Bibliography

Abdel-Kader, M. M., El-Mougy, N. S. and Embaby, E. I. (2012) Resistance inducers treatments against downy and powdery mildews of cucumber under commercial plastic houses conditions. *Australian Journal of Basic and Applied Sciences* **6:** 249-259.

Abhayashree, M. S., Murali, M. and Amruthesh, K. N. (2016) Abiotic elicitors mediated resistance and enhanced defense related enzymes in *Capsicum annuum* L. against anthracnose disease. *Scientia Horticulturae* **204:** 172–178.

Acharya, K., Chakraborty, N., Dutta, A. K., Sarkar, S. and Acharya, R. (2011) Signaling role of nitric oxide in the induction of plant defense by exogenous application of abiotic inducers. *Archives of Phytopathology and Plant Protection* **44:**1501-1511.

Aleandri, M. P., Reda, R., Tagliavento, V., Magro, P. and Chilosi, G. (2010) Effect of chemical resistance inducers on the control of *Monosporascus* root rot and vine decline of melon. *Phytopathologia Mediterranea* **49:** 18–26.

Alkahtani, M., Omer, S. A., El-Naggar, M. A., Abdel-Kareem, E. M. and Mahmoud, M. A. (2011) Pathogenesis-related protein and phytoalexin induction against cucumber powdery mildew by elicitors. *International Journal of Plant Pathology* **2:** 63-71.

Al-Sohaibani, S. A., Mahmoud, M. A., Al-Othman, M. R., Ragab, M. M. M., Saber, M. M. and Abd El- Aziz, A. R. M. (2011) Influence of some biotic and abiotic inducers on root rot disease incidence of sweet basil. *African Journal of Microbiology Research* **22:** 3628-3639.

Altinok, H. H. and Dikilitas, M. (2014) Antioxydant response to biotic and abiotic inducers for the resistance against fusarium wilt disease in eggplant (*Solanum melongena* L.) *Acta Botanica Croatica* **73:** 79–92.

Altschul, S. F., Madden, T. L., Schaffer, A. A., Zhang, J., Zhang, Z., Miller, W., and Lipman, D. J. (1997) Gapped BLAST and PSI-BLAST: A new generation of protein database search programs. *Nucleic Acids Research* **25:**3389-3402.

Alvarez, J. C., Rodriguez, H. A., Rodriguez-Arango, E., Monsalve, Z. I. and Arango, R. E. (2013) Characterization of a differentially expressed phenylalanine ammonia-lyase gene from banana induced during Mycosphaerella fijiensis infection. *Journal of Plant Studies* **2:** 35.

Ambareen, Z., Konde, S., Raj, S. N. and Kumar, N. C. (2015) Antimicrobial efficacy of herbal extracts. *International Journal of Oral Health Dentistry* **1:**108-113.

Amer, M. A., El-Abd, S. M., Deraz, S. F. and Zaid, N. A. (2015) Systemic acquired resistance induced by some biotic agents against downy mildew of cucumber disease. *International Conference on Plant, Marine and Environmental Sciences (PMES-2015) Jan. 1-2, 2015 Kuala Lumpur (Malaysia) pp* 76-83.

Amzalek, E., and Cohen, Y. (2007) Comparative efficacy of systemic acquired resistance-inducing compounds against rust infection in sunflower plants. *Phytopathology* **97:** 179-186.

Anand, T., Raguchander, T., Karthikeyan, G., Gopalakrishnan, C., Bhaskaran, R. and Ganeshamoorthi, P. (2007) Induction of systemic resistance by plant growth promoting rhizobacteria in chilli plants against fruit rot disease. *World Journal of Agricultural Sciences* **3:** 815-824.

Angellotti, M. C., Bhuiyan, S. B., Chen, G. and Wan, X. F. (2007) CodonO: codon usage bias analysis within and across genomes. *Nucleic Acids Research* **35:** W132–W136.

Arlorio, M., Ludwig, A., Boller, T. and Bonfante, P. (1992) Inhibition of fungal growth by plant chitinases and β-1,3-glucanases: A morphological study. *Protoplasma* **171**: 34-43.

Arunachalam, M. K. and Sharma, P. (2012). Confrontation assay for *Trichoderma* as a potential biocontrol agent against *Pythium aphanidermatum* and *Sclerotinia sclerotiorum. Pest Management in Horticultural Ecosystems* **18:** 74-77.

Asada, K. (1992) Ascorbate peroxidase- a hydrogen peroxide-scavenging enzyme in plants. *Physiologia Plantarum* **86:** 235-241.

Avdiushko, S. A., Ye, X. S. and Kuc, J. (1993) Detection of several enzymatic activities in leaf prints cucumber plant. *Physiological and Molecular Plant Pathology* **42**: 441-454.

Aye, S. S. and Matsumoto, M. (2011) Effect of some plant extracts on *Rhizoctonia* spp. and *Sclerotium hydrophilum*. *Journal of Medicinal Plants Research* **5:** 3751-3757.

Azami-Sardooei, Z., Seifi, H. S., De Vleesschauwer, D. and Hofte, M. (2013) Benzothiadiazole (BTH)-induced resistance against Botrytis cinerea is inversely correlated with vegetative and generative growth in bean and cucumber, but not in tomato. *Australasian Plant Pathology* **42:** 485-490.

Azzahra, L. F., Fouzia, H., Mohammed, L. and Noureddine, B. (2012) Antioxidant response of *Camellia sinensis* and *Rosmarinus officinalis* aqueous extracts toward H_2O_2 stressed mice. *Journal of Applied Pharmaceutical Science* **2:** 70-76.

Baby, U. I. and Sanjay, R. (2006) Seasonal incidence and economic importance of grey blight disease of tea. *Journal of plantation Crops* **34**: 66-67.

Baljeet, S. Y., Simmy, G., Ritika, Y. and Roshanlal, Y. (2015) Antimicrobial activity of individual and combined extracts of selected spices against some pathogenic and food spoilage microorganisms. *International Food Research Journal* **22:** 2594-2600.

Bansod, S. and Rai, M. (2008) Antifungal activity of essential oils from Indian medicinal plants against human pathogenic *Aspergillus fumigatus* and *A. niger*. *World Journal of Medical Sciences* **3:** 81-88.

Baysal, O., Soylu, E. M. and Soylu, S. (2003) Induction of defence-related enzymes and resistance by the plant activator acibenzolar-S-methyl in tomato seedlings against bacterial canker caused by *Clavibacter michiganensis* ssp. *Michiganensis*. *Plant Pathology* **52:** 747–753.

Beckers, G. J. and Conrath, U. (2007) Priming for stress resistance: from the lab to the field. *Current Opinion in Plant Biology* **10:** 425–431.

Beneduzi, A., Ambrosini, A. and Passaglia, L. M. P. (2012) Plant growth-promoting rhizobacteria (PGPR): Their potential as antagonists and biocontrol agents. *Genetics and Molecular Biology* **35:** 1044-1051.

Bhakshu, L. M., Ratnam, K. V. and Venkataraju, R. R. (2008) Medicinal properties and antimicrobial activity of *Crotalaria madurensis* var. *kurnoolica*. *Ethnobotanical Leaflets* **1:** 104.

Bhardwaj, P., Sharma, R. K., Kumar, R., Sharma, H. and Ahuja, P. S. (2014) SSR marker based DNA fingerprinting and diversity assessment in superior tea germplasm cultivated in western Himalaya. *Proceedings of the Indian National Science Academy* **80:** 157-162.

Bhatt, D., Saxena, S. C., Jain, S., Dobriyal, A. K., Majee, M. and Arora, S. (2013) Cloning, expression and functional validation of drought inducible ascorbate peroxidase (Ec-apx1) from *Eleusine coracana*. *Molecular Biology Reports* **40:** 1155–1165.

