

LIST OF PUBLICATIONS 2019-2020

Book Chapters/ Book Reviews/Bulletins/ Research papers/ Monographs/ Booklets

Book Chapters

Kesharwani P, Paknikar KM and Gajbhiye V (eds.). 2019. Polymeric Nanoparticles as a Promising Tool for Anti-Cancer Therapeutics. 1st edition. Academic Press, Elsevier: 1- 432.

Kumar P, Gajbhiye KR, Paknikar KM and Gajbhiye V. 2019. Current Status and Future Challenges of Various Polymers as Cancer Therapeutics. In: Kesharwani P, Paknikar KM and Gajbhiye V (eds.) Polymeric Nanoparticles as a Promising Tool for Anti-Cancer Therapeutics. 1st edition. Academic Press, Elsevier: 1-20.

Pathan EK, Ghormade V, Panmei R and Deshpande MV. 2019. Biochemical and molecular aspects of dimorphism in fungi. In: T.Satyanarayana, Deshmukh SK and Deshpande M. (eds.) Advancing Frontiers in Mycology and Mycotechnology, Springer: 69-94.

Rahi S, Choudhari P and Ghormade V. 2019. Aflatoxin and Ochratoxin a Detection: Traditional and Current Methods. In: T.Satyanarayana, Deshmukh SK and Deshpande M. (eds.) Advancing Frontiers in Mycology and Mycotechnology, Springer: 377- 404.

Srinivasan SY, Gajbhiye KR, Gajbhiye V and Paknikar KM. 2019. Conjugated polymer nanoparticles as promising tool for anticancer therapeutics. In: Kesharwani P, Paknikar KM and Gajbhiye V (eds.) Polymeric Nanoparticles as a Promising Tool for Anti-Cancer Therapeutics. 1st edition. Academic Press, Elsevier: 257-280.

Tambe P, Sayed N, Paknikar KM and Gajbhiye V. 2019. Poly (Phospho Ester) and Poly(Phosphazene) Nanoparticles as a Promising Tool for Anticancer Therapeutics. In: Kesharwani P, Paknikar KM and Gajbhiye V (eds.) Polymeric Nanoparticles as a Promising Tool for Anti-Cancer Therapeutics. 1st edition. Academic Press, Elsevier:123-143.

Book Review

Roy S and Karthick B. 2019. Book review “Diatoms from the Congo and Zambezi Basins- Methodologies and Identification of the genera”. African Journal of Aquatic Science, 44 (3): 301-302.

Research Papers

Arora P, Kshirsagar PR, Rana DP and Dhakephalkar PK. 2019. Hyperthermophilic Clostridium Sp. N-4 produced a glycoprotein biosurfactant that enhanced recovery of residual oil at 96 degrees C in lab studies. Colloids and Surfaces B- Biointerfaces, 182 (Article No. UNSP 110372). (Impact Factor = 3.997)

Avchar R, Groenewald M and Baghela A. 2019. *Wickerhamiella shivajii* sp. nov., a thermotolerant yeast isolated from distillery effluent. *International Journal of Systematic and Evolutionary Microbiology*, 69 (10): 3237-3242. (Impact Factor = 1.932)

Baviskar VS, Kumar KJY, Honrao BK, Misra SC, Chavan AM, Surve VD, Khade VM, Bagwan JH, Gite VD, Khairnar SS, Bankar DN and Navathe S. 2019. Biofortified Variety MACS 4028. *Indian Journal of Genetics and Plant Breeding*, 79 (4): 765-766. (Impact Factor = 0.409)

Bera H, Abbasi YF, Ping LL, Marbaniang D, Mazumder B, Kumar P, Tambe P, Gajbhiye V, Cun, DM and Yang MS. 2020. Erlotinib-loaded carboxymethyl temarind gum semi-interpenetrating nanocomposites. *Carbohydrate Polymers*, 230 (Article no. 115664). (Impact Factor = 5.158)

Bokil SA, Darshetkar AM, Maurya S, Choudhary RK and Datar MN. 2019. Lectotypification of two names of *Smithsonia Saldanha* (Orchidaceae). *Phytotaxa*, 427 (1): 80-84. (Impact Factor = 1.185)

Borkar VD and Kulkarni KG. 2019. The oldest record of the bivalve *Dosinisca Dall* and its implications. *Journal of Earth System Science*, 128 (4). (Impact Factor = 0.890)

Chate SV, Bonde SD and Gamre PG. 2019. *Palmoxylon Phytelephantiodes* sp. Nov.- A new fossil palm from the deccan Intertrappean Beds of Umaria, Madhya Pradesh, India. *International Journal of Advanced Scientific Research and Management*, 4 (6): 189-193.

