

LIST OF PUBLICATIONS

Refereed Journals:

- Sandhu KS**, Singh, D & Park RF (2021) A pictorial disease assessment scale for assessing wheat stripe rust at adult plant growth stage. *Australasian Plant Pathol.* <https://doi.org/10.1007/s13313-021-00827-8>
- Khan SN, Hassan G, Khan MR, Facho ZH, Singh D, **Sandhu KS**, Sanaullah M, Imtiaz M and Ali S (2021) Field assessment and molecular markers-based characterization of yellow rust resistance in wheat hybrid progenies. *The journal of animal and plant Sciences* **32**(1), Doi.org/10.36899/JAPS.2022.1.0409
- Yong WTL, Ades PK, Runa FA, Bossinger G, **Sandhu KS**, Potts BM, Tibbits JFG (2021) Genome-wide association study of myrtle rust (*Austropuccinia psidii*) resistance in *Eucalyptus obliqua* (subgenus *Eucalyptus*). *Tree Genetics & Genomes* **17**:31, Doi.org/10.1007/s11295-021-01511-0
- Tobis PA, Schwessinger B, Deng CH, Wu C, Dong C, Sperschneider J, Jones A, Lou Z, Zhang P, **Sandhu K**, Smith GR, Tibbits J, Chagné D, Robert P (2021) *Austropuccinia psidii*, causing myrtle rust, has a gigabase-sized genome shaped by transposable elements. *G3: Genes/Genomes/Genetics* **11**(3), Doi.org/10.1093/g3journal/jkaa015
- Berthon KA, Winzer LF, **Sandhu K**, Cuddy W, Manea A, Carnegie AJ, Leishman MR (2019) Endangered species face an extra threat: susceptibility to the invasive pathogen *Austropuccinia psidii* (myrtle rust) in Australia. *Australasian Plant Pathology* **48**: 385–393, Doi.org/10.1007/s13313-019-00640-4
- Yong WTL, Ades PK, Goodger JQD, Bossinger G, Runa FA, **Sandhu KS**, Tibbits JFG (2019) Using essential oil composition to discriminate between myrtle rust phenotypes in *Eucalyptus globulus* and *Eucalyptus obliqua*. *Industrial Crops & Products* **140**: 111595, Doi.org/10.1016/j.indcrop.2019.111595
- Yong WTL, Ades PK, Bossinger G, Runa FA, **Sandhu KS**, Potts BM, Tibbits JFG (2019) Geographical patterns of variation in susceptibility of *Eucalyptus globulus* and *Eucalyptus obliqua* to myrtle rust. *Tree Genetics & Genomes* **15**: 31 Doi.org/10.1007/s11295-019-1338-5
- Yong WTL, Ades PK, Tibbits JFG, Bossinger G, Runa FA, **Sandhu KS** and Taylor PWJ (2019) Disease cycle of *Austropuccinia psidii* on *Eucalyptus globulus* and *Eucalyptus obliqua* leaves of different rust response phenotypes. *Plant Pathology* **68**: 547–556, Doi.org/10.1111/ppa.12959
- Hsieh JF, Chuah A, Patel H, **Sandhu KS**, Foley W and Külheim C (2018) Transcriptome profiling of *Melaleuca quinquenervia* challenged by myrtle rust reveals differences in defense responses among resistant individuals. *Phytopathology* **108** (4): 495–509, Doi.org/10.1094/PHYTO-09-17-0307-R

- Sandhu KS**, Karaoglu H, Park RF (2016) Pathogenic and genetic diversity in *Puccinia hordei* Otth in Australasia. *Journal of Plant Breeding and Crop Science* **8** (10): 197–205, DOI: 10.5897/JPBCS2016.0582
- Sandhu KS**, Singh D, Park RF (2016) Characterisation of leaf rust resistance in international barley nurseries. *Journal of Plant Breeding and Crop Science* **8** (8): 117–125, DOI: 10.5897/JPBCS2016.0587
- Potts BM, **Sandhu KS**, Wardlaw T, Freeman J, Li H, Tilyard P, Park RF (2016) Evolutionary history shapes the susceptibility of an island tree flora to an exotic pathogen. *Forest Ecology and Management* **368**: 183–193, DOI: 10.1016/j.foreco.2016.02.027
- Sandu KS**, Karaoglu H, Zhang P, Park RF (2016) Simple sequence repeat markers support the presence of a single genotype of *Puccinia psidii* in Australia. *Plant Pathology* **65**: 1084–1094, Doi.org/10.1111/ppa.12501
- Park RF, Golegaonkar PG, Derevnina L, **Sandhu KS**, Karaoglu H, Elmansour HM, Dracatos PM and Singh D (2015) Leaf Rust of Cultivated Barley: Pathology and Control. *Annual Review of Phytopathology* **53**: 26.1–26.25, DOI: 10.1146/annurev-phyto-080614-120324
- Sandhu KS**, Singh D, Park RF (2014) Characterising seedling and adult plant resistance to *Puccinia hordei* in *Hordeum vulgare*. *Annals of Applied Biology* **165**: 117–129, Doi.org/10.1111/aab.12122
- Sandhu KS**, Forrest KL, Kong S, Bansal UK, Singh D, Hayden MJ, Park RF (2012) Inheritance and molecular mapping of a gene conferring seedling resistance against *Puccinia hordei* in the barley cultivar Ricardo. *Theoretical and Applied Genetics* **125**: 1403–1411, DOI: 10.1007/s00122-012-1921-8
- Dilawari VK, **Singh Karanjeet** and Dhaliwal GS (1994) Effects of *Melia azedarach* L. on oviposition and feeding of *Plutella xylostella* (L.). *Insect Science and Application* **15** (2): 203–205, DOI: <https://doi.org/10.1017/S1742758400015460>
- Dilawari VK, **Singh Karanjeet** and Dhaliwal GS (1994) Sensitivity of diamondback moth *Plutella xylostella* (L.) to *Melia azedarach* L. *Pesticide Research Journal* **6** (1): 71–74, URL: <https://www.indianjournals.com/ijor.aspx?target=ijor:prj&volume=6&issue=1&article=010>