Bishop, J. P., Dean, A. M. and Olds, T. M. (2000) Rapid evolution in plant chitinases: Molecular targets of selection in plant pathogen coevolution. *Proceedings of the National Academy of Sciences of the United States of America* **97:** 5322-5327.

Boba, A., Kostyn, K., Kostyn, A., Wojtasik, W., Dziadas, M., Preisner, M., Szopa, J. and Kulma, A. (2017) Methyl salicylate level increase in flax

after *Fusarium oxysporum* infection is associated with phenylpropanoid pathway activation. *Frontiers in Plant Science* **7:** 1951.

Boel, G., Letso, R., Neely, H., Price, N. W., Wong, K., Su, M., Luff, J. D., Valecha, M., Everett, J. K., Acton, T. B., Xiao, R., Montelione, G. T., Aalberts D. P. and Hunt, J. F. (2016) Codon influence on protein expression in *E. coli* correlates with mRNA levels. *Nature* **529:** 358-363.

Boro, M. C., Beriam, L. O. S. and Guzzo, S. D. (2011) Induced resistance against *Xanthomonas axonopodis* pv. *passiflorae* in passion fruit plants. *Tropical Plant Pathology* **36:** 074-080.

Brennan, J.M., Fagan, B., van Maanen, A., Cooke, B. M. and Doohan, F. M. (2003) Studies on in vitro growth and pathogenicity of European *Fusarium* fungi. *European Journal of Plant Pathology* **109:** 577–587.

Bressan, A. and Purcell, A. H. (2005) Effect of benzothiadiazole on transmission of X-disease phytoplasma by the vector Colladonus montanus to *Arabidopsis thaliana*, a new experimental host plant. *Plant Disease* **89:** 1121-1124.

Brisset, M-N., Cesbron, S., Thomson, S. V. and Paulin, J-P. (2000) Acibenzolar-S-methyl induces the accumulation of defense-related enzymes in apple and protects from fire blight. *European Journal of Plant Pathology* **106:** 529-536.

Campo, S., Carrascal, M., Coca, M., Abian, J. and San, S. B. (2004) The defense response of germinating maize embryos against fungal infection: a proteomics approach. *Proteomics* **4:** 383–396.

Chacko, S. M., Thambi, P. T., Kuttan, R. and Nishigaki, I. (2010) Beneficial effects of green tea: A literature review. *Chinese Medicine* **5:**13.

Chakraborty B. N., Basu, P., Das, R., Saha, A. and Chakraborty, U. (1995) Detection of cross reactive antigens between *Pestalotiopsis thae* and

tea leaves and their cellular location. *Annals of Applied Biology* **127:** 11-21.

Chakraborty, B. N., Das-Biswas, R. and Sharma, M. (2006) *Alternaria alternata*–a new foliar fungal pathogen of tea in North Bengal, India. *Plant pathology* **55:** 303-303.

Chakraborty, U., Chakraborty, B. and Basnet, M. (2006) Plant growth promotion and induction of resistance in *Camellia sinensis* by *Bacillus megaterium*. *Journal of Basic Microbiology* **46:** 186-195.

Chandra, A., Saxena, R., Dubey, A. and Saxena, P. (2007) Change in phenylalanine ammonia lyase activity and isozymevpatterns of polyphenol oxidase and peroxidase by salicylic acidvleading to enhance resistance in cowpea against *Rhizoctonia solani*. *Acta Physiologiae Plantarum* **29:** 361–367.

Chen, C., Belanger R. R., Benhamou, N. and Paulitz, T. C. (2000) Defense enzymes induced in cucumber roots by treatment with plant growth-promoting rhizobacteria (PGPR) and *Pythium aphanidermatum*. *Physiological and Molecular Plant Pathology* **56:** 13-23.

Chen, T. M. and Chen, S. F. (1982) Diseases of tea and their control in the people's republic of China. *Plant Disease* **66**: 961-965.

Chen, Z. and Lin, Z. (2015) Tea and human health: biomedical functions of tea active components and current issues. *Journal of Zhejiang University-SCIENCE B (Biomedicine & Biotechnology)* **16:** 87-102.

Chen, Z., Malamy, J., Henning, J., Conrath, U., Sanchez-Casas, P., Silva, H., Riciglianoi, J., and Klessigii, D. F. (1995) Induction, modification, and transduction of the salicylic acid signal in plant defense responses. *Proceedings of the National Academy of Sciences* **92:** 4134-4137.

Chitra, K., Ragupathi, N., Dhanalakshmi, K., Mareeshwari, P., Indra, N., Kamalakannan, A., Sankaralingam, A. and Rabindran, R. (2008) Salicylic acid induced systemic resistant on peanut against

Alternaria alternate. *Archives of Phytopathology and Plant Protection* **41:** 50-56.

Choudhury, M. D., Paul, S. B., Choudhury, S., Choudhury, S. and Choudhury, P. P. N. (2009) Isolation, characterization and bio-activity screening of compound from *Clerodendrum viscosum* Vent. *Assam University Journal of Science and Technology: Biological Sciences* **4:** 29-34.

Christ, U. and Mosinger, E. (1989) Pathogenesis-related proteins of tomato: I . Induction by *Phytophthora infestans* and other biotic and abiotic inducers and correlations with resistance. *Physiological and Molecular Plant Pathology* **35:** 53-65.

Cohen, Y., Rubin, A. E. and Vaknin, M. (2011) Post infection application of DL-3-amino-butyric acid (BABA) induces multiple forms of resistance against *Bremia lactucae* in lettuce. *European Journal of Plant Pathology* **130:** 13-27.

Conrath, U. (2009) "Priming of induced plant defense responses." *In:* Advances in Botanical Research Vol. 51 ed. VanLoon L. C., editor. (London: Elsevier), pp. 361-395.

Conrath, U., Chen, Z., Ricigliano, J. R. and Klessig, D. F. (1995) Two inducers of plant defense responses, 2,6-dichloroisonicotinic acid and salicylic acid, inhibit catalase activity in tobacco. *Proceedings of the National Academy of Sciences* **92:** 7143-7147.

Cortes-Barco, A. M., Goodwin, P. H. and Hsiang, T. (2010) Comparison of induced resistance activated by benzothiadiazole, (2R, 3R)-butanediol and an isoparaffin mixture against anthracnose of *Nicotiana benthamiana*. *Plant Pathology* **59:** 643–653.

Dao, T. T. H., Linthorst, H. J. M. and Verpoorte, R. (2011) Chalcone synthase and its functions in plant resistance. *Phytochemistry Reviews* **10:** 397-412.

Das, K. and Roychoudhury, A. (2014) Reactive oxygen species (ROS) and response of antioxidants as ROS-scavengers during environmental stress in plants. *Frontiers in Environmental Science* **2:** 53.

Das, K. and Roychoudhury, A. (2014) Reactive oxygen species (ROS) and response of antioxidants as ROS-scavengers during environmental stress in plants. *Frontiers in Environmental Science* **2:** 53.

Dasgupta, S., Saha, D. and Saha, A. (2005) Levels of common antigens in determining pathogenicity of *Curvularia eragrostidis* in different tea varieties. *Journal of Applied Microbiology* **98**:1084-1092.

De Vos, M., Van Oosten, V. R., Van Poecke, R. M. P., Van Pelt, J. A., Pozo, M. J., Mueller, M. J., Buchala, A. J., Metraux, J. P., Van Loon, L. C., Dicke, M. and Pieterse, C. M. J. (2005) Signal signature and transcriptome changes of *Arabidopsis* during pathogen and insect attack. *Molecular Plant-Microbe Interactions* **18:** 923-937.

Deepak, S. A., Oros, G., Sathyanarayana, S. G., Shetty, N. P., Shetty, H. S. and Sashikanth, S. (2005) Antisporulant activity of leaf extracts of Indian plants against Sclerospora graminicola causing downy mildew disease of pearl millet. *Archives of Phytopathology and Plant Protection* **38:** 31-39.

Dickens, J. S. W. and Cook, R. T. A. (1989) *Glomerella cingulata* on *Camellia*. *Plant pathology* **38:** 75-85.

