Curriculum Vitae of
TAPON KUMAR ROY

Mailing Address

Tapon Kumar Roy
Scientific Officer (SO)
Entomology Division
Bangladesh Rice Research Institute (BRRI)
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PERSONAL DETAILS

Father's name	:	Adhir Roy
Mother's name	:	Promoda Bala
Date of birth	:	16th October
Nationality	:	Bangladeshi by birth
Religion	:	Hindu
Marital status	:	Married
Sex	:	Male
Height	:	5′ 6″
Blood group	:	'O+'
Permanent address	:	Village:Kundopukur (sahapara), Post:Pulerhat, Post-code:5200 Upazila:Sadar, District: Nilphamari,Bangladesh
Present Address	:	Entomology Division, Bangladesh Rice Research Institute (BRRI), Gazipur, Bangladesh

FIELD OF SPECIALIZATION: Insect and Pest of Rice, Toxicology, Pesticide residue analysis, Nano-particle, Storage pests, Botanicals, Natural Enemy, Salt Stress Physiology, Soil Salinity, Rice, Leadership.

ACADEMIC QUALIFICATIONS:

Name of Examination	Duration	Year of passing	Board/University
Masters	1.5 years	2017	Hajee Mohammad Danesh Science & Technology University (HSTU), Dinajpur, Bangladesh
B.Sc. Ag. (Hons.)	4 years	2015	Hajee Mohammad Danesh Science & Technology University (HSTU), Dinajpur, Bangladesh
H.S.C.	2 years	2010	Dinajpur, Bangladesh
S.S.C.	2 years	2008	Rajshahi, Bangladesh

Biometrical analysis software/Skills:

R Studio, MSTAT-C, Polo Plus, QGIS, Statistics10, Mendele, LCMS, LCMS/MS, GCMS/MS, Microsoft Word, Microsoft Excel, Microsoft PowerPoint.

TRAINING EXPERIENCES: In country

SL	Title	Duration	Year	Venue/ Conduct
01	Research Methodology	02-15 February (14 days)	2020	Graduate Training Institute (GTI), Mymensing
02	Scientific Report Writing Training Course	11-15 October (5 days)	2020	Bangladesh Rice Research Institute (BRRI), Gazipur
03	N-27 Foundation Training Course for NARs Scientist	23 February-23 March 2020, 19 December 2020-18 March 2021 (120 days)	2020-2021	National Agriculture Training Academy (NATA), Gazipur
04	International Web Conference on Ensuring Food Safety, Security and Sustainability through Crop Protection	5-6 August (2 days)	2020	Bihar Agriculture University, India
05	Production, Processing, Conservation, Marketing of Quality Seed and Seed Law	02 Sept.	2020	Seed certified Agency, Rangpur
06	Hands on training for using high throughput phenotypic system for C4 rice research course	31 March to 1 April	2021	Bangladesh Rice Research Institute, (BRRI), Gazipur
07	Training on advanced research data management and refresh of scientific report writing	2 to 7 October	2021	Bangladesh Rice Research Institute, (BRRI), Gazipur
08	Hands on training in analytical instruments and sampling procedures	17 to 31 October	2021	Bangladesh Rice Research Institute, (BRRI), Gazipur
09	Hands on training in HPLC, LCMS and ICPOES	13 to 27 December	2021	Bangladesh Rice Research Institute, (BRRI), Gazipur
10	Modern Rice production Training	27th January to 27th March (60 days)	2022	Bangladesh Rice Research Institute, (BRRI), Gazipur
11	Rules & Regulations for Organizational Management	6 to 10 November (5 days)	2022	National Agriculture Training Academy(NATA), Gazipur
12	Rice arthropod identification from sweep net & light trap collection	24 to 26 January (3 days)	2023	Bangladesh Rice Research Institute, (BRRI), Gazipur
13	Technical Report Writing and Editing	5-7 March (3 days)	2023	Bangladesh Agriculture Research Council (BARC)
14	Hybrid Rice Cultivation and Seed Production Technologies	7-11 May (5 days)	2023	Bangladesh Rice Research Institute, (BRRI), Gazipur
15	Bioinformatics for future rice	20 April-3 May (14 days)	2024	Bangladesh Rice Research Institute, (BRRI), Gazipur

TRAINING EXPERIENCES: Abroad

SL	Title	Duration	Year	Venue/ Conduct
01	Seminar on Hybrid Rice Cultivation and Promotion for Bangladesh	11-24 July (14 days)	2024	China Ministry of Commerce & Yuan Longping Agriculture Co., Ltd

Research Experience:

*Management of rice storage pest and rice leaf folder by using botanicals.