Conferences, workshops, and project reports:

- Sandhu KS**, Singh D and Park RF (2019) Synthetic hexaploid wheats with stripe rust resistance. *1st International Wheat Congress*, 22–26 Jul. 2019, Saskatoon, Saskatchewan, Canada. pp. 101

- Sandhu KS**, Singh D, Hundie B, Derso E, Singh GP, Chatrath R, Bhardwaj S, Mahto B, Thapa D, Munir A, Rattu A, Huttner E and Park RF (2018) Mitigating the effects of stripe rust on wheat production in South Asia and Eastern Africa. *15th International Cereal Rust and Powdery Mildew Conference*, 23–26 Sep. 2018, Kruger National Park, Skukuza, South Africa. pp. 43
- Sandhu KS** and Park RF (2017) Effect of climate on the expression of adult plant stripe rust resistance genes in wheat. *International Wheat Genetics Symposium (IWGS)*, 23–28 Apr. 2017, Austria. pp. 271
- Winzer LF, Berthon KA, **Sandhu KS**, Leishman MR (2017) Dominant Australian native vegetation communities in danger. *Science Protecting Plant Health Conference 2017*, 26–28 Sep. 2017, Brisbane Convention Centre, Queensland, Australia. pp. 64
- Sandhu KS** and Park RF (2015) Expression of adult plant stripe rust resistance in selected Australian wheat genotypes. The Borlaug Global Rust Initiative (BGRI) technical workshop, 17–20 Sep. 2015, Sydney, Australia
- Sandhu KS** and Park RF (2015) Genetic diversity in *Puccinia psidii* and its pathogenicity to native myrtaceae in Australia. Conference “Botany 2015, Science and Plants for People” 25–29 Jul. 2015, the Shaw Conference Centre Edmonton, Alberta, Canada. pp. 8
- Park, RF, Golegaonkar P, Derevnina L, **Sandhu K**, Elmansour H, Dracatos P, Singh D (2014) Adult plant resistance to leaf rust in barley: the story so far. In: 1st International Workshop on Barley Leaf Diseases, Salsomaggiore Terme, Italy, 3–6 Jun. 2014. pp. 47
- Park, RF, Derevnina L, Dracatos P, Elmansour H, Golegaonkar P, **Sandhu K**, Wellings C and Singh D (2014) Understanding durable rust resistance in barley. In: BGRI 2014 Technical Workshop (22–25 Mar.) Obregon, Mexico. pp. 31
- Sandhu KS**, Park RF (2013) Genetic basis of pathogenicity in *Uredo rangelii*, Final Report, National Myrtle Rust Transition to Management (T2M) Program, Plant Health Australia, <http://myrtlerust.net.au/wordpress/wp-content/uploads/2014/07/Genetic-basis-of-pathogenicity-in-Uredo-rangelii.pdf>
- Sandhu K**, Park R, Singh D (2012) Characterisation of barley leaf rust resistance in four international nurseries, in: W. Q. Chen (Ed.), *13th International Cereal Rust and Powdery Mildew Conference*, 28 Aug.–1 Sep. 2012, China Agricultural Science and Technology Press, Beijing, China. pp. 113
- Sandhu KS** (2012) Preparing for stripe rust management. Research update 2012, Department of employment, economic development and innovation. Leslie Research Centre, Toowoomba, Queensland, Australia. <https://grdc.com.au/uploads/documents/DEEDI-Rust-Update-2012.pdf>
- Sandhu KS**, Reinheimer J, Park RF, Bansal UK, Khatkar D, Bariana HS (2009) Stem rust resistance gene *Sr2* identified in triticale using linked morphological and molecular markers. *14th Australasian Plant Breeding Conference and 11th SABRAO Congress*, Cairns Australia, Special edition *SABRAO Journal of Breeding and Genetics* **41**

Dilawari VK, **Singh Karanjeet** and Dhaliwal GS (1995) Toxic and Bioregulatory Properties of Different Fractions of *Melia azedarach* L. against *Plutella xylostella* (L.). International Conference 'Sustainable Agriculture and Environment' Jan. 11–13 1995, Hissar, India, pp. 46

Dilawari VK, **Singh Karanjeet** and Dhaliwal GS (1992) Bioactivity in the drupes of *Melia azedarach* L. against insect pests. *National Symposium on Recent Advances in Integrated Pest Management*, Oct. 12–15, PAU, Ludhiana, India, pp. 158

Sequences submitted with NCBI:

Sandhu KS, Karaoglu H, Zhang P, Park RF (2015) *Puccinia psidii* isolate Aus_3, Whole Genome Shotgun sequencing project: GenBank: LKHF000000000.1
URL: <https://www.ncbi.nlm.nih.gov/nuccore/LKHF000000000>

Dissertations:

PhD Thesis (2011) Genetic and Molecular Analyses of Barley for Seedling and Adult Plant Resistance against Rust Diseases. The University of Sydney, NSW, Australia
URL: <https://ses.library.usyd.edu.au/handle/2123/8860>

MSc Thesis (1994) Bioactivity of *Melia azedarach* L. against diamondback moth *Plutella xylostella* (L.). Punjab Agricultural University, Punjab, India
URL: <https://krishikosh.egranth.ac.in/handle/1/5810138259>