Dixon, R. A. and Paiva, N. (1995) L. Stress-induced phenylpropanoid metabolism. *The Plant Cell* **7:**1085-1097.

Duan, C., Yu, J., Bai, J., Zhu, Z. and Wang, X. (2014) Induced defense responses in rice plants against small brown plant hopper infestation. *The crop journal* **2:** 55-62.

Duan, C., Yu, J., Bai, J., Zhu, Z. and Wang, X. (2014) Induced defense responses in rice plants against small brown planthopper infestation. *The Crop Journal* **2:** 55-62.

Duan, C., Yu, J., Bai, J., Zhu, Z. and Wang, X. (2014) nduced defense responses in rice plants against small brown planthopper infestation. *The Crop Journal* **2:** 55-62.

Dube, H. C. (2001) Rhizobacteria in biological control and plant growth promotion. *Journal of Mycology and Plant Pathology* **31**: 9-21.

Dufoura, M. C., Lambertb, C., Bouscauta, J., Merillonb, J. M. and Corio-Costet, M. F. (2013) Benzothiadiazole-primed defence responses and enhanced differential expression of defence genes in *Vitis vinifera* infected with biotrophic pathogens *Erysiphe necator* and *Plasmopara viticola. Plant Pathology* **62:** 370-382.

Edreva, A. (2005) Pathogenesis-related proteins: research progress in the last 15 years. *General and Applied Plant Physiology* **31:** 105-124.

Ejtahed, R. S., Radjabian, T. and Tafreshi, S. A. H. (2015) Expression analysis of phenylalanine ammonia lyase gene and rosmarinic acid production in *Salvia officinalis* and *Salvia virgata* shoots under salicylic acid elicitation. *Applied Biochemistry and Biotechnology* **176:** 1846-1858.

El-Mougy, N. S., Abdel-Kader, M. M., Lashin, S. M. and Megahed, A. A. (2013) Fungicides alternatives as plant resistance inducers against foliar diseases incidence of some vegetables grown under plastic houses conditions. *International Journal of Engineering and Innovative Technology* **3:** 71-81.

Falade M. J. (2017) *In vitro* evaluation of antifungal activities of six plant extracts against *Colletotrichum lindemuthianum sensu-lato. American Journal of Plant Biology* **2:** 61-65.

Farzad, M., Soria-Hernanz, D. F., Altura, M., Hamilton, M. B., Weiss, M. R. Elmendorf, H. G. (2005) Molecular evolution of the chalcone synthase gene family and identification of the expressed copy in flower petal tissue of *Viola cornuta. Plant Science* **168:** 1127-1134.

Ferrer, J. L., Austin, M. B., Stewart, C. Jr., Noel J. P. (2008) Structure and function of enzymes involved in the biosynthesis of phenylpropanoids. *Plant Physiology and Biochemistry* **46:** 356–370.

Fitsum, S., Amin, M., Selvaraj, T. and Alemayehu, A. (2014) *In vitro* evaluation of some fungicides and bioagents against common bean anthracnose (*Colletoteichum lindemuthianum* Sacc. Magnus) Briosi and Cavara. *African journal of microbiology research* **8:** 2000-2005.

Friedrich, L., Lawton, K., Ruess, W., Masner, P., Specker, N., Rella, M. G. Meier, B., Dincher, S., Staub, T., Uknes, S., Metraux, J. P., Kessmann, H. and Ryals, J. (1996) A benzothiadiazole derivative induces systemic acquired resistance in tobacco. *The Plant Journal* **10:** 61-70.

Gajera, H., Domadiya, R., Patel, S., Kapopara, M. and Golakiya, B. (2013) Molecular mechanism of Trichoderma as bio-control agents against phytopathogen system - a review. *Current Research in Microbiology and Biotechnology* **1:** 133-142.

Ghawana S., Paul A., Kumar H., Kumar A., Singh H. and Bhardwaj P.K. (2011) An RNA isolation system for plant tissues rich in secondary metabolites. *BMC Research Notes* **4:** 85-89.

Ghosh, R. (2015) Enzymatic responses of ginger plants to *Pyithium* infection after SAR induction. *Journal of Plant Pathology & Microbiology* **6:** 283.

Ghosh, R. (2015) Enzymatic responses of ginger plants to *Pythium* infection after SAR induction. *Journal of Plant Pathology & Microbiology* **6:** 283.

Ghosh, R. and Purkayastha, R. P. (2003) Molecular diagnosis and induced systemic protection against rhizome rot disease of ginger caused by *Pythium aphanidermatum*. *Current Science* **85:** 1782-1787.

Giberti, S., Bertea, C. M., Narayana, R., Maffei, M. E. and Forlani, G. (2012) Two phenylalanine ammonia lyase isoforms are involved in

the elicitor-induced response of rice to the fungal pathogen *Magnaporthe oryzae. Journal of Plant Physiology* **169:** 249-254.

Gilardi, G., Demarchi, S., Garibaldi, A. and Gullino, M. L. (2013) Management of downy mildew of sweet basil (*Ocimum basilicum*) caused by *Peronospora belbahrii* by means of resistance inducers, fungicides, biocontrol agents and natural products. *Phytoparasitica* **41:** 59-72.

Gilardi, G., Demarchi, S., Gullino, M. L. and Garibaldi, A. (2014) Managing Phytophthora crown and root rot on tomato by pre-plant treatments with biocontrol agents, resistance inducers, organic and mineral fertilizers under nursery conditions. *Phytopathologia Mediterranea* **53:** 205–215.

Guleria, S. and Kumar, A. (2006) Antifungal activity of some Himalayan medicinal plants using direct bioautography. *Journal of Cell and Molecular Biology* **5:** 95-98.

Guo, X., Park, Y., Freedman, N. D., Sinha, R., Hollenbeck, A. R., Blair, A., Chen, H. (2014). Sweetened beverages, coffee, and tea and depression risk among older US adults. *PLoS ONE* **9:** e94715.

Hammerschmidt, R., Nuckles, E. and Kuc, J. (1982) Association of enhanced peroxidase activity with induced systemic resistance of cucumber to *Colletotrichum lagenarium. Physiological Plant Pathology* **20:** 73-82.

Hashemitabar, M., Kolahi, M., Tabandeh, M. R., Jonoubi, P. and Majd, A. (2014) cDNA cloning, phylogenic analysis and gene expression pattern of phenylalanine ammonia-lyase in sugarcane (*Saccharum officinarum* L.). *Brazilian Archives of Biology and Technology* **57:** 456-465.

Hassan, M. A. E. and Abo-Elyousr, K. A. M. (2013) Activation of tomato plant defence responses against bacterial wilt caused by *Ralstonia*

solanacearum using DL-3-aminobutyric acid (BABA). *European Journal of Plant Pathology* **136:**145-157.

Higa, A., Hidaka, T., Minai, Y., Matsuaka, Y. and Higa, M. (2001) Active oxygen radicals induce peroxidase activity in rice blade tissue. *Bioscience, Biotechnology, and Biochemistry* **65**: 1852-1855.

Huang, J., Gu, M., Lai, Z., Fan, B., Shi, K., Zhou, Y. H., Yu, J. Q. and Chen, Z. (2010) Functional analysis of the Arabidopsis pal gene family in plant growth, development, and response to environmental stress. *Plant Physiology* **153:** 1526**–**1538.

Huang, Y., Li, L., Smith, K. P. and Muehlbauer, G. J. (2016) Differential transcriptomic responses to *Fusarium graminearum* infection in two barley quantitative trait loci associated with *Fusarium* head blight resistance. *BMC Genomics* **17:**387.

Hukkanen, A. T., Kokko, H. I., Buchala, A. J., Mcdougall, G. J., Stewart, D., Renlampi, S. O. K. and Karjalainen, R. O. (2007) Benzothiadiazole induces the accumulation of phenolics and improves resistance to powdery mildew in strawberries. *Journal of Agricultural and Food Cheistry* **55:** 1862-1870.