*Management of green leaf hopper and brown plant hopper by using insecticide as seed treatment in early stage.
*Effect of temperature on growth and development of *Sitophilus oryzae* L. (Curculionidae) on polished rice
*Pesticidal residue analysis through **LCMS, LCMS/MS & GCMS/MS**
*Conservation of natural enemies through eco-engineering

SYNERGISTIC ACTIVITIES:

Monitoring insect pest and natural enemy incidence pattern using light trap and surveying farmer's field. Monitoring team member of variety development program at BRRI regional station Rangpur on PYT (Preliminary Yield Trial), RYT (Regional Yield Trial), MLT (Multi-Location Yield Trial), Bacterial Blast Resistance Rice; Long-term missing element trial for diagnosing the limiting nutrient in soil; Influence of Nitrogen and Potassium rates on performance of modern rice; Effect of planting time on growth and yield of some BRRI released Boro varieties; seedlings raising techniques through polythene covering. Team member of ALART (Advanced Line Adaptive Research Trial), PVT (Proposed Variety Trial) at BRRI regional station Rangpur and BRRI gazipur.

EXTRA CURRICULAMS:

Acted as **General Secretary** at ***Debating Society of Hajee Mohammad Danesh Science and Technology University*** in the year of 2016-17. Also acted as Joint-Secretary at ***National Debate Fedaration(NDF-BD), Bangladesh(2017-19)*** and Co-Chairman at ***National Debate Fedaration(NDF-BD), Bangladesh(2019-23).*** **Convener** at '5th NDF-BD Rangpur Divisional Debate Festival 2018'.

English Language Proficiency: The medium of instruction in Bachelor of Science (Hons.) and Master of Science (MS) was English.

EMPLOYMENT HISTORY

Post Hold	Organization	Duration
Scientific Officer (SO)	Entomology Division, Bangladesh Rice Research Institute (BRRI), Regional Station, Rangpur.	27 October 2019 to 14 January 2023
Working Scientist (Pesticide Analysis)	**Rice Analytical Laboratory (RAL),** at Bangladesh Rice Research Institute (BRRI), Gazipur	21 July 2023 to till date **(Deputation)**
Scientific Officer (SO)	Entomology Division, Bangladesh Rice Research Institute (BRRI), Gazipur	15 January 2023 to till date

MEMBERSHIP OF THE PROFESSIONAL ASSOCIATION:

Member, Krishibid (Agriculturist) Institution of Bangladesh (KIB).
Member, BRRI Scientists Association (BRRISA).
Member, Bangladesh Entomological Society (BES)
Member, Bangladesh Society of Plant Science and Technology (BSPST)

AWARDS AND HONOURS:

1. National Integrity Award 2021-22, BRRI regional station Rangpur
2. Best Worker (Scientist) Award 2020-21, BRRI regional station, Rangpur

SCIENTIFIC PUBLICATION: Total **27** (Twenty seven) Publication in both National and International Peer Review and Index journal and **3** Conference paper/poster presentation in national and international conference.

International Journal: 21 (Twenty one)

