

## PUBLICATIONS

- Alexandre Grondin, Mignon A. Natividad, Takuya Ogata, **Asad Jan**, Amélie C. M. Gaudin, Kurniawan R. Triyatmiko, Evelyn Liwanag, Kyonoshin Maruyama, Yasunari Fujita, Kazuko Yamaguchi-Shinozaki, Kazuo Nakashima, Inez H. Slamet-Loedin & Amelia Henry (2024) A Case Study from the Overexpression of *OsTZF5*, Encoding a CCCH Tandem Zinc Finger Protein, in Rice Plants Across Nineteen Yield Trials. **Rice**. 9; 17(1):25. doi: 10.1186/s12284-024-00705-z.
- Rokhmatul Asiyah, Elfi Anis Saati, Hafizhah Layyina, Hanif Alamudin Manshur, Afifa Husna, Desiana Nuriza Putri, **Asad Jan**, Muhammad Mashuri Utama (2024). Improvement of Antioxidant Activity and Quality of Coffee Milk using Rosa sp. Petal Powder. BIO Web of Conferences 104, 00034 (2024).
- Noor Harini, Lathifah Nur Izzah, Sri Winarsih, Imro'ah Ikarini, Zainuri Hanif, Hasim Ashari and **Asad Jan** (2024) The Effect of Coconut Water and Temperature on Carrageenan Extraction. BIO Web of Conferences 104, 00030 (2024).
- Farhan Ahmad, Safdar Hussain Shah, **Asad Jan** (2023). Overexpression of the DREB1A gene under stress-inducible promoter delays leaf senescence and improves drought tolerance in rice. **Cereal Research Communications**. <https://doi.org/10.1007/s42976-023-00359-5>.
- Haseena Gulzar, Sidra Pervez, Muhammad Asif Nawaz, Rahim Ullah, Tour Jan, Farhat Ali Kan, **Asad Jan**, Muhammad Zahoor, Essam A. Ali, Muhammad Naveed Umar (2023). An automated reading of semi-quantitative hemagglutination results in microplates: Micro-assay for plant lectins. **Open Chemistry**. 21:20220342. <https://doi.org/10.1515/chem-2022-0342>.
- Agus Zainudin, Harun Rasyid, Tri Wulandari and **Asad Jan** (2023). Differences in Vegetative and Generative Characters of M2 Generation of Mutant Rice Compared to Wild Types and Commercial Cultivars. E3S Web of Conferences 432, 00003 (2023).
- Noor Harini, Manar Fayiz Mousa Atoum, Swastika Tri Aji Wulandari, Vritta Amroini Wahyudi, **Asad Jan**, Irum Iqrar (2023). Extraction, Characterization, Amino Acid Profile of Halal Gelatin from Kampong and Broiler Chicken Feet Skin. **Jordan Journal of Biological Sciences**. 16 (3): 379 -387.
- Johan Sukweenadhi, Stefan Pratama Chandra, Leonardo Satriono

Putra, Yoanes Maria Vianney, Theresia Liliani, Merlyn Wongso, Melisa Widjaja, Sari Pramadiyanti, Pissa Christanti, Kim-Jong Hak, Deok-Chun Yang, **Asad Jan** (2023). The Effect of Elicitor on Growth and Ginsenoside Level in Hairy Root Culture of *Panax ginseng* Cultivated in Shake Flasks. E3S Web of Conferences 374, 00019 (2023).