Hu-Shu Xia. (1996) A preliminary evaluation of tea germplasm resource resistance to tea grey blight disease in Anhui Province, China. *Crop Genetic Resources* **2**: 41-42.

Ishnava, K. B., Chauhan, K. H. and Bhatt, C. A. (2012) Screening of antifungal activity of various plant leaves extracts from Indian plants. *Archives of Phytopathology and Plant Protection* **45:** 152-160.

Jain, I., Jain, P., Bisht, D., Sharma, A., Srivastava, B. and Gupta, N. (2015) Comparative evaluation of antibacterial efficacy of six Indian plant extracts against *Streptococcus* m*utans*. *Journal of Clinical and Diagnostic Research* **9:** ZC50-ZC53.

Jiang, C., Schommer, C. K., Kim, S. Y. and Suh D. Y. (2006) Cloning and characterization of chalcone synthase from the moss, *Physcomitrella patens. Phytochemistry* **67:** 2531–2540.

Jigisha, A., Nishant, R., Navin, K. and Pankaj, G. (2012) Green tea: a magical herb with miraculous outcomes. *International Research Journal of Pharm*acy **3**:139-148.

Jin, Q., Yao, Y., Cai, Y. and Lin, Y. (2013) Molecular cloning and sequence analysis of a phenylalanine ammonia-lyase gene from *Dendrobium*. *PLoS ONE* **8:** e62352.

Johnny, L., Yusuf, U. K. and Nulit, R. (2011) Antifungal activity of selected plant leaves crude extracts against a pepper anthracnose fungus, *Colletotrichum capsici* (Sydow) butler and bisby (Ascomycota: Phyllachorales). *African Journal of Biotechnology* **10:** 4157-4165.

Jones, J. D. G. and Dangl, J. L. (2006). The plant immune system. *Nature* **444:** 323-329.

Jong, F. D., Hanley, S. J., Beale, M. H. and Karp, A. (2015) Characterisation of the willow phenylalanine ammonia-lyase (PAL) gene family reveals expression differences compared with poplar. *Phytochemistry* **117:** 90–97.

Justyna, P-G. and Ewa, K. (2013) Induction of resistance against pathogens by β-aminobutyric acid. *Acta Physiologiae Plantarum* **35:**1735-1748.

Kanaya, S., Yamada, Y., Kinouchi, M., Kudo, Y. and Ikemura, T. (2001) Codon usage and tRNA genes in eukaryotes: correlation of codon usage diversity with translation efficiency and with CG-dinucleotide usage as assessed by multivariate analysis. *Journal of Molecular Evolution* **53:** 290-298.

Karakaya, A. and Bayraktar, H. (2010) Botrytis Disease of Tea in Turkey. *J Phytopathol* **158:** 705-707.

Kaur, A. and Kolte, S. J. (2001) Protection of mustard plants against staghead phase of white rust by Foliave treatment with benzothiadiazole. An activator of plant defense system. *Journal of Mycology and Plant Pathology* **31:** 133-138.

Khan, J. A. and Yadav, K. P. (2011) Assessment of antifungal properties of *Ricinus communis*. *Journal of pharmaceutical and biomedical sciences* **11:** 1-3.

Kildea, S., Ransbotyn, V., Khan, M. R., Fagan, B., Leonard, G., Mullins, E., and Doohan, F. M. (2007) *Bacillus megaterium* shows potential for the biocontrol of *Septoria tritici* blotch of wheat. *Biological Control* **47:** 37-45.

Kim, D. S. and Hwang, B. K. (2014) An important role of the pepper phenylalanine ammonia-lyase gene (*PAL1*) in salicylic acid-dependent signalling of the defence response to microbial pathogens. *Journal of Experimental Botany* **65:** 2295–2306.

Kiran, K., Linguraju, S. and Adiver, S. (2006) Effect of plant extract on Sclerotium rolfsii, the incitant of stem rot of ground nut. *Journal of Mycology and Plant Pathology* **36:** 77-79.

Kiwan, Y. and Lee, M. Y. (2003) Environmental stress-induced extracellular isoperoxidase RC3 from rice. *Journal of Environmental Biology* **24**:17-22.

Kloepper, J. W., Tuzun, S. and Kud, J. A. (1992) Proposed definitions related to induced disease resistance. *Biocontrol Science and Technology* **2:** 349-351.

Kogel, K. H. and Langen, G. (2005) Induced disease resistance and gene expression in cereals. *Cellular Microbiology* **7:** 1555–1564.

Koley, S., Mahapatra, S. S. and Kole, P. C. (2015) In vitro efficacy of bio-control agents and botanicals on the growth inhibition of *Alternaria solani* causing early leaf blight of tomato. *International journal of bio-resource, environment and agricultural* sciences **1:** 114-118.

Kumar, A. and Ellis, B. E. (2001) The phenylalanine ammonia-lyase gene family in Raspberry. Structure, expression, and evolution. *Plant Physiology* **127:** 230-239.

Kumar, U. M. N. and Panneerselvan T. (2015) Efficacy of aqueous and ethanol extracts *Casuarina equisetifolia* for potential antimicrobial activity. *World Journal of Pharmacy and Pharmaceutical Sciences* **4:** 1877-1882.

Kumhar, K. C., Babu, A., Bordoloi, M., Benarjee, P. and Rajbongshi, H. (2016) Comparative bioefficacy of fungicides and *Trichoderma* spp. against *Pestalotiopsis theae*, causing grey blight in tea (*Camellia* sp.): An *In vitro* study. *International Journal of Current Research in Biosciences and Plant Biology* **3:** 20-27.

La Camera, S., Gouzerh, G., Dhondt, S., Hoffmann, L., Fritig, B., Legrand, M. and Heitz, T. (2004) Metabolic reprogramming in plant innate immunity: the contributions of phenylpropanoid and oxylipin pathways. *Immunological Reviews* **198:** 267-284.

Lalitha. V., Kiran. B. and Raveesha. K. A. (2011) Antifungal activity of *Polyalthia longifolia* (Sonn.) Thw. against seed borne fungi of paddy (*Oryza sativa*. L). *Journal of Phytology* **3:** 4-8.

Landi, L., Feliziani, E. and Romanazzi, G. (2014) Expression of defense genes in strawberry fruits treated with different resistance inducers. *Journal of Agricultural and Food Chemistry* **62:** 3047-3056.

Langebartels, C., Wohlgemuth, H., Kschieschan, S., Grun, S. and Sandermann, H. (2002) Oxidative burst and cell death in ozone-exposed plants. *Plant Physiol Biochem* **40:** 567-575.

Langebartels, C., Wohlgemuth, H., Kschieschan, S., Grun, S. and Sandermann, H. (2002) Oxidative burst and cell death in ozone-exposed plants. *Plant Physiology and Biochemistry* **40:** 567–575.

Lanubile, A., Bernardi, J., Battilani, P., Logrieco, A. and Marocco, A. (2012) Resistant and susceptible maize genotypes activate different transcriptional responses against *Fusarium verticillioides*. *Physiological and Molecular Plant Pathology* **77:** 52-59.

Lanubile, A., Pasini, L. and Marocco, A. (2010) Differential gene expression in kernels and silks of maize lines with contrasting levels of ear rot resistance after Fusarium verticillioides infection. *Journal of Plant Physiology* **167:** 1398-1406.

Lawton, K. A., Friedrich, L., Hunt, M., Weymann, K., Delaney, T., Kessmann, H., Staub, T. and Ryals, J. (1996) Benzothiadiazole induces disease resistance in *Arabidopsis* by activation of the systemic acquired resistance signal transduction pathway. *The Plant Journal* **10:** 71-82.

Lawton, M. A., Dixon, R. A., Hahlbrock, K. and Lamb, C. (1983) Rapid induction of the synthesis of phenylalanine ammonia-lyase and of chalcone synthase in elicitor-treated plant cells. *European Journal of Biochemistry* **129:** 593-601.

