Dr. IBANDALIN MAWLONG
Scientist (Plant Biochemistry)
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1.	Date of birth	:	02-01-1984
2.	Education Qualification	:	Ph D (Plant Biochemistry)
3.	Joining Date in ICAR	:	1-1-2014
4.	Joining Date in DRMR	:	9-4-2014
5.	Discipline/Specialization	:	Plant Biochemistry
6.	Research Experience	:	9 yrs
7.	Training/advance exposure in the area of work	:	• 3 months professional attachment training on "Proteomics as tools for crop improvement"at ICAR-NRCPB, New Delhi • "Genomics and Phenomics for enhancement of crop nutrient use efficiency" at ICAR-NRCPB, New Delhi

8. Contribution to the scientific advancement

- Isolated two genes encoding transcription factors responsible for Drought (Accession # KF006851.1 and KC98830)
- Developed a simple spectrophotometric method for total glucosinolate content in defatted seed meal
- Identification of double low lines from *B.juncea*lines
- Identification of heat tolerant lines from advanced breeding materials and germplasm using physico-biochemical markers.

9. Current research Projects and Future planning of research

- Proteomics studies in Oilseed Brassica (Institute project)-**P1**
- Screening of Oilseed Brassica Germplasm (Institute project)-**CoPI**
- Role of micro and secondary nutrients and their fortification on rapeseed-mustard productivity and quality (Institute project) –**CoPI**
- Enhancing soil resilance through integrity crop management practices (Institute project) –**CoPI**
- Incentivizing Research in Agriculture (IRA) on Molecular genetic analysis of resistance/tolerance to different stresses (External project)**CoPI**

- Molecular breeding for improvement of tolerance to biotic (white rust / stem rot) and quality traits (low erucic acid and glucosinolates) in mustard (External project)**CoPI**

10. Awards/ recognition

- Best poster presentation on "Stimulation of Orobanche Seed Germination by Mustard Root Exudates is Genotype-dependent". M.S. Sujith Kumar, Prasanta Dash, **IbandalinMawlong**, J. Nanjundan&Dhiraj Singh (2015)
- SESR young scientist awardee, Bengalura Dec, 2016
- Invited panelist in the panel discussion on "Enhancing Oilseed Brassica Production Through Climate-Smart Technologies" organized by Society by Society for rapeseed mustard research on 3rd National Brassica Conference feb 16-18, 2017 at IARI New Delhi

11. Publications (Research papers best 20)

- **Mawlong, I**., Kumar, M. S., & Singh, D. (2014). Furan fatty acids: their role in plant systems. *Phytochemistry Reviews*, 1-7. (NAAS 9.39)
- **Mawlong, I**., Ali, K., Kurup, D., Yadav, S., &Tyagi, A. (2014). Isolation and characterization of an AP2/ERF-type drought stress inducible transcription factor encoding gene from rice. *Journal of plant biochemistry and biotechnology*, *23*(1), 42-51. (NAAS rating 6.93)
- **Mawlong, I.,** Ali, K., Srinivasan, R., Rai, R. D., &Tyagi, A. (2015). Functional validation of a drought-responsive AP2/ERF family transcription factor-encoding gene from rice in Arabidopsis. *Molecular Breeding*, *35*(8), 1-14. (NAAS 8.47)
- **Mawlong, I**., Ali, K., &Tyagi, A. (2016). Cloning and characterization of a water deficit stress responsive transcription factor gene from Oryza sativa L.*Indian Journal of Experimental Biology*, *54*, 26-36. (NAAS 6.0).
- Kumar, S**., Mawlong, I.** and Singh, D., (2016). Phytosterol recovery from oilseeds: Recent advances. Journal of Food Process Engineering. (NAAS 7.37)
- **Ibandalin M**, Kishwar, A. and Aruna, T.(2016). Effect of Age of Seeds on Rice Transformation with Drought Stress Inducible Transcription Factor Encoding Gene by Biolistic Method. BioChemistry: An Indian Journal, 10(4). (IF= 0.11)
- **Mawlong, I**., Sujith Kumar, M.S., Gurung, B., Singh, K.H. and Singh, D., (2017). A Simple Spectrophotometric Method for Estimating Total Glucosinolates in Mustard de-oiled Cake. International Journal of Food Properties, 1-8. (NAAS 7.43)
- M.S. Sujith Kumar, **IbandalinMawlong**, J.Nanjundan, J. Arvind and Dhiraj Singh "Seed color as an index for accessing rapeseed meal quality" *The Bioscan* (2017) 12(2):995-999 (NAAS 5.26)
- **Mawlong,I**., M.S. Sujith Kumar., Kandpal B.K., Premi O.P., Gurung B., Singh D (2017)Meal and Oil Quality Among Genotypes of Indian Mustard (Brassica juncea) Varies Under Recommended Dose Of Nitrogen fertilizer*Applied Ecology and Environmental Research*15:1427-1445 (NAAS 6.68).

- M.S. Sujith Kumar, **IbandalinMawlong**, J.Nanjundan, J. Arvind and Dhiraj Singh (2018) Variation of beta-carotene and other antioxidants among different species of Oilseed Brassica *Indian journal of agricultural biochemistry* 30(2): 129-134 (NAAS 4.46).
- **Mawlong, Ibandalin**, Kishwar Ali, and ArunaTyagi. (2018) "Functional validation of a water deficit stress responsive AP2/ERF family transcription factor-encoding gene in Oryza sativa." (2018). *Indian journal of biochemistry and biophysics* 55: 17-25 (NAAS 6.0).
- MukeshMeena, PramodSahu ,Alka Joshi and **IbandalinMawlong** (2018). Identification and Prioritization of Problems in Integrated Agriculture for Community Development: A Case of Amba Village in Sub-humid Region of Western India *Asian Journal of Agricultural Extension, Economics & Sociology* 24(2):1-2 (NAAS 4.35).
- Kumar, MS Sujith**, IbandalinMawlong**, Kishwar Ali, and ArunaTyagi. "Regulation of phytosterol biosynthetic pathway during drought stress in rice." Plant Physiology and Biochemistry(2018). (NAAS 8.72)