- Popy Hartie Hardjo, Ida Bagus Made Artadana, Sulistyo Emantoko Putra, **Asad Jan** (2023) *Keiki* induction by cytokinin on *Phalaenopsis* spp. E3S Web of Conf. Volume 374, (2023). The 3rd International Conference on Natural Resources and Life Sciences (NRLS) 2020, 374 (00026), 23-26.
- Muhammad Ilyas, Safdar Hussain Shah, Yasunari Fujita, Kyonoshin Maruyama , Kazuo Nakashima, Kazuko Yamaguchi-Shinozaki, **Asad Jan** (2022). *OsTZF1*, a CCH-tandem zinc finger protein gene, driven under own promoter produces no pleiotropic effects and confers salt and drought tolerance in rice. **Plant Signaling & Behavior**. 31;17(1):2142725.
- Saima Hashim, Shahida Ayub, **Asad Jan**, Muhammad Israr, Muhammad Azim Khan, Muhammad Fawad (2022). Medicinal Properties, Phytochemistry and Pharmacology of *Acacia Modesta* (Wall.) Hurter. **Pakistan Journal of Weed Science Research**. 28 (3): 269-
- Mazhar Ullah, Mohammad S. Khan, **Asad Jan**, Sayed U.A. Shah, Navid Iqbal, Iqbal Munir (2022). Biolistic transformation of sugarcane (*Saccharum officinarum* L.) with the *Oryza sativa* L. H+-PPase gene for improved salt stress tolerance. **Notulae Botanice Horti Agrobotanici Cluj-Napoca**. 50(4), 12854.
- Dyah Roeswitawati, Zahid Hussain, **Asad Jan**, Ivar Zekker, Maizirwan Mel, Roy Hendroko Setyobudi, Muhidin Muhidin, Davit Hudin (2022). The Evaluation of Secondary Metabolites in *Saccharum officinarum* L. and *Mimosa invisa* Mart. as Natural Herbicides. **Jordan Journal of Biological Sciences** 15 (1), 1-6.
- Faiza Mir, Sajida Bibi, Noreen Asim, **Asad Jan** (2022). Genomic Analysis of C3H Zinc Finger Proteins Family in *Brassica Rapa*. **Pakistan Journal of Botany** 54 (3), 887-896.
- Ema Nur Hidayah, Febri Adi Susanto, Tri Joko, Yekti Asih Purwestri, Tri Rini Nuringtyas, Manar Fayiz Mousa Atoum, **Asad Jan** (2022).

Metabolite Profiling of Black Rice (*Oryza sativa* L.) Following Xanthomonas oryzae pv. oryzae Infection. **Jordan Journal of Biological Sciences** 14 (5), 653-958.

- Sukardi Sukardi, Damat Damat, Manar Fayiz Mousa Atoum, Lili Zalizar, Rahayu Relawati, **Asad Jan**, Zane Vincēviča-Gaile6, Effendi Andoko, Warkoyo Warkoyo (2022). Chemical Compounds, Antioxidant Properties, and Enzyme Inhibitory Activities of Kitolod Leaf and Fruit Hexane Extracts as Antidiabetic. **Jordan Journal of Biological Sciences**.15(5), 897- 904.
- Huimei Zhao, **Asad Jan**, Naohiko Ohama, Satoshi Kidokoro, Fumiuki Soma, Shinya Koizumi, Junro Mogami, Daisuke Todaka, Junya Mizoi, Kazuo Shinozaki, Kazuko Yamaguchi- Shinozaki (2021). Cytosolic HSC70s repress heat stress tolerance and enhance seed germination under salt stress conditions. **Plant, Cell & Environment** 44 (6), 1788-1801.
- Haseena Gulzar, Muhammad Asif Nawaz, **Asad Jan**, Farhat Ali Khan, Sumaira Naz, Muhammad Zahoor, Dil Naz, Riaz Ullah, Essam A Ali, Hidayat Hussain (2021). Semi-Quantification of Lectins in Rice (*Oryza sativa* L.) Genotypes via Hemagglutination. **Agronomy** 11 (10), 1899-
- Mohammad Sayyar Khan, Sayed Usman Ali Shah, Mazhar Ullah, Muhammad Zaheer Ahmad, Waqar Ahmad, **Asad Jan** (2021). Genetic engineering of sugarcane with the rice tonoplast H<sup>+</sup>-ppase (*OVP2*) gene to improve sucrose content and salt tolerance. **Pakistan. Journal of Botany** 53 (3), 813-821.
- Sajida Bibi, Shahab Ali, Shahidin, Ikram Ullah, Abdur Rauf, Muhammad Arif, Muhammad Umar, Ali Sultan Khan, Mehbob Hussain, Adnan Ghani, Hamid Ali, Asad Jan, Muhammad Shuaib (2021) Chemical composition and anti-microbial analysis of *Mentha arvensis* L. and *Thymus linearis* Benth. essential oils of leaves. **Rom Biotechnol Lett.** 2021; 26(5): 2893-2900.
- MS Khan, W Ahmad, MZ Ahmad, M Ullah, **Asad Jan** (2021). Transformation of The *Osc3H52* Gene Promoter In Tissue Culture Of Sugarcane. **Journal of Animal & Plant Sciences** 31 (1), 156-165.
- Michael Gomez Selvaraj, **Asad Jan**, Takuma Ishizaki, Milton Valencia, Beata Dedicova, Kyonoshin Maruyama, Takuya Ogata, Daisuke Todaka, Kazuko Yamaguchi- Shinozaki, Kazuo Nakashima, Manabu Ishitani (2020). Expression of the CCCH- tandem zinc finger