Le Roy, J., Huss, B., Creach, A., Hawkins, S. and Neutelings, G. (2016) Glycosylation is a major regulator of phenylpropanoid availability and biological activity in plants. *Frontiers in Plant Science* **7:** 735.

Le Roy. J., Huss, B., Creach, A., Hawkins, S. and Neutelings, G. (2016) Glycosylation is a major regulator of phenylpropanoid availability and biological activity in plants. *Frontiers in Plant Science* 7:735.

Leclere, V., Bechet, M., Adam, A., Guez, J. S., Wathelet, B., Ongena, M., Thonart, P., Gancel, F., Chollet-Imbert, M. and Jacques, P. (2005) Mycosubtilin overproduction by *Bacillus subtilis* BBG100 enhances the organism's antagonistic and biocontrol activities. *Applied and Environmental Microbiology* **71:** 4577-4584.

Leon, I. P. and Montesano, M. (2013) Activation of defense mechanisms against pathogens in mosses and flowering plants. *International Journal of Molecular Sciences* **14:** 3178-3200.

Liew, C. F., Loh, C. S., Goh, C. J. and Lim, S. H. (1998) The isolation, molecular characterization and expression of dihydroflavonol 4-reductase cDNA in the orchid, Bromheadia finlaysoniana. *Plant Science* **135:** 161-169

Liu, F., Hou, L., Raza, M. and Cai L. (2017) *Pestalotiopsis* and allied genera from *Camellia*, with description of 11 new species from China. *SCIENTIFIC REPORTS* **7:** 866.

Liu, X., Hou, F., Li, G. and Sang, N. (2015) Effects of nitrogen dioxide and its acid mist on reactive oxygen species production and antioxidant enzyme activity in Arabidopsis plants. *Journal of Environmental Sciences* **34:** 93-99.

Livak, K. J. and Schmittgen, T. D. (2001) Analysis of relative gene expression data using real-time quantitative PCR and the $2^{-\Delta\Delta CT}$ method. *Methods* **25**: 402-408.

Llorens, E., García-Agustín, P. and Lapena, L. (2017) Advances in induced resistance by natural compounds: towards new options for woody crop protection. *Scientia Agricola* **74:** 90-100.

Lo, C., Coolbaugh, R. C. and Nicholson, R. L. (2002) Molecular characterization and in silico expression analysis of a chalcone synthase gene family in *Sorghum bicolor. Physiological and Molecular Plant Pathology* **61:** 179-188.

Macedo, J. A., Ferreira, L. R., Camara, L. E., Santos, J. C., Gambero, A., Macedo, G. A. and Ribeiro, M. L. (2012) Chemopreventive potential of the tannase-mediated biotransformation of green tea. *Food chemistry* **133:** 358-365.

Mahadevan, A. and Sridhar, R. (1982) Methods in Physiological Plant Pathology 2nd *edition. Sivakami Publications*, Madras.

Malabadi, R. B. and Vijay Kumar, S. (2007) Assessment of antifungal activity of some medicinal plants. *International Journal of Pharmacology* **3:** 499-504.

Mandal, S. M., Chakraborty, D. and Dey S. (2010) Phenolic acids act as signaling molecules in plant-microbe symbioses. *Plant Signaling and Behavior* **5:** 359-368.

Mandal, S. M., Chakraborty, D. and Dey, S. (2010) Phenolic acids act as signaling molecules in plant-microbe symbioses. *Plant Signaling & Behavior* **5:** 359-368.

Mardanova, A. M., Hadieva, G. F., Lutfullin, M. T., Khilyas, I. V., Minnullina, L. F., Gilyazeva, A. G., Bogomolnaya, L. M. and Sharipova, M. R. (2017) *Bacillus subtilis* strains with antifungal activity against the phytopathogenic fungi. *Agricultural Sciences* **8:** 1-20.

Mauch, F., Mauch-Mani, B. and Boller, T. (1988) Antifungal hydrolases in pea tissue. II. Inhibition of fungal growth by combination of chitinase and ß-1,3- glucanase. *Plant Physiology* **88**: 936-942.

Meegahakumbura, M. K., Wambulwa, M. C., Thapa, K. K., Li, M. M., Moller, M., Xu, J. C., Yang, J. B., Liu, B. Y., Ranjitkar, S., Liu, J., Li, D. Z. and Gao, L. M. (2016) Indications for three independent domestication events for the tea plant (*Camellia sinensis* (L.) O. Kuntze) and new insights into the origin of tea germplasm in china and india revealed by nuclear microsatellites. PLoS ONE **11:** e0155369.

Meena, A. K., Mali, B. L. and Chaudhary, S. L. (2007) Evaluation of partially purified plant products and antimicrobial chemicals preparation against bacterial pathogens. *Journal of Mycology and Plant Pathology* **37:** 365-368.

Meena, B., Marimuthu, T. and Velazhahan, R. (2001) Salicylic acid induces systemic resistance in groundnut against late leaf spot caused by

Cercosporidium personatum. *Journal of Mycology and Plant Pathology* **31:** 139-145.

Mewari, N., Chaturvedi, P., Kumar, P. and Rao, P. B. (2007) Antimicrobial activity of moss extracts plant pathogen. *Journal of Mycology and Plant* Pathology **37:** 359-360.

Miltiadis, V., Christopoulos, Tsantili, E. (2015) Participation of phenylalanine ammonia-lyase (PAL) in increased phenolic compounds in fresh cold stressed walnut (*Juglans regia* L.) kernels. *Postharvest Biology and Technology* **104:** 17-25.

Mondal, T. K., Bhattacharya, A., Laxmikumaran, M. and Ahuja, P. S. (2004) Recent advances of tea (*Camellia sinensis*) biotechnology. *Plant Cell, Tissue and Organ Culture* **76:** 195**–**254.

Muhire, B. M., Varsani, A., Martin, D. P. (2014) SDT: A virus classification tool based on pairwise sequence alignment and identity calculation. *PLoS ONE* 9:e108277.

Naglot, A., Goswami, S., Rahman, I., Shrimali, D. D., Yadav, K. K., Gupta, V. K., Rabha, A. J., Gogoi H. K. and Veer V. (2015) Antagonistic potential of native *Trichoderma viride* strain against potent tea fungal pathogens in north east India. *The Plant Pathology Journal* **31:** 278-289.

Narayanasamy P. (2013) Abiotic Biological Control Agents for Crop Disease Management. *In:* Biological Management of Diseases of Crops. Progress in Biological Control, vol 15. Springer, Dordrecht, pp. 511-632.

Nasrin, F., Ahmad, S. and Kamrunnahar. (2012) Evaluation of antimicrobial, antioxidant and cytotoxic activities of methanolic extracts of *Lagerstroemia speciosa* leaves and barks. *Journal of Applied Pharmaceutical Science* **2:** 142-147.

Navarova, H., Bernsdorff, F., Doring, A-C. and Zeiera, J. (2012) Pipecolic Acid, an endogenous mediator of defense amplification and priming,

is a critical regulator of inducible plant immunity. *The Plant Cell* **24:** 5123-5141.

Naz, R. and Bano, A. (2012) Antimicrobial potential of *Ricinus communis* leaf extracts in different solvents against pathogenic bacterial and fungal strains. *Asian Pacific Journal of Tropical Biomedicine* **2:** 944-947.

Nielsen, P. and Sørensen, J. (1997) Multi-target and medium-independent fungal antagonism by hydrolytic enzymes in *Paenibacillus polymyxa* and *Bacillus pumilus* strains from barley rhizosphere. *FEMS Microboilogy Ecology* **22:** 183-192.