A. First Author- 09 (Nine)

1. **Roy, T. K**., Akter, S., Kabir, M. M. M., Hena, M. H., Joaty, J. Y., Uddin, A. B. M. A., Bari, M. N., Hossain, M. M., & Sannal, A. (2026). Effect of temperature on growth and development of rice weevil [*Sitophilus oryzae* (L.) (Coleoptera: Curculionidae)] on polished rice. *Agrosystems, Geosciences & Environment*, 9, e70287. https://doi.org/10.1002/agg2.70287
2. **Roy, T. K.,** Jamian, S. B., Hashim, A. B. M., Mokhtar, A. S. B., & Sannal, A. (2025). Integrated management of rice leaffolder (*Cnaphalocrocis medinalis*, Guenée), life cycle, seasonal dynamics, and sustainable control strategies. *Notulae Scientia Biologicae*, *17*(4), 12766. https://doi.org/10.55779/nsb17412766
3. **Roy, T. K.,** Biswas, Md. A., Tonmoy, S. M. M. S., Nayeem, A., Hossain, M. M., & Sannal, A. (2025). Management of Rice Leaf Folder (*Cnaphalocrocis medinalis* Guenée) in Bangladesh: Evaluating the Pesticidal Efficacy of some Botanicals an Eco-Friendly Alternative. *Journal of Natural Pesticide Research*, 100152. https://doi.org/10.1016/j.napere.2025.100152
4. **Roy, T.K.,** Akter,S., Kabir, M.M.M., Tonmoy, S.M.M.S., Sharmin, S., Riad, M.A., Rana, M.M., Biswas, M.A., Uddin, A.B.M.A., & Sannal, A. (2025). Strategic Management of Rice Stem Borer: Evaluating Tobacco Based Alternatives to Reducing Insecticide Dependency. *Scientia Agriculturea Bohemica*, 56 (3): 13, 1-13**.** https://doi.org/10.7160/sab.2025.560313
5. **Roy, T. K**., Kabir, M. M. M., Akter, S., Nayeem, A., Alam, Z., Hasan, M. R., Bari, M. N., & Sannal, A. (2024). Seasonal variations of insect abundance: Correlating growth stage-specific metrics with weather patterns in Rangpur Region, Bangladesh. *Heliyon*, *10*(18), e38121. https://doi.org/10.1016/j.heliyon.2024.e38121
6. **Roy, T. K.,** Sannal, A., Akter, S., Kabir, M.M.M., Bari, M.N., & Haque, S.S. (2024). Efficacy Assessment of Different Botanicals Against Rice Weevil (*Sitophilus Oryzae*) in Stored Rice: Efficacy of Botanicals Against Rice Weevil in Stored Rice. *SAARC Journal of Agriculture*, *22*(2), 197–207. https://doi.org/10.3329/sja.v22i2.76521
7. **Roy, T.K**., Sannal, A., Kabir, M.M.M., Monir. N., Tareq, K.H., & Rana, M.M. (2024). Assessment of insecticidal efficacy of *Azadirachta indica* plant parts and naphthalene on rice weevil infestation in stored rice. *African and Mediterranean Agricultural Journal-Al Awamia*. 142:73-88. https://doi.org/10.34874/IMIST.PRSM/afrimed-i142.47704
8. **Roy, T. K**., Sannal, A., Tonmoy, S. M. M. S., Biswas, M. A., Nahid, M. N. I., Nayeem, A. Akter., Hasan, M. R. (2026). Yield and Trait Associations with Long-Duration Boro Rice Varieties in Northern Bangladesh using Correlation and PCA Approach. *SAARC Journal of Agriculture*, *23*(2), 43–61. https://doi.org/10.3329/sja.v23i2.80865
9. **Roy, T.K**., Sannal, A., Tonmoy, S.S., Akter, S., Roy, B., Rana, M.M., Alam, Z., & Hasan, M.R. (2024). Trait analysis of short duration boro rice (*Oryza sativa* L.) varieties in northern region of Bangladesh: Insights from heatmap, correlation and PCA. *Nova Geodesia*, *4*(2), 175 https://doi.org/10.55779/ng42175

B. Corresponding author -04 (four)

10. Biswas, M. A., Karmakar, B., Tonmoy, S. S., Tamanna, S., **Roy, T. K.** (2026). Influences of Planting Geometry on the Yield Performance of Modern Boro Rice

Variety BRRI dhan100. *Scientia Agriculturea Bohemica*, 57(1), 09. https://doi.org/10.7160/sab.2026.570109