protein gene OsTZF5 under a stress- inducible promoter mitigates the effect of drought stress on rice grain yield under field conditions. **Plant Biotechnology Journal** 18(8):1711-1721.

- Zamarud Shah, Safdar Hussain Shah, Gul Shad Ali, Iqbal Munir, Raham Sher Khan, Arshad Iqbal, Nisar Ahmed, **Asad Jan** (2020). Introduction of Arabidopsis's heat shock factor HsfA1d mitigates adverse effects of heat stress on potato (*Solanum tuberosum* L.) plant. **Cell Stress and Chaperones** 25 (1), 57-63.
- Rahman Ud Din, Muhammad Ismail Khan, **Asad Jan**, Shah Anwar Khan, Irshad Ali (2020). A novel approach for high-level expression and purification of GST-fused highly thermostable Taq DNA polymerase in *Escherichia coli*. **Archives of Microbiology** 202 (6), 1449-1458.
- Haseena Gulzar, Sidra Pervez, Rehana Masood, **Asad Jan**, Faheeda Soomro, Muhammad Asif Nawaz (2021). Phylogenetics of rice (*Oryza sativa* L.) genotypes from Pakistan based on diversity of biochemical markers. **Bioscience Research** 18(2):1681-1693.
- Muhammad Medrar Hussain, **Asad Jan**, Muhammad Sayyar Khan Kazi (2020). Agrobacterium mediated transformation of *OsTZF8* gene in *Oryza sativa* for drought stress tolerance. **Sarhad Journal of Agriculture** 36 (2), 702-713.
- Irfan Safdar Durrani, **Asad Jan**, Shaheen Shah, Aqib Iqbal, Dawood Ahmad, Habibiullah Khan, Syed Muhammad Saqlain Naqvi (2020). Bioinformatics studies of *OSGLP8-12* gene from *Oryza sativa* (japonica) reveal its role in conferring resistance against disease and stresses. **Pakistan Journal of Botany** 52 (2), 461-467.
- Saima Hashim, **Asad Jan**, Shah Fahad, Hafiz Haider Ali, Muhammad Naeem Mushtaq, Karim Bux Laghari, Khawar Jabran, Bhagirath Singh Chauhan (2019). Weed management and herbicide resistant weeds: A case study from wheat growing areas of Pakistan. **Pakistan Journal of Botany** 51 (5), 1761-1767.
- Muhammad Naeem Khan, **Asad Jan** (2019). Evaluation of pharmacognostic features and antimicrobial activities of *Dysphania*