Okorska, S., Michalczyk, D., Okorski, A., Piotrowicz-Cieślak, A., Pupel, P., Głowacka, K., Jagielska, T. and Górecki, R. (2014) Variability of *PSPAL1* (phenylalanine ammonia-lyase gene-1) proximal promoter sequence and expression in pea challenged with *Mycosphaerella pinodes*. *Czech Journal of Genetics and Plant Breeding* **50**: 163-170.

Oliveira, M. D. M., Varanda, C. M. R. and Felix, M. R. F. (2016) Induced resistance during the interaction pathogen x plant and the use of resistance inducers. *Phytochemistry Letters* **15:** 152-158.

Oly, W.T., Islam, W., Hasan, P. and Parween, S. (2011) Antimicrobial activity of *Clerodendrum viscosum* vent. (Verbenaceae). *International Journal of Agriculture and Biology* **13:** 222-226.

Oumar, D., Akumah, B. E. and Tchinda, N. D. (2015) Induction of resistance in cocoyam (*Xanthosoma sagittifolium*) to *Pythium myriotylum* by corm treatments with Benzothiadiazole and its effect on vegetative growth. *American Journal of Experimental Agriculture* **5:** 164-171.

Padaria, J. C., Vishwakarma, H., Biswas, K., Jasrotia, R. S. and Singh, G. P. (2014) Molecular cloning and in-silico characterization of high temperature stress responsive pAPX gene isolated from heat tolerant Indian wheat cv. Raj 3765. *BMC Research Notes* **7:** 713.

Padder, B. A., Sharma, P. N., Kapil, R., Pathania, A. and Sharma, O. P. (2010) Evaluation of bioagents and biopesticides against *Colletotrichum lindemuthianum* and its integrated management in common bean. *Notulae Scientia Biologicae* **3:** 72-76.

Pajot, E., Corre, D. L. and Silue, D. (2001) Phytogard and DL-*β*-amino butyric acid (BABA) induce resistance to downy mildew (*Bremia lactucae*) in lettuce (*Lactuca sativa* L). *European Journal of Plant Pathology* **107:** 861-869.

Pallavi, R. V., Nepolean, P., Balamurugan, A., Jayanthi, R., Beulah, T. and Premkumar, R. (2012) *In vitro* studies of biocontrol agents and fungicides tolerance against grey blight disease in tea. *Asian Pacific Journal of Tropical Biomedicine* **2012:** S435-S438.

Pan, S.Q., Ye, X. S., and Kuc, J. (1991) A technique for detection of chitinase, β-1,3-glucanases and protein patterns after a single separation using polyacrylamide gel electrophoresis or isoelectrofocussing. *Phytopathology journal* **81**: 970-974.

Pandey, A., Yadava, L. P., Mishra, R. K., Pandey, B. K., Muthukumar M. and Chauhan, U. K. (2012) Studies on the incident and pathogenesis of *Colletotrichum gloeosporioides* penz. causes anthracnose of mango. *International Journal of Security and Networks* **3:** 220-232.

Pang, Y., Shen, G., Wu, W., Liu, X., Lin, J., Tan, F., Sun, X. and Tang, K. (2005) Characterization and expression of chalcone synthase gene from *Ginkgo biloba*. *Plant Science* **168:** 1525-1531.

Paolisa, A. D., Pignoneb, D., Morgeseb, A. and Sonnante, G. (2008) Characterization and differential expression analysis of artichoke phenylalanine ammonia-lyase-coding sequences. *Physiologia Plantarum* **132:** 33-43.

Parimala, S. and Sangeetha, D. (2016). Antifungal activity of *Ricinus communis* L. solvent extracts against pathogenic fungi. *Life Science Archives* **2:** 741-746

Parimelazhagan, T. and Francis, K. (1999) Antifungal activity of *Clerodendrum viscosum* against *Curvularia lunata* in rice seeds. *J. Mycology and Plant Pathology* **29:** 139-141.

Pawar, B. T. (2011) Antifungal activity of some leaf extracts against seed-borne pathogenic fungi. *International Multidisciplinary Research Journal* **4:**11-13.

Payyavula, R. S., Navarre, D. A., Kuhl, J. C., Pantoja, A, and Pillai, S. S. (2012) Differential effects of environment on potato phenylpropanoid and carotenoid expression. *BMC Plant Biology* **12:** 39

Peden, J. F. (1991). Analysis of Codon Usage. Ph. D. thesis, University of Nottingham, Nottingham, UK.

Peraza-Sánchez, S. R., Chan-Che, E. O. and Ruiz-Sánchez, E. (2005) Screening of Yucatecan plant extracts to control *Colletotrichum gloeosporioides* and isolation of a new pimarene from *Acacia pennatula*. *Journal of agricultural and food chemistry* **53:** 2429-2432.

Percival, G. C. (2010) Effect of Systemic Inducing Resistance and Biostimulant Materials on Apple Scab Using a Detached Leaf Bioassay. *Arboriculture and Urban Forestry* **36:** 41-46.

Perez-de-Luque, A., Jorrfn, J. V., and Rubiales, D. (2004) Crenate broomrape control in pea by foliar application of benzothiadiazole (BTH). *Phytoparasitica* **32:** 21-29.

Pitakdantham, W., Sutaburtra, T., Chiemsombat, P. and Pitaksutheepong, C. (2010) Isolation and characterization of chalkone synthase gene isolated from *Dendrobium* Sonia Earsakul. *Pakistan Journal of Biological Sciences* **13:** 1000-1005.

Pitsch, N. T., Witsch, B. and Baier, M. (2010) Comparison of the chloroplast peroxidase system in the chlorophyte *Chlamydomonas reinhardtii*, the bryophyte *Physcomitrella patens*, the lycophyte *Selaginella moellendorffii* and the seed plant *Arabidopsis thaliana*. *BMC Plant Biology* **10**: 133.

Polesani, M., Desario, F., Ferrarini, A., Zamboni, A., Pezzotti, M., Kortekamp, A. and Polverari, A. (2008) cDNA-AFLP analysis of plant and pathogen genes expressed in grapevine infected by Plasmopara viticola. *BMC Genomics* **9:** 142-156.

Pranoothi, E. K., Narendra, K., Joshi, D.S.D.S., Swathi, J., Sowjanya, K.M., Rathnakarreddi, K.V.N., Emmanuel S., Padmavathi, C. and Satya, A. K. (2014) Studies on qualitative, quantitative, phytochemical analysis and screening of *in vitro* biological activities of *Leucas indica* (L) var. Nagalapuramiana. *International Journal of Herbal Medicine* **2:** 30-36.

Premkumar, R., Nepolean, P., Pallavi, V. R., Balamurugan, A. and Jayanthi, R. (2012) Integrated disease management of grey blight in tea. *Two and a Bud* **59:** 27-30.

Punyasiria, P. A. N., Abeysinghea, I. S. B., Kumarb, V., Treutterc, D., Duyd, D., Goschd, C., Martense, S., Forkmannd, G. and Fischer T. C. (2004) Flavonoid biosynthesis in the tea plant *Camellia sinensis*: properties of enzymes of the prominent epicatechin and catechin pathways. *Archives of Biochemistry and Biophysics* **431:** 22–30.

Pye, M. F., Hakuno, F., MacDonald, J. D. and Bostock, R. M. (2013) Induced resistance in tomato by SAR activators during predisposing salinity stress. *Frontiers in plant science* **4:** 116.

Raju, S., Jayalakshmi, S. K., and Sreeramulu, K. (2008) Comparative study on the induction of defense related enzymes in two different cultivars of chickpea (*Cicer arietinum* L) genotypes by salicylic acid, spermine and *Fusarium oxysporum* f. sp. *ciceri. Australian Journal of Crop Science* **2:**121-140.

Ravikumar M.C. and Garampalli R. H. (2013) Antifungal activity of plants extracts against *Alternaria solani*, the causal agent of early blight of tomato. *Archives of Phytopathology and Plant Protection* **46:** 1897-1903.

