

# Toko Manna

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### **Personal details:**

Name: Dr. Toko Manna

**Fathers Name**: Shri. Toko Budh **Mothers Name**: Smt. Toko Yakam

DOB: 31/10/1992 Gender: Female Blood Group: O<sup>+ve</sup> Nationality: Indian

Permanent Address: Vill. Talo, E-4 Tilli, Rumblin Segment.

Keyi Panyor dist. Arunachal Pradesh. 791120. India

Present Address: Director's House, Near Girls hostel No.1.

Maharaja Ranjit Singh Punjab Technical University. Bathinda. Punjab.

### **Awards & Accomplishments:**

- Availed Fellowship while pursuing Ph. D (Agronomy)
- University Gold Medalist in M.Sc. (Agronomy)
- All Round Best Student (2007-09)
- 5 Research paper published in Scopus indexed journals
- 2 patents published
- 10 Copyrights

### **Education Qualification:**

Name of Exam	Passing Year	Percentage	Board
Class X	2009	81.4	CBSE
Class XII (Sc)	2011	61.0	CBSE
B. Sc Agriculture(4yrs)	2017	75.79	Punjabi University, Patiala, Punjab.
M. Sc in Agronomy	2021	84.37	Himalayan University, Itanagar,
	2021	04.37	Arunachal Pradesh
Ph.D. in Agronomy	2025	Ph. D.	Lovely Professional University,
		Awarded	Punjab

# **Other Qualifications:**

- Qualified National Eligibility Test (NET) conducted by ASRB on behalf of ICAR in the discipline of Agronomy (2021).
- Computer Literacy: Post Graduate Diploma in Computer Application.

## **Experiences:**

S.no	Position	Institution	Duration
	Young Professional-II	ICAR-CITH,	
1		RS-Dirang. Arunachal	1 Year
		Pradesh	
	Guest lecturer for Management for	Office of the Horticulturist:	
2	the foundation training course on	RAN, Government of	Six months
	specific subjects i.e.	Arunachal Pradesh.	
	i) Plant Protection and		
	ii) Post Harvest		

## **Publications:**

S.no.	Year	Title	Type of	Journal	Indexing	NAAS
			Paper			rating
1	2025	Optimizing morphophysiological traits and yield potential in Indian mustard [Brassica juncea (L) Czern] through irrigation frequency, humic acid and sulphur application	Research paper	Plant Science Today	Scopus indexed	6.90
2	2025	Humic Acid and Sulphur Modulating Phenology, Membrane Integrity, Lipid Peroxidation and Oil Yield in <i>Brassica juncea</i> under Water Regimes	Research paper	Agricultural Science Digest	Scopus indexed	5.52
3	2025	Quality and NUE of wheat ( <i>Triticum aestivum</i> L.) under variable planting techniques and different nitrogen levels.	Research paper	Plant Science Today	Scopus indexed	6.90
4	2024	Role of planting patterns and weed control methods on quality of transplanted African Sarson ( <i>Brassica carinata</i> A.)	Research paper	International Journal of Advanced Biochemistry Research	UGC- care	5.29

5	2024	Impact of Humic Acid and	Research	The open	Scopus	-
		Sulphur application on	paper	access IOP	indexed	
		growth and yield of Indian		Conference		
		Mustard under variable		Series: Earth		
		Water moisture regimes		and		
				Environmental		
				Science (EES)		

**Book Chapters:** 

S	Year	Chapter Title	Chapter no.	ISBN	Book Title	Publisher
no			/ Page no.			
1	2025	Integrated weed management in major crops.		9788198 488497	Integrative Agriculture 2 <sup>nd</sup> Edition	Bio Think Publication

# **Patents:**

S.no	Title	Patent ID	Status
1	Effect of humic acid and sulphur on fatty acid		
	composition of Indian mustard under varying	202411079580A	Published
	irrigation regimes		
2	Enhancing Indian mustard's resilience by		
	improving membrane injury index and water	202411089801A	Published
	content using humic acid and sulphur		

# **Copyrights:**

S.no.	Title of the work	Registration Number	Status
1	Evaluation of humic acid and sulphur supplementation on secondary branch count and test weight in <i>Brassica juncea</i> L. cultivated under various hydric conditions.	LD-20250167681	Published
2	Assessment of priming on total chlorophyll and chlorophyll a content in induced-saline condition	L-151573/2024	Published
3	Ameliorative effect of priming on membrane injury index and membrane stability index in maize under salinity stress	L-151338/2024	Published

4	Impact of priming on proline and MDA content in maize under salinity condition	L-151437/2024	Published
5	Priming mediated trigger in total leaf area and leaf area index of maize.	L-150505/2024	Published
6	Priming mediated alteration on test weight and hi in maize ( <i>Zea mays</i> 1.) Under salinity stress.	L-151280/2024	Published
7	Ameliorative effect of priming treatments on biological and grain yield in maize under salinity stress	L-151056/2024	Published
8	Assessment of priming on plant height and dry weight in maize under salinity stress.	L-151318/2024	Published
9	Impact on siliqua proliferation and seed yield in <i>Brassica juncea</i> L. via humic acid and sulphur application across differential moisture conditions	16611	Accepted
10	The influence of humic acid and sulphur on the days to 50% flowering and oil content in Indian mustard under different moisture regimes.	16612	Accepted