- Irfan Safdar Durrani, Farwa Iqbal Butt, **Asad Jan**, Noreen Asim, SM Naqvi (2019). In silico Analysis Tools Prove Basmati 2008 (Indica Rice) to be More Meaningful for Crop Improvement as Compared to Nipponbare (Japonica Rice). **Pakistan Journal of Life & Social Sciences** 17 (1), 7-16.
  - Mohammad S Khan, Syed U Sadat, **Asad Jan**, Iqbal Munir (2017). Impact of transgenic Brassica napus harboring the antifungal synthetic chitinase (*NiC*) gene on rhizosphere microbial diversity and enzyme activities. **Frontiers in plant science** 8, 1307
  - Z Shah, SH Shah, **Asad Jan**, GS Ali (2017). Overexpression of the heat shock-specific transcription factor HSFA1D enhances thermotolerance on tobacco plants. **Sarhad J Agric** 33 (1), 162-170.
  - Mazhar Ullah, Haseena Khan, Mohammad Sayyar Khan, **Asad Jan**, Khalil Ahmad, Abdul Waheed Khan (2016). *In vitro* plant regeneration of sugarcane (*Saccharum officinarum* L.); the influence of variety, explant, explant position and growth regulators. **ARPJ Journal of Agricultural and Biological Science** 11(7), 267-273.
  - Muhammad Tahir Khan, Saima Hashim, Shahida Ayub, **Asad Jan** and Khan Bahadar Marwat. 2015. A case study of ethnobotany and biodiversity conservation from Tehsil Barawal, Upper Dir, Khyber Pakhtunkhwa, **Pakistan Journal of Botany** 47(SI) : 7-13
  - Maleeha Khan, **Asad Jan**, Saima Hashim and Khan Bahadar Marwat. 2015. Cloning and Agrobacterium mediated transformation of the putative promoter region of Oryza sativa *C<sub>3</sub>H<sub>52</sub>* gene into local rice variety. **Pakistan Journal of Botany** 47(SI) : 211-218.
  - Kazuo Nakashima, **Asad Jan**, Daisuke Todaka, Kyonoshin Maruyama, Shingo Goto, Kazuo Shinozaki, Kazuko Yamaguchi-Shinozaki (2014). Comparative functional analysis of six drought-responsive promoters in transgenic rice. **Planta** 239 (1), 47-60.
  - Saima Hashim, **Asad Jan**, Khan Bahadar Marwat and Muhammad Azim Khan. 2014. Phytochemistry and medicinal properties of *Ammi visnaga* (Apiaceae). **Pakistan Journal of Botany** 46(3): 861-867.
-

- Saima Hashim, Tamana Bakht, Khan Bahadar Marwat and **Asad Jan**. 2014. Medicinal properties, phytochemistry and pharmacology of *Tribulus terrestris* L. (Zygophyllaceae). **Pakistan Journal of Botany** 46(1): 399-404.
- Muhammad Medrar Hussain, Bashir Ahmad, Elisa Rashid, Saima Hashim, Khan Bahadar Marwat and **Asad Jan**. 2014. *In vitro* antibacterial activity of methanol and water extracts of *Adiantum capillus veneris* and *Tagetes patula* against multidrug resistant bacterial strains. **Pakistan Journal of Botany** 46(1): 363-368.
- **Asad Jan**, Kyonoshin Maruyama, Daisuke Todaka, Satoshi Kidokoro, Mitsuru Abo, Etsuro Yoshimura, Kazuo Shinozaki, Kazuo Nakashima, Kazuko Yamaguchi-Shinozaki (2013). OsTZF1, a CCCH-tandem zinc finger protein, confers delayed senescence and stress tolerance in rice by regulating stress-related genes. **Plant physiology** 161 (3), 1202-1216.
- Saima Hashim, **Asad Jan**, Yukari Sunohara, Mayumi Hachinohe, Hideki Ohdan and Hiroshi Matsumoto (2012). Mutation of Alpha-Tubulin Genes in Trifluralin Resistant Water Foxtail (*Alopecurus aequalis*). **Pest Management Science**; 68: 422–429.
- Tariq Mahmood, **Asad Jan**, Setsuko Komatsu (2009). Proteomic analysis of bacterial blight defence signalling pathway using transgenic rice over-expressing thaumatin-like protein. **Biologia Plantarum**, 53: 285-293.
- Yang G, **Asad Jan**, Komatsu S (2009). Characterization of  $\beta$ -tubulin 4 regulated by gibberellins in rice leaf sheath. **Biologia Plantarum**, 53: 422-428.
- Tariq Mahmood, **Asad Jan**, Setsuko Komatsu (2009). Proteomic analysis of bacterial blight defence signalling pathway using transgenic rice overexpressing thaumatin-like protein  
• **Biologia plantarum** 53 (2), 285-293.
- Setsuko Komatsu, **Asad Jan**, Yasunori Koga (2009). Characterization of a histidine-and alanine-rich protein showing interaction with