Chikte RG, Paknikar KM, Rajwade JM and Sharma J . 2019. Nanomaterials for the control of bacterial blight disease in pomegranate: quo vadis? *Applied Microbiology and Biotechnology*, 103(11): 4605-4621. (Impact Factor = 3.340)

Darshetkar AM, Datar MN, Rao GR, Tamhankar S, Prabhukumar KM and Choudhary RK. 2019. *Eriocaulon karaavalense* (Eriocaulaceae), a new species from India based on morphological and molecular evidence. *Annales Botanici Fennici* , 56 (4-6): 305-316. (Impact Factor = 0.872)

Darshetkar AM, Datar MN, Tamhankar S and Choudhary RK. 2019. Understanding evolution in Poales: Insights from Eriocaulaceae plastome. *PLOS One*, 14 (8). (Impact Factor = 2.766)

Datar MN, Dongre S and Gadgil M. 2019. A critical evaluation of environmental impact assessments: a case study of Goa mines, India. *Current Science*, 117 (5), 776-782. (Impact Factor = 0.883)

Datar MN and Tetali P. 2019. Hill Forts: Abodes of Endemic Plants and Potential Priority Conservation Areas of Northern Western Ghats. *National Academy Science Letters- India*, 42 (4): 375-378. (Impact Factor = 0.519)

Devadatha B, Mehta N, Wanasinghe DN and Baghela A. 2019. *Vittaliana mangrovei* Devadatha, Nikita, A.Baghela & VVSarma, gen. nov, sp. nov. (Phaeosphaeriaceae), from mangroves near Pondicherry (India), based on morphology and multigene phylogeny. *Cryptogamie Mycologie*, 40 (7): 117-132. (Impact Factor = 2.000)

Dhiman N, Shweta K, Tendulkar S, Deshpande G, Ratnaparkhi GS and Ratnaparkhi A. 2019. *Drosophila* Mon1 constitutes a novel node in the brain-gonad axis that is essential for female germline maturation. *Development*, 146 (13). (Impact Factor = 5.413)

Gajbhiye KR, Pawar A, Mahadik KR and Gajbhiye V. 2020. PEGylated nanocarriers: A promising tool for targeted delivery to the brain. *Colloids and Surfaces B: Biointerfaces*, 187. (Impact Factor = 3.997)

Gautam T, Amardeep, Saripalli G, Rakhi, Kumar A, Gahlaut V, Gadekar DA, Oak M, Sharma PK, Balyan HS and Gupta PK. Introgression of a drought insensitive grain yield QTL for improvement of four Indian bread wheat cultivars using marker assisted breeding without background selection. *Journal of Plant Biochemistry and Biotechnology*. (Impact Factor = 0.774)

Ghatpande NS, Misar AV, Waghole RJ, Jadhav SH and Kulkarni PP. 2019. *Tinospora cordifolia* protects against inflammation associated anemia by modulating inflammatory cytokines and hepcidin expression in male Wistar rats. *Scientific Reports*, 9 (Article No.10969). (Impact Factor = 4.122)

Hanafy RA, Lanjekar VB, Dhakephalkar PK, Callaghan TM, Dagar SS, Griffith GW, Elshahed MS and Youssef NH. 2020. Seven new *Neocallimastigomycota* genera from wild, zoo-housed, and domesticated herbivores greatly expand the taxonomic diversity of the phylum. *Mycologia*. (Impact Factor = 2.762)

Harish RK, Tendulkar S, Deivasigamani S, Ratnaparkhi A and Ratnaparkhi GS. 2019. Monensin Sensitive 1 Regulates Dendritic Arborization in *Drosophila* by Modulating Endocytic Flux. *Frontiers in Cell and Developmental Biology*, 7. (Impact Factor=

Hyde KVD, Dong Y, Singh SK, Singh SM, Rana S, Lad SS, Rajeshkumar KC.... et al. 2020. Fungal diversity notes 1151-1276: taxonomic and phylogenetic contributions on genera and species of fungal taxa. *Fungal Diversity*, 100 (1): 5-277. (Impact Factor = 14.078)

Hyde KD, Tennakoon DS, Singh SK, Singh PN....et. al. 2019. Fungal diversity notes 1036-1150: taxonomic and phylogenetic contributions on genera and species of fungal taxa. *Fungal Diversity*, 96(1): 1-242. (Impact Factor =14.078)

Jaybhay SA, Varghese P and Taware Sp. 2019. Influence of foliar application of nutrient on growth, yield, economics, soil nutritional status and nutrient uptake of soybean. *Legume Research- An International Journal*. (Impact Factor = 0.232)

Jaybhay SA, Varghese P, Taware SP, Idhol BD, Waghmare BN and Salunkhe DH. 2019. Response of soybean [*Glycine max* (L.) Merrill] to irrigation at different growth stages. *Agricultural Science Digest*, 39 (2): 132- 135.