11. Shultana, R., Zuan, A.T.K., Rana, M.M., Naher, U.A., Paul, P.L.C., Akter, M., Shupta, S.A., **Roy, T.K**. (2025). Exploring indigenous *Bacillus* spp. as a biostimulant to enhance the growth and yield of rice under glasshouse conditions. *Asian Journal of Agriculture*, 9 (1): 131-139. https://doi.org/10.13057/asianjagric/g090114
12. Uddin, A. A., Ara, A., Islam, A. S., **Roy, T. K**., Hena, M. H., Joaty, J. Y., & Akter, S. (2025). Optimizing light trap height and installation timing for effective monitoring of insect pests in rice field. *Nova Geodesia*, *5*(1), 322. https://doi.org/10.55779/ng51322
13. Biswas, M. A., Karmakar, B., **Roy, T. K**., Tamanna, S., Adil, M., Ahmed, M. N., Tonmoy, S. S., & Khalid, M. A. I. (2025). Growth and yield response of irrigated rice to nitrogen fertilizer rates in Southern Bangladesh. *Nova Geodesia*, *5*(4), 533. https://doi.org/10.55779/ng54533

C. Co-Author -08 (Eight)

14. Rana, M. M., Upama, S. A., Nahar, S., **Roy, T. K**., Shultana, R., Hossain, M. S., Chungopast, S., Islam, A. K. M. M., & Hasan, A. K. (2025). Abiotic Stress Management in Agriculture: Insights from Conservation Practices. *Egyptian Journal of Soil Science*, *65*(3), 1745-1769. doi: 10.21608/ejss.2025.414023.2319
15. Rana, Md. M., Hossain, Md. B., **Roy, T. K.,** Shultana, R., Hasan, Md. R., Naher, U. A., Biswas, J. C., & Maniruzzaman, Md. (2023). Response of yield and agronomic output of Bangabandhu dhan100 under varying sowing window in cold prone Rangpur region. *Indian Journal Of Agricultural Research, Of*. https://doi.org/10.18805/IJARe.AF-796
16. Shultana, R., Ali Tan, K. Z., Rana, M., **Roy, T. K**., Naher, U. A., Ibne Baki, M. Z., Iqbal Khan, M. A., Akter, R., Chandra Paul, P. L., Shupta, S. A., Islam, M. S., & Hasan, A. K. (2025). Exploring the impact of agricultural pesticides on soil microbes: A comprehensive review. *Egyptian Journal of Soil Science*, *65*(3):1247-1271 -. doi: 10.21608/ejss.2025.371094.2081
17. Ali, M.P., Haque, S.S., Hossain, M.M., Bari, M.N., Kabir, M.M.M., **Roy, T.K**., Dutta, J.,Howlader, M.T.H., Alam, S.N., & Krupnik, T.J. (2023). Development and demographic parameters of Fall Armyworm (*Spodoptera frugiperda* J.E. Smith) when feeding on rice (*Oryza sativa*). *CABI Agriculture and Bioscience* **4**, 29 (2023). https://doi.org/10.1186/s43170-023-00162-6
18. Akter, S., **Roy, T.K**., Haque, M.M., and Alam, Z. (2024). Effective multidimensional treatment identification of different chemical fertilizers: Response of insect dynamics and rice production. *Heliyon, 10 (11), E32567*. https://doi.org/10.1016/j.heliyon.2024.e32567
19. Alam, Z., Akter, S., Khan, M. A. H., Amin, M. N., Karim, M. R., Rahman, M. H. S., Rashid, M.H., Rahman, M.M., Mokarroma, N., Sabuz, A.A., Alam, M.J., **Roy, T.K.,** Rahaman, E.H.M.S., Ali, M.A., Chanda, D., Sarker, U. (2024). Multivariate analysis of yield and quality traits in sweet potato genotypes (*Ipomoea batatas* L.). *Scientia Horticulturae*, 328, 112901. https://doi.org/10.1016/j.scienta.2024.112901 (Indexing: Scopus, IF:8.6)
20. Rana, M.M., Hossain, M.B., **Roy, T.K.,** Shultana, R., Hasan, M.R., Naher, U.A., Biswas, J.C. and Maniruzzaman, M. (2023). Response of Yield and Agronomic Output

of Bangabandhu dhan100 under Varying Sowing Window in Cold Prone Rangpur Region. *Indian Journal of Agricultural Research.* DOI: 10.18805/IJARe.AF-796

21. Kabir, M.M.M., Ali, M.P., Datta, J., Topy, S.N., Debonath, A., Nasif, S.O., **Roy, T.K.,** and Uddin, A.B.M.A. (2023). Period of effective catching of insect pests and natural enemies in light traps. *International Journal of Agricultural and Applied Sciences, 4(1)*: 12-16. https://doi.org/10.52804/ijaas2023.412

