping and identification of Rht8-B1 that regulates plant height in wheat. *BMC Plant Biol.* 2023;23(1):333. <https://doi.org/10.1186/s12870-023-04343-3>
11. Li JC, Li JJ, Zhao L, et al. Rapid identification of Psathyrostachys huashanica Keng chromosomes in wheat background based on ND-FISH and SNP array methods. *J Integr Agric.* 2023;22(10):2934-48. <https://doi.org/10.1016/j.jia.2023.02.001>
12. Li J, Zhao L, Lü B, et al. Development and characterization of a novel common wheat–Mexico Rye T1DL·1RS translocation line with stripe rust and powdery mildew resistance. *J Integr Agric.* 2023;22(5):1291-1307. <https://doi.org/10.1016/j.jia.2022.08.039>
13. Xiang M, Liu S, Wang X, et al. Development of breeder chip for gene detection and molecular-assisted selection by target sequencing in wheat. *Mol Breed.* 2023;43(2):13. DOI: [10.1007/s11032-023-01359-3](https://doi.org/10.1007/s11032-023-01359-3)
14. Xiong H, Guo H, Fu M, et al. A large-scale whole-exome sequencing mutant resource for functional genomics in wheat. *Plant Biotechnol J.* 2023;21(10):2047-2056. <https://doi.org/10.1111/pbi.14111>

15. Hu J, Gebremariam TG, Zhang P, et al. Resistance to Powdery Mildew Is Conferred by Different Genetic Loci at the Adult-Plant and Seedling Stages in Winter Wheat Line Tianmin 668. *Plant Dis.* 2023;107(7):2133-2143. DOI: [10.1094/PDIS-11-22-2633-RE](https://doi.org/10.1094/PDIS-11-22-2633-RE)
16. Niu F, Liu Z, Zhang F, et al. Identification and validation of major-effect quantitative trait locus QMS-5B associated with male sterility in photo-thermo-sensitive genic male sterile wheat. *Theor Appl Genet.* 2023;136(12):257. <https://doi.org/10.1007/s00122-023-04500-0>
17. Zhou J, Li W, Yang Y, et al. A promising QTL QSns.sau-MC-3D.1 likely superior to WAPO1 for the number of spikelets per spike of wheat shows no adverse effects on yield-related traits. *Theor Appl Genet.* 2023;136(9):181. DOI: [10.1007/s00122-023-04429-4](https://doi.org/10.1007/s00122-023-04429-4)
18. Zhao R, Liu B, Wan W, et al. Mapping and characterization of a novel adult-plant leaf rust resistance gene LrYang16G216 via bulked segregant analysis and conventional linkage method. *Theor Appl Genet.* 2023;136(1):1. <https://doi.org/10.1007/s00122-023-04270-9>
19. Qiu Y, Han Z, Liu N, et al. Effects of Aegilops longissima chromosome 1Sl on wheat bread-making quality in two types of translocation lines. *Theor Appl Genet.* 2024;137(2). <https://doi.org/10.1007/s00122-023-04504-w>
20. Xu X, Su Y, Yang J, et al. A novel QTL conferring Fusarium crown rot resistance on chromosome 2A in a wheat EMS mutant. *Theor Appl Genet.* 2024;137(2):49. <https://doi.org/10.1007/s00122-024-04557-5>
21. Li Y, Hu J, Lin H, et al. Mapping QTLs for adult-plant resistance to powdery mildew and stripe rust using a recombinant inbred line population derived from cross Qingxinmai × 041133. *Front Plant Sci.* 2024;15:1397274. <https://doi.org/10.3389/fpls.2024.1397274>
22. Ren H, Zhang X, Zhang Y, et al. Identification of Two Novel QTL for Fusarium Head Blight Resistance in German Wheat Cultivar Centrum. *Plant Dis.* 2024;108(8):2462-2471. DOI: [10.1094/PDIS-01-24-0135-RE](https://doi.org/10.1094/PDIS-01-24-0135-RE)