Kanade GD, Pingale KD and Karpe YA. 2019. Protein Interactions Network of Hepatitis E Virus RNA and Polymerase with Host Proteins. *Frontiers in Microbiology*, 10 (Article no. 2501). (Impact Factor = 4.019)

Kaushik T, Murugan T and Dagar SS. 2019. Morphological variation in the porcelaneous benthic foraminifer *Quinqueloculina seminula* (Linnaeus, 1758): Genotypes or Morphotypes? A detailed morphotaxonomic, molecular and ecological investigation. *Marine Micropaleontology*, 150 (Article no. UNSP 101748) (Impact Factor = 1.874)

- Khot M, Raut G, Ghosh D, Alarcon-Vivero M, Contreras D and Ravikumar A. 2020. Lipid recovery from oleaginous yeasts: Perspectives and challenges for industrial applications. *Fuel*, 259 (UNSP 116292). (Impact Factor = 4.908)
- Kociolek JP, Williams DM, Stepanek J, Liu Q, Liu Y, You QM, Karthick B and Kulikovskiy, M. 2019. Rampant homoplasy and adaptive radiation in pennate diatoms. *Plant Ecology and Evolution*, 152 (2): 131-141. (Impact Factor= 1.138)
- Kumar KJY, Baviskar VS, Honrao BK, Misra SC, Chavan AM, Surve VD, Khade VM, Bagwan JH, Gite VD, Khairnar SS, Bankar DN and Navathe S. 2019. Variety MACS 3949. *Indian Journal of Genetics and Plant Breeding*, 79 (4): 765-765. (Impact Factor= 0.409)
- Kumar S, Phogat BS, Vikas VK, Sharma AK, Saharan MS, Singh AK, Kumari J, Singh R, Jacob SR, Singh GP, Sivasamy M, Jayaprakash P, Meeta M, Jaiswal JP, Shikha D, Honrao BK, Kalappanavar IK, Mishra PC, Singh SP, Vaish SS and Solanki VA. 2019. Mining of Indian wheat germplasm collection for adult plant resistance to leaf rust. *PLOS One*, 14 (3). (Impact Factor= 2.766)
- Lagashetti AC, Dufosse L, Singh SK and Singh PN. 2019. Fungal Pigments and Their Prospects in Different Industries. *Microorganisms*, 7 (12).
- Lee J, Khang NS, Choudhary RK and Quang BH. 2019. Two new records of *Spiradiclis* (Rubiaceae) from Vietnam. *Korean Journal of Agricultural Science*, 46 (3): 645- 651. (Impact Factor=
- Maurya S, Bokil SA, Darshetkar AM, Datar MN and Choudhary RK. 2020. Second-step lectotypification of the name *Wormia mansonii*, the basionym of *Dillenia mansonii* (Dilleniaceae). *Phytotaxa*, 432 (2): 221-222. (Impact Factor= 1.185)
- Maurya S, Darshetkar AM, Datar MN, Tamhankar S, Li P and Choudhary RK. 2020. Plastome data provide insights into intra and interspecific diversity and *ndh* gene loss in *Capparis* (Capparaceae). *Phytotaxa*, 432 (2): 206-220. (Impact Factor= 1.185)
- Murphy CL, Youssef NH, Hanafy RA, Couger MB, Stajich JE, Wang Y, Baker K, Dagar SS, Griffith GW, Farag IF, Callaghan TM, Elshahed MS. 2019. Horizontal Gene Transfer as an Indispensable Driver for Evolution of Neocallimastigomycota into a Distinct Gut-Dwelling Fungal Lineage. *Applied and Environmental Microbiology*, 85 (15). (Impact Factor= 3.633)
- Navathe S, Singh S, Singh VK, Chand R, Mishra VK and Joshi AK . 2019. Genome-wide mining of respiratory burst homologs and its expression in response to biotic and abiotic stresses in *Triticum aestivum*. *Genes and Genomics*, 41 (9): 1027-1043.
- Navathe S, Yadav PS, Chand R, Mishra VK, Vasistha NK, Meher PK, Joshi AK and Gupta PK. 2020. ToxA- Tsn1 interaction for spot blotch susceptibility in Indian wheat: an example of inverse gene- for- gene relationship. *Plant Disease*, 104: 71-81. (Impact Factor = 2.941)
- Pathan EK, Ghormade V, Panwar SL, Prasad R and Deshpande MV. 2019. Molecular studies of NAD- and NADP-glutamate dehydrogenases decipher the conundrum of yeast-hypha dimorphism in zygomycete *Benjaminiella poitrasii*. *FEMS Yeast Research*, 19 (8). (Impact Factor= 2.609)