National Journal: 06 (Six)

D. First Author-03 (Three)

22. **Roy, T.K**., Sannal, A., Akter, S., Tonmoy, S., Chakrobarty, T., Hasan, M., & Bari, M. (2023). Pesticidal effect of naphthalene and different botanicals against anguimous grain moth (*Sitotroga cerealella*). *Bangladesh Journal of Scientific and Industrial Research*, *58*(3), 155–162. https://doi.org/10.3329/bjsir.v58i3.66797
23. **Roy, T.K.,** Tonmoy, S.M.M.S., Sannal, A., Akter, S., Tarek, K.H., Rana, M.M., and Hasan, M.R. (2022). Yield performance of some short duration high yielding rice varieties during boro season in northern region of Bangladesh. *International Journal of Natural and Social Sciences,9*(4): 15-21. DOI: 10.5281/zenodo.7877953
24. **Roy, T.K.,** Hasan, Md., Pramanik, S., & Sikder ,S. (2021). Yield performance of rice varieties under NaCl induced salinity stress in boro season. *Journal of Science and Technology (Dinajpur),* 19: 40-51. https://jst.hstu.ac.bd/assets_vcc/files/vol_19/JST_19_21_5.pdf

E. Co-Author-03 (Three)

25. Bari M.N, Haque S.S., Nowrin, F., Ali, M.P., Kabir, M.M.M, Akter, S., **Roy, T.K.,** and Afrin, S. (2025). Eco-Engineering for Managing Insect Pests in Rice Fields. *Bangladesh Rice Journal*, *27*(1), 49–60. doi.org/10.3329/brj.v27i1.77723
26. Badshah, M. A., Hasan, M. R.., **Roy, T. K.**, & Rahman, M. A. (2023). Effect of Polythene Covering on Seedling Quality and It's Carryover Effect on Field Duration and Grain Yield of Rice. *Bangladesh Rice Journal*, *26*(1), 59–68. https://doi.org/10.3329/brj.v26i1.66595
27. Tonmoy, S. M. M. S., **Roy, T. K.,** Sannal, A., Razu, M. A. U., & Rana, M. M. (2024). Determination of Optimum Nitrogen Level for Maximizing Yield of Two HYV Boro Rice Varieties in Bogura Region, Bangladesh. *Bangladesh Agronomy Journal*, *26*(2), 41–48. https://doi.org/10.3329/baj.v26i2.76336

Conference Paper/ Poster Presentation: **3 (Three)**

1. **Roy, T. K.,** Sannal, A., & Akter, A. (2023). Yield performance and correlation coefficient of some long duration high yielding rice (*Oryza sativa* L.) Varieties during boro season in northern region of bangladesh. International Rice Congress. 16 October, 2023. Manila, Philippines. https://doi.org/10.5281/zenodo.10399822
2. **Roy, T. K.,** Sannal, A., & Bari, M. N. (2023). Pesticidal Effect of Different Botanicals and Chemical against Anguimous grain moth (*Sitotroga cerealella*). International Rice Congress. 16 October, 2023. Manila, Philippines. https://doi.org/10.5281/zenodo.10399154
3. **Tapon Kumar Roy**, Anamika Sannal, Mir Md Moniruzzaman Kabir, Sanjida Akter, Abu Nayeem, Zakaria Alam, Md Rokebul Hasan & Md Nazmul Bari. (2024). Seasonal variations of insect abundance: correlating growth stage-specific metrics with weather patterns in rangpur region, Bangladesh. International Conference on Entomological

research and development in last fifty years: Challenges and way forward. Bangladesh Entomological society, BARC, Dhaka. 9 March, 2024

Leaflet/book: 2 (two) Leaflets)

1. Ways for yield maximization of Boro rice in Rangpur-Dinajpur region. Dr. Adil Badshah, Md. Rokebul Hasan, **Tapon Kumar Roy**. June 2020
2. Ways for yield maximization of T Aman rice in Rangpur-Dinajpur region. Dr. Md. Rokebul Hasan, Anowara Akter, **Tapon Kumar Roy** & Md. Khalid Hasan Tareq. June 2022

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(TAPON KUMAR ROY)

(17.01.2026)