Rawal, H. C., Singh, N. K. and Sharma, T. R. (2013) Conservation, Divergence, and Genome-Wide Distribution of *PAL* and *POX A* Gene Families in Plants. *International Journal of Genomics* **2013:** Article ID 678969, 10 pages.

Reddy, L., Nagaraju, C. N., Prasanna, Kumar, M. K. and Venkataravanappa, V. (2007) Transmission and host range of the *Papaya ringspot virus* (PRSV). *Journal of Plant Diseases and Protection* **2**: 9-13.

Rejeb, I. B., Pastor, V. and Mauch-Mani, B. (2014) Plant responses to simultaneous biotic and abiotic stress: molecular mechanisms. *Plants (Basel)* **3:** 458-475.

Rinez, A., Remadi, M. D., Ladhari, A., Omezzine, F., Rinez, I. and Haouala, R. (2013) Antifungal activity of *Datura metel* L. organic and aqueous extracts on some pathogenic and antagonistic fungi. *African Journal of Microbiology Research* **7:** 1605-1612.

Romanazzi, G., D'Ascenzo, D. and Murolo, S. (2009) Field treatment with resistance inducers for the control of grapevine bois noir. *Journal of Plant Pathology* **91:** 677-682.

Roslan, N. D., Tan, C. S., Ismail, I. and Zainal, Z. (2013) cDNA cloning and expression analysis of the chalcone synthase gene (CHS) from'polygonum minus. *Australian Journal of Crop Science* **7:** 777.

Ryals, J. A., Neuenschwander, U. H., Willits, M. G., Molina, A., Steiner, H. Y. (1996) Systemic acquired resistance. *Plant Cell* **8:** 1809-1819.

Sadasivam, S. and Manickam, A. (1996) Biochemical Methods (2nd Edition), new Age International Private Limited. pp. 110-112.

Saha, A. and Chakraborty, B. N. (1992) Phytotoxic effect of metabolic byproducts in the culture filtrate of *Bipolaris carbonum* and *Camellia sinensis. Geobios* **19:** 15-17.

Saha, A., Dasgupta, S. and Saha, D. (2001) Discovery of *Curvularia eragrostidis* on Tea (*Camellia sinensis* (L.) O. Ktze.) leaves from

clonal-cutting nurseries in North Bengal. *Environment and Ecology* **19**: 846–848.

Salar R.K. and Suchitra,. (2009) Evaluation of antimicrobial potential of different extracts of *Solanum xanthocarpum* Schrad. and Wendl. *African Journal of Microbiology Research* **3:** 97-100.

Sambrook J. and Russel D. W. (2001) *A laboratory manual*, Second edition, Cold Spring Harbour, Laboratory Press, USA.

Sarmah, K. C. (1960) Disease of tea and associated crops in North East. Memorandum No.26. Indian Tea Association, Tocklai Experimental Station.

Sarmah, S. R., Dutta, P., Bhattacharyya, P. N., Payeng, B. and Tanti, A. J. (2016) Growth habit of tea pathogens (*Cephaleuros* spp. and *Fusarium solani*) and evaluation of relative susceptibility of selected Tea cultivars. *International Research Journal of Biological Sciences* **5:** 1-9.

Shadlea, G. L., Wesleya, S. V. Kortha, K. L., Chena, F., Lambb, C. and Dixon, R. A. (2003) Phenylpropanoid compounds and disease resistance in transgenic tobacco with altered expression of l-phenylalanine ammonia lyase. *Phytochemistry* **64:** 153-161.

Shaikh, F. T. and Sahera, N. (2016) Antifungal activity of *Pseudomonas aeuroginosa* and *Bacillus subtilis* against pathogens of cucurbitaceous fruits. *IJIRSET* ***5*:** 3320-3324.

Sharma, P., Jha, A. B., Dubey, R. S. and Pessarakli, M. (2012) Reactive oxygen species, oxidative damage, and antioxidative defense mechanism in plants under stressful conditions. *Journal of Botany* **2012:** Article ID 217037, 26 pages.

Sharma, R. K., Negi, M. S., Sharma, S., Bhardwaj, P., Kumar, R., Bhattachrya, E., Tripathi, S. B., Vijayan, D., Baruah, A. R., Das, S. C., Bera, B., Rajkumar, R., Thomas, J., Sud, R. K., Muraleedharan, N., Hazarika, M., Lakshmikumaran, M., Raina, S. N. and Ahuja, P. S.

(2010) AFLP-based genetic diversity assessment of commercially important tea germplasm in India. *Biochemical Genetics* **48:** 549-564

Sharma, R., Mahila, H. R., Mohapatra, T., Bhargava, S. C. and Sharma M. M. (2003) Isolating plant genomic DNA without liquid nitrogen. *Plant molecular biology Reporter* **21:** 43-50.

Sharp, P. M. and Li, W. H. (1986) An evolutionary perspective on synonymous codon usage in unicellular organisms. *Journal of Molecular Evolution* **24:** 28-38.

Sharp, P. M. and Li, W. H. (1987) The codon adaptation index- a measure of directional synonymous codon usage biase, and its potential application. *Nucleic Acid Research* **15:** 1281-1295.

Shrivastava, D. K.and Swarnkar K. (2014) Antifungal activity of leaf extract of neem (*Azadirachta Indica* Linn). *International Journal of Current Microbiology and Applied Sciences* **3:** 305-308.

Shrivastava, D.K. and Swarnkar, K. (2014) Antifungal Activity of leaf extract of Neem (*Azadirachta Indica* Linn). *International Journal of Current Microbiology and Applied Sciences* **3:** 305-308.

Siju, E. N., Rajalakshmi, G. R., Sreejith, K. R., Hariraj, N., Venugopal, V. P., Sneha, V. N. (2011) Anthelmintic activity of leaves of *Clerodendrum viscosum* Vent. *International Journal of Pharma and Bio Sciences* **5:** 25-28.

Singh, A., Sharma, O. P. and Garg, D. K. (2006) Integrated pest management, principle and applications, Vol. 2: applications. *CBS Publishers and distributor, New Delhi.*

Sinha, A. K. and Das, N. C. (1972) Induced resistance in rice plants to *Helminthosporium oryzae*. *Physiological Plant Pathology* **2**:401-410.

Slaughter, A., Daniel, X., Flors, V., Luna, E., Hohn, B. and Mauch, M. B. (2012) Descendants of primed Arabidopsis plants exhibit resistance to biotic stress. *Plant Physiology* **158:** 835-843.

Somssich, I. E., and Hahlbrock, K. (1998) Pathogen defence in plants—a paradigm of biological complexity. *Trends in Plant Science* **3:** 86-90.

Sood, N., Sohal, B. S. and Lore, J. S. (2013) Foliar application of benzothiadiazole and salicylic acid to combat sheath blight disease of rice. *Rice Science* **20:** 349-355.

Sreedevi, B., Devi, M. C. and Saigopal, D. V. R. (2011) Induction of defense enzymes in *Trichoderma harzianum* treated groundnut plants against *Macrophomina phaseolina. Journal of Biological Control* **25:** 33–39.

Sticher. L, Mauch-Mani, B. and Métraux, J. P. (1997) Systemic acquired resistance. *Annual Review of Phytopathology* **35:** 235-270.

Su, W., Li, X., Chen, M., Dai, W., Sun, S., Wang, S., Sheng, X., Sun, S., Gao, C., Hou, A., Zhou, Y., Sun, B., Gao, F., Xiao, J., Zhang, Z. and Jiang, C. (2017) Synonymous codon usage analysis of hand, foot and mouth disease viruses: A comparative study on coxsackievirus A6, A10, A16, and enterovirus 71 from 2008 to 2015. *Infection, Genetics and Evolution* **53:** 212–217

Svecova, E., Colla, G. and Crino, P. (2017) Antifungal activity of *Boerhavia diffusa* L. extract against *Phytophthora* spp. in tomato and pepper. *European Journal of Plant Pathology* **148:** 27-34.