- Pingale KD, Kanade GD and Karpe YA. 2020. Heterogeneous Nuclear Ribonucleoproteins Participate in Hepatitis E Virus Replication. *Journal of Molecular Biology*, 432 (7): 2369-2387. (Impact Factor = 4.894)
- Poudel A, Navathe S, Chand R, Mishra VK, Singh PK and Joshi AK. 2019. Hydrogen Peroxide Prompted Lignification Affects Pathogenicity of Hemi-bio-trophic Pathogen *Bipolaris sorokiniana* to Wheat. *Plant Pathology Journal*, 35 (4): 287-300. (Impact Factor= 1.407)
- Puranik NV, Rani R, Singh VA, Tomar S, Puntambekar HM and Srivastava P. 2019. Evaluation of the Antiviral Potential of Halogenated Dihydorugosaflavonoids and Molecular Modeling with nsP3 Protein of Chikungunya Virus (CHIKV). *ACS Omega*, 4 (23): 20335-20345.
- Puranik NV, Srivastava P, Bhatt G, Mary DJSJ, Limaye AM and Sivaraman J . 2019. Determination and analysis of agonist and antagonist potential of naturally occurring flavonoids for estrogen receptor (ER alpha) by various parameters and molecular modelling approach. *Scientific Reports*, 9 (Article no. 7450) (Impact Factor= 4.122)
- Quang BH, Choudhary RK and Lee J. 2019. Taxonomic notes on *Leycesteria* Wall. (*Caprifoliaceae*): a newly recorded genus for the flora of Vietnam. *Korean Journal of Agricultural Science*, 46 (2): 335-341.
- Radhakrishnan C, Pardhi S, Kulikovskiy M, Kocielek JP and Karthick, B. 2020. *Navicula watveae* sp. nov. (*Bacillariophyceae*) a new diatom species from the Western Ghats, India. *Phytotaxa*, 433 (1): 20-26. (Impact Factor= 1.185)
- Rahalkar MC, Khatri K, Pandit PS and Dhakephalkar PK. 2019. A putative novel *Methylobacter* member (KRF1) from the globally important *Methylobacter* clade 2: cultivation and salient draft genome features. *Antonie Van Leeuwenhoek International Journal of General and Molecular Microbiology*, 112 (9): 1399-1408. (Impact Factor= 1.588)
- Rajeshkumar KC, Hyde KD, Wijayawardene NN, Madrid H, Lad SS, Boonmee S and Fatima S. 2019. *Tubeufia sahyadriensis* (*Tubeufiaceae*), a new dictyosporous anamorph from the Western Ghats, India. *Phytotaxa*, 423 (3): 171-181. (Impact Factor= 1.185)
- Rajwade JM, Chikte RG and Paknikar KM. 2020. Nanomaterials: new weapons in a crusade against phytopathogens. *Applied Microbiology and Biotechnology*, 104 (4): 1437-1461. (Impact Factor= 3.340)
- Rana S and Singh SK. 2019. *Kamalia indica*, a new genus and species belonging to *Diaporthales* (*Ascomycota*, *Fungi*) described based on morphology and molecular phylogeny. *Phytotaxa*, 425 (4): 233-243. (Impact Factor= 1.185)
- Rana S, Singh SK and Singh PN. 2019. *Strelitziana sarbhoyi* sp. nov. (*Strelitzianaceae*, *Chaetothyriales*), from North-Western Himalayas, India, described based on morphology and molecular phylogeny. *Phytotaxa*, 427 (1): 51-59. (Impact Factor= 1.185)
- Raut VM, Kanitkar S, Kulkarni M, Taware SP, Varghese P, Jaybhay SA and Kadam M. 2019. Efficacy of bio- fertilizers and growth promoters on seed yield of soybean (*Glycine max* L. Merril). *Pestology*, XLIII (6): 48- 56.