# **Publications under process**

S.no.	Title	Type of paper
1	NPS Based-Seed priming with ZnO: A study to	Research Paper
	optimize the concentration and duration for the	
	establishment of Barley seedlings	
2	Synergistic approach of KSB and priming mediated triggers of antioxidative defence	Research Paper
	mechanism in green gram ( <i>Vigna radiata</i> L.) under drought conditions	
3	Introduction: Bridging Solutions for Sustainable Agriculture-Biogenic Nanoparticles, Biochar, and Eco-friendly Approaches	Book Chapter
4	Drought Management Strategies: Biochar and Biogenic NPs Applications for Water Conservation and Sustainable Crop Resilience.	Book Chapter

5	Nanoparticle-Induced Stress in Crops: Impact on Growth, Yield and Human Nutrition.	Book Chapter	
6	Introduction to Potassium Solubilizing/ Mobilization Bacteria (KSB) in Agriculture.	Book Chapter	

### **Conferences:**

- 1. Presented oral presentation on the topic 'Relevance of Humic acid on oilseed crops in different water regimes' in 6<sup>th</sup> International Conference on Advances in Agriculture Technology and Allied Sciences (ICAATAS-2023) organized by Society of Agriculture Research and Social Development, New Delhi, India and Loyola Academy, Secunderabad, Telanga, India.
- 2. Participated in oral presentation on the topic 'Humic acid and Sulphur: An approach for the betterment of oilseed crops under drought conditions' in Recent Trends in Smart and Sustainable Agriculture for Food and Nutrition Security (SSAFNS-2023) held by Lovely Professional University, School of Agriculture. Jalandhar-Delhi, GT-Road, Phagwara, Punjab.
- 3. Gave oral presentation on the topic 'Impact of Humic acid and sulphur application on growth and yield of Indian mustard under variable water moisture regimes' in International Conference on Sustainable Experimentation and Modelling in Civil Engineering (SEMCE-2023) organized by School of Civil Engineering, Lovely Professional University, Punjab in association with the Department of Civil Engineering, Dr B R Ambedkar National Institute of Technology, Jalandhar.
- 4. Presented oral and poster presentation on the topic 'Impact of Sulphur on Indian Mustard under variable Hydric Strategies' in 7<sup>th</sup> International Conference on Opportunities and Challenges in Agriculture, Environmental & Biosciences for Global Development (OCAEBGD-2022) organized by Don Bosco College of Agriculture, Sulcorna, Quepem Goa Affiliated to Goa University, Goa, Agro Environmental Development Society(AEDS) Majhra Ghai, Ramur, U.P, India, College of Horticulture and Forestry Central Agricultural University Pasighat, Arunachal Pradesh, School of Environment and Sustainable Development, Central University of Gujarat, Gandhinagar, India.
- **5.** Participated in the Conference cum International Buyer Seller Meet of Agriculture-Horticulture Products held at D.K State Convention Hall, Itanagar, Arunachal Pradesh in collaboration with APEDA and Ministry of Commerce and Industry, Govt. of India.

**6.** Poster presentation National Conference on "Food Security Issues and Environmental Challenges for Indian Agriculture in the next decades" jointly organised by National Environmental Science Academy (NESA), New Delhi and Dolphin (PG) College of Science & Agriculture, Chandigarh-Sirhind State Highway 12-A, Chunni Kalan, Fatehgarh Sahib, Punjab on 19-20 November, 2016 at University Auditorium, Punjab University, Chandigarh.

#### **Training and Workshops:**

- Statistical and software-based data analysis for research applications
- National Workshop on Advanced Chromatographic Techniques: Theory and Applications.
- Workshop on Intellectual Property Rights (IPR) in Green Technology and Innovation
- 7-Days Hands-on Training on Agricultural Data Analysis using Statistical Tools'
- Poster presentation on one day workshop on "Modern approaches for nutritional food security and sustainability of Agriculture in North-East India" on 21 November,2019 organised by Department of Agriculture, Himalayan University.
- Training on "Post-entry Quarantine for Imported Planting Material of Horticultural Crops" on 17<sup>th</sup> September 2022, conducted by ICAR-National Bureau of Plant Genetic Resources, New Delhi.

#### **Technical Skills:**

- Software handling: R Studio, STAR, SPSS, OPSTAT and Response Surface Methodology (RSM), ORIGIN PRO 2023, Turnitin etc.
- MS-Word, MS-Excel, MS-power point
- Handling of UV-Viz spectrophotometers, Kjeldahl apparatus, Soxhlet apparatus, Centrifuge, leaf area meter, hot air oven, germinator, hot water bath, GC-MS, HPLC etc.

#### **References:**

S.no	Name	Designation and Institution	E-mail	Contact
1	Dr. Anaytullah	Associate Professor in	anaytullahsiddique@g	8318834346
	Siddique	Department of Agronomy, Lovely	mail.com	
		Professional University,		
		Phagwara, Punjab		

2	Dr. Raja	Head of Department of	rajahussain02@gmail.	9917743282
	Husain	Agriculture, Himalayan	com	
		University		
3	Dr. Wasim	Scientist, Fruit Science, ICAR-	wasimiari@gmail.com	8082023230
	Hassan Raja	CITH, Old Airfield Rangreth		
		Srinagar, Jammu and Kashmir		
		India		

<u>Declaration:</u> I hereby declare that all the information mentioned herewith is correct and true to the best of my knowledge. I understand that any misleading information will be seen as manipulation of facts and may also lead to the cancellation of my candidature.

Dr. Toko Manna

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