calreticulin in rice. **Amino acids** 36 (1), 137-146.

- Yang GX, **Asad Jan**, Setsuko Komatsu (2007). Functional analysis of OsTUB8, an anther-specific  $\beta$ tubulin in rice. **Plant Science**, 172: 832–838.
- **Asad Jan**, Hidemitsu Nakamura, Hirokazu Handa, Hiroaki Ichikawa, Hiroshi Matsumoto, Setsuko Komatsu (2006). Gibberellin regulates mitochondrial pyruvate dehydrogenase activity in rice. **Plant and Cell Physiology** 47 (2), 244-253.
- Tariq Mahmood, **Asad Jan**, M Kakishima , Setsuko Komatsu (2006). Proteomic analysis of bacterialblight Defense-responsive proteins in rice leaf blades. **Proteomics**, 6: 6053-6065.
- **Asad Jan**, Setsuko Komatsu (2006). Functional characterization of gibberellin-regulated genes in rice using microarray system. **Genomics, Proteomics and Bioinformatics**, 4: 137-144.
- **Asad Jan**, H Kitano, Hiroshi Matsumoto,Setsuko Komatsu (2006). The rice OsGAE1 is a novel gibberellinregulated gene and involved in rice growth. **Plant Molecular Biology**, 62: 439-452.
- Md Khan, Monowar Karim, **Asad Jan**, Hideji Karibe, Setsuko Komatsu (2005). Identification of phosphoproteins regulated by gibberellin in rice leaf sheath. **Plant Molecular Biology**, 58: 27-40.
- **Asad Jan**, Guangxiao Yang, Hidemitsu Nakamura, Hiroaki Ichikawa, Hidemi Kitano, Makoto Matsuoka, Hiroshi Matsumoto, Setsuko Komatsu (2004). Characterization of a xyloglucan endotransglucosylase gene that is up regulated by gibberellin in rice. **Plant Physiology**, 136: 3670-3681.
- G-X Yang, **Asad Jan**, S-H Shen, J Yazaki, M Ishikawa, Z Shimatani, N Kishimoto, S Kikuchi, H Matsumoto, S Komatsu (2004). Microarray analysis of brassinosteroids- and gibberellin-regulated gene expression in rice seedlings. **Molecular Genetics and Genomics**, 271: 468-478.

- 
- Tayyab Husnain, SM Bokhari, N Riaz, T Fatima, AA Shahid, K Bashir, **Asad Jan**, S Riazuddin (2003). Pesticidal genes of *Bacillus thuringiensis* in transgenic rice technology to breed insect resistance. **Pakistan Journal of Biochemistry and Molecular Biology** 36, 133–142.
  - Tayyab Husnain, **Asad Jan**, SB Maqbool, Datta SK, Riazuddin S (2002). Variability in expression of insecticidal *Cry1Ab* gene in Indica Basmati rice. **Euphytica**, 128: 121-128.
  - Tahira Fatima, **Asad Jan**, Tayyab Husnain, Riazuddin S (2002). Initiation and cryopreservation of cell suspension of rice basmati varieties. **Pakistan Journal of Biological Sciences**, 5(6): 679682.
  - **Asad Jan**, Hassan QM, Tahira Fatima, Tayyab Hasnain (2001) Tissue culture response of local varieties of rice (*Oryza sativa L.*) of NWFP. **Pakistan Journal of Biological Sciences**, 1(5): 387-390.