Raval KM, Ghormade V, Rajamohanam PR, Choudhary H, Rudramurthy SM and Chakrabarti A. 2019. Development of a nano-gold immunodiagnostic assay for rapid on-site detection of invasive aspergillosis. *Journal of Medical Microbiology*, 68 (9): 1341-1352. (Impact Factor= 2.112)

Roy S, Cheran R, Taylor JC, Kulikovskiy MS and Karthick B. 2020. *Encyonema keshrii*, sp. Nov.: a new diatom species (Cymbellales, Bacillariophyceae) from the Indian subcontinent. *Cryptogamie Algologie*, 41 (2): 7-17. (Impact Factor= 2.000)

Roy S, Liu Y, Kociolek JP, Lowe RL and Karthick, B. 2020. *Kulikowskiya* gen. nov. (Bacillariophyceae) from the lateritic rock pools of the Western Ghats, India and from Hainan Province, China. *Phycological Research*, 68 (1): 80-89. (Impact Factor= 1.275)

Sayed N, Tambe P, Kumar P, Jadhav S, Paknikar KM and Gajbhiye V. 2020. miRNA transfection via poly(amidoamine)-based delivery vector prevents hypoxia/reperfusion-induced cardiomyocyte apoptosis. *Nanomedicine*, 15 (2): 163-181. (Impact Factor= 5.005)

Shigwan B, Ghate K, Karandikar M and Datar MN. 2020. Traditional Knowledge in Sealing Reassessment Gaps of Threatened Species: An Example of a Grass from Northern Western Ghats of India. *National Academy Science Letters*. (Impact Factor = 0.519)

Singh N, Paknikar KM and Rajwade J. 2019. Gene expression is influenced due to 'nano' and 'ionic' copper in pre-formed *Pseudomonas aeruginosa* biofilms. *Environmental Research*, 175: 367-375. (Impact Factor= 4.732)

Singh N, Paknikar KM and Rajwade J. 2019. RNA-sequencing reveals a multitude of effects of silver nanoparticles on *Pseudomonas aeruginosa* biofilms. *Environmental Science- Nano*, 6 (6): 1812-1828. (Impact Factor= 6.087)

Singh A, Singh NK, Singh PN, Singh R and Dubey NK. 2019. Additions to *Ochroconis* from India. *Phytotaxa*, 427 (3):186-199. (Impact Factor= 1.185)

Tapadia-Maheshwari S, Pore S, Engineer A, Shetty D, Dagar SS and Dhakephalkar PK. 2019. Illustration of the microbial community selected by optimized process and nutritional parameters resulting in enhanced biomethanation of rice straw without thermo-chemical pretreatment. *Bioresource Technology*, 289 (Article No. 121639) (Impact Factor= 5.807)

Thacker M, Roy S, Kociolek JP, Lowe RL and Karthick B. 2019. A new species of *Germainiella* (Bacillariophyta) from the *Myristica* swamps of the Western Ghats, India. *Diatom Research*, 34 (3): 181-191. (Impact Factor= 1.000)

Trabert Z, Buczek K, Borics G, Udovic M, Karthick B, Ector L, Foldi A, Kiss K and Acs E. 2019. Biogeography and morphology of a poorly known diatom *Dorofeyukea rostellata* (Hustedt) Kulikovskiy and Kociolek. *Limnetica*, 38 (2): 743-758. (Impact Factor= 0.736)

Turwankar A and Ghaskadbi S. 2019. VEGF and FGF signaling during head regeneration in hydra. *Gene*, 717 (Article No. UNSP 144047). (Impact Factor= 2.498)

Upadhye A, Dias L, Pathak GP and Datar MN. 2019. Pharmacognostic evaluation of stem and root of *Salacia Oblonga* Wall. *International Journal of Pharma and Chemical Research*, 5 (2): 34-39.

Upadhye AS, Kulkarni DK and Pathak GP. 2019. Evaluation of Ret Species from Preserved Forests of Konkan Region, Maharashtra State, India. *Indian Forester*, 145 (5): 447-454.

Wadmare N, Roy S, Kociolek JP and Karthick B . 2019. Two new aerophilic species of *Stauroneis* Ehrenberg (Bacillariophyta) from the Eastern Himalayas. *Botany Letters*, 166 (2): 234-245. (Impact Factor= 1.342)

Wijayawardene NN, Hyde KD, Rajeshkumar KC..., et.al. 2020. Outline of Fungi and fungus-like taxa. *Mycosphere*, 11 (1): 1060-1456. (Impact Factor = 2.015)