Tamm, L., Thüriga, B., Fliessbacha, A., Goltliebb, A. E., Karavanib, S. and Cohen, Y. (2011) Elicitors and soil management to induce resistance against fungal plant diseases. *NJAS - Wageningen Journal of Life Sciences* **58:** 131-137.

Tamura, K., Stecher, G., Peterson, D., Filipski, A., and Kumar, S. (2013) MEGA6: Molecular Evolutionary Genetics Analysis Version 6.0. *Molecular Biology and Evolution* **30:** 2725-2729.

Tan, G., Liu, K., Kang, J., Xu, K., Zhang, Y., Hu, L., Zhang, J. and Li, C. (2015) Transcriptome analysis of the compatible interaction of tomato with *Verticillium dahliae* using RNA-sequencing. Frontiers in Plant Science **6:** 428.

Thakur, M. and Sohal, B. S. (2013) Role of elicitors in inducing resistance in plants against pathogen infection: A review. *International Scholarly Research Notices Biochemistry* **2013:** Article ID 762412, 10 pages.

Thatcher, L. F., Williams, A. H., Garg, G., Buck, S-A. G. and Singh, K. B. (2016) Transcriptome analysis of the fungal pathogen *Fusarium oxysporum* f. sp. *medicaginis* during colonisation of resistant and susceptible *Medicago truncatula* hosts identifies differential pathogenicity profiles and novel candidate effectors. *BMC Genomics* **17:** 860.

Thembo, K. M., Vismer, H. F., Nyazema, N. Z., Gelderblom, W. C. A. and Katerere, D. R. (2010) Antifungal activity of four weedy plant extracts against selected mycotoxigenic fungi. *Journal of Applied Microbiology* **109:** 1479-1486.

Thompson, J. D., Higgins, D. G., and Gibson, T. J. (1994) CLUSTAL W: improving the sensitivity of progressive multiple sequence alignment through sequence weighting, position-specific gap penalties and weight matrix choice. *Nucleic Acids Research* **22:** 4673-4680.

Tian, L., Kong, W. F., Pan, Q. H., Zhan, J. C., Wen, P. F., Chen, J. Y., Wan, S. B. and Huang, W. D. (2006). Expression of the chalcone synthase gene from grape and preparation of an anti-CHS antibody. *Protein Expression and Purification* **50:** 223-228.

Ton, J. and Mauch-Mani, B. (2004) β-amino-butyric acid-induced resistance against necrotrophic pathogensis based on ABA-dependent priming for callose. *The Plant Journal* **38:** 119-130.

Trejo-Saavedra, D. L., García-Neria, M. A. and Rivera-Bustamante, R. F. (2013) Benzothiadiazole (BTH) induces resistance to Pepper golden mosaic virus (PepGMV) in pepper (*Capsicum annuum* L.). *Biological Research* **46:** 333-340.

Walters, D. R., Havis, N. D., Sablou, C. and Walsh, D. J. (2011) Possible trade-off associated with the use of a combination of resistance elicitors. *Physiological and Molecular Plant Pathology* **75:** 188-192.

Wang, Z. W., Jiang, C., Wen, Q., Wang, N., Tao, Y. Y. and Xu, L. A. (2014) Deep sequencing of the *Camellia chekiangoleosa* transcriptome revealed candidate genes for anthocyanin biosynthesis. *Gene* **538:** 1-7.

Wei, L., He, J., Jia, X., Qi, Q., Liang, Z., Zheng, H., Ping, Y., Liu, S. and Sun, J. (2014) Analysis of codon usage bias of mitochondrial genome in *Bombyx mori* and its relation to evolution. *BMC Evolutionary Biology* **14:** 262.

Wessels, J. G. H. and Sietsma, J. H. (1981) Fungal Cell Wells: a survey in plant carbohydrates II. extracellular carbohydrates. *In*: Encyclopedia of Plant Physiology, *eds*. Tanner, W. and Loewuse, F. A. *Springer Verlag*. Barlin, Germany. pp. 352-394.

Wright, F. (1990) The 'effective no of codons' used in a gene. *Gene* **87:** 23-29.

Xu, F., Cai, R., Cheng, S., Du, H., Wang, Y. and Cheng, S. (2008) Molecular cloning, characterization and expression of phenylalanine ammonia-lyase gene from *Ginkgo biloba. African Journal of Biotechnology* **7:** 721-729.

Xu, H., Park, N., Li, X., Kim, Y. K., Lee, S. Y. and Park, S. U. (2010) Molecular cloning and characterization of phenylalanine ammonia-lyase, cinnamate 4-hydroxylase and genes involved in flavone biosynthesis in *Scutellaria baicalensis*. *Bioresource Technology* **101:** 9715-9722.

Xu, X. Z., Liu, Q. P., Fan, L. J., Cui, X. F. and Zhou X. P. (2008) Analysis of synonymous codon usage and evolution of begomoviruses. *Journal of Zhejiang University SCIENCE B* **9:** 667-674.

Yamanishi, T. (Ed.) (1991) Proceedings, International Symposium on Tea Science. Organizing Committee, ISTS, NIVOT, Shizuoka, Japan.

Yanase, Y. and Takeda, Y. (1987) Method for testing the resistance to tea grey blight caused by *Pestalotia longiseta*. Spegazzini in tea breeding. *Bulletin of the National Research Institute of Vegetables, Ornamental plants and tea*, B (Kenya) **1**:1-4.

Zeng, S., Liu, Y., Zou, C., Huang, W. and Wang, Y. (2013) Cloning and characterization of phenylalanine ammonia-lyase in medicinal *Epimedium* species. *Plant Cell, Tissue and Organ Culture* **113:** 257-267.

Zhang, J., Wang, M., Liu, W. Q., Zhou, J. H., Chen, H. T., Ma, L. N., Ding, Y. Z., Gu, Y. X. and Liu, Y. S. (2011) Analysis of codon usage and nucleotide composition bias in polioviruses. *Virology Journal* **8:** 146.

Zhang, Y. P., E, Z. G., Jiang, H., Wang, L., Zhou, J. and Zhu, D.F. (2015) A comparative study of stress-related gene expression under single stress and intercross stress in rice. *Genetics and Molecular Research* **14:** 3702-3717.

Zhao, Y., Zheng, H, Xu, A., Yan, D., Jiang, Z., Qi, Q. and Sun, J. (2016) Analysis of codon usage biase of envelope glycoprotein genes in nuclear polyhedrosis virus (NPV) and its relation to evolution. *BMC Genomics* **17:** 677.

Zhou, L., Wang, Y. and Peng, Z. (2011) Molecular characterization and expression analysis of chalcone synthase gene during flower development in tree peony (*Paeonia suffruticosa*). *African Journal of Biotechnology* **10:** 1275-1284.

Zhou, Z., Dang, Y., Zhou, M., Li, L., Yu, C. H., Fu, J., Chen, S. and Liu, Y. (2016) Codon usage is an important determinant of gene expression levels largely through its effects on transcription. *Proceedings of the National Academy of Sciences of the United States of America* **113:** E6117-E6125.

Zhu, Q., Xie, X., Lin, H., Sui, S., Shen, R., Yang, Z., Lu, K., Li, M. and Liu, Y. (2015) Isolation and functional characterization of a phenylalanine ammonia-lyase gene (*SsPAL1*) from *Coleus* (*Solenostemon scutellarioides* (L.) Codd). *Molecules* **20:** 16833-16851.

Zhu, X., Lin, H., Si, Z., Xia, Y., Chen, W. and Li, X. (2016) Benzothiadiazole-mediated induced resistance to *Colletotrichum musae* and delayed ripening of harvested banana fruit. *J. Agric. Food Chem.* **64:** 1494-1502.

Ziaei, M., Sharifi, M., Behmanesh, M. and Razavi, K. (2012) Gene expression and activity of phenyl alanine amonialyase and essential oil composition of *Ocimum basilicum* L. at different growth stages. *Iranian Journal of Biotechnology* **10:** 32-39.