

	Dr. Biswa Ranjan Maharana
	Scientist
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Educational Qualifications	<p>2015 Ph.D. Vety. Parasitology, ICAR-IVRI, Izatnagar, U.P. 2009 M.V.Sc., Vety. Parasitology, ICAR-IVRI, Izatnagar, U.P. 2006 B.V.Sc. & A.H., COVS, OUAT, Bhubaneswar</p>
Employment Details	<p>Scientist, HPVK, LUVAS, Karnal 23.05.2016 -Continuing Assistant Professor, JAU, Junagadh 11.8.2011 to 19.05.2016</p>
Research Interests	<ol style="list-style-type: none"> 1. Molecular epidemiology, systematics and evolution of parasites 2. Molecular and Immunodiagnosics
Membership of scientific societies	<ol style="list-style-type: none"> 1. Life member of Indian Association for Advancement of Veterinary Parasitology 2. Life member of Indian Society of Parasitology 3. Life member of Indian Veterinary Council. 4. Life member of Haryana Veterinary Council. 5. Life member Alumni Association, LUVAS, Hisar. 6. Life member of Laboratory Animal Sciences Association of India 7. Life member of Indian Buffalo Congress 8. Life member of World Association for Advancement of Veterinary Parasitology
Selected Publications	<ol style="list-style-type: none"> 1. Maharana B R, Sudhakar N R, Jawalagatti V, Saravanan B C, Blake D P, Tewari A K. (2020). Evaluation of the Immunoprotective Potential of Recombinant Paraflagellar Rod Proteins of <i>Trypanosoma evansi</i> in Mice. <i>Vaccines</i> 8: 84. NAAS rating: 10.09 2. Maharana B R, Rao J R, Tewari A K, Singh H, Allaie I M, Varghese A. (2014). Molecular Characterization of Paraflagellar Rod Protein Gene (PFR) in <i>Trypanosoma evansi</i>. <i>Journal of Applied Animal Research</i> 42 (1): 1-5. NAAS rating:8.29 3. Maharana B R, Potliya S, Ganguly A, Bisla R S, Mishra C, Ganguly I. (2020). First report of the isolation and phylogenetic characterization of equine <i>Setaria digitata</i> from India based on mitochondrial COI, 12S rDNA, and nuclear ITS2 sequence data. <i>Parasitology Research</i> 119 (2): 473-481. NAAS rating:8.29 4. Maharana B R, Gupta S, Gupta S, Ganguly A, Kumar B, Bisla R S. (2021) First report of molecular and phylogenetic analysis of <i>Physaloptera praeputialis</i> in naturally infected stray cats from India. <i>Parasitology Research</i>. https://doi.org/10.1007/s00436-021-07163-2. NAAS rating:8.29 5. Kumar B, Maharana B R*, Brahmabhatt N N, Thakre B J, Parmar V L. (2021). Development of a loop-mediated isothermal

amplification assay based on RoTat1.2 gene for detection of *Trypanosoma evansi* in domesticated animals. *Parasitology Research* **120**: 1873–1882. **NAAS rating:8.29**

6.Nangru A, **Maharana BR**, Vohra S, Kumar B. (2022). Molecular identification of *Theileria* species in naturally infected sheep using nested PCR-RFLP. *Parasitology Research*. 121(5):1487-1497. doi: 10.1007/s00436-022-07489-5 **NAAS rating:8.29**

7.Nangru A, **Maharana BR**, Vohra S, Kumar B, Ganguly A. (2022). Molecular Detection and Differentiation of Different Theileria Species in Naturally Infected Goats Using Nested PCR-RFLP: A First Report from Northern India. *Acta Parasitologica* **NAAS rating:7.44**

Publications

- Research paper: **50**
- Review article: **09**
- Book:**04**
- Book chapter in training manual: **33**
- Laboratory manual: **08**
- Lead paper: **06**
- Invited lectures: **37**
- Gene bank Sequence: **>40**
- Popular Articles: **11**
- Pamphlets: **01**
- Posters: **05**
- Radio/TV talk: **02**
- National/International conferences attended: **12**
- Professional training attended: **07**
- Papers/ Abstracts in National Conferences/Seminars: **40**
- Awards/ Honours in conferences: **30**
- Reviewers of referred national/international journals: **12**

Awards/ Fellowships/Recognition received

1. First rank/highest OGPA in Master's degree in Veterinary Parasitology, 2009.
2. First rank/highest OGPA in Ph.D. in Veterinary Parasitology, 2015.
3. Awarded ICAR-JRF for pursuing M.V.Sc. degree programme, ICAR-IVRI (2007-2009).
4. Awarded ICAR-SRF for pursuing PhD degree programme (2009-2011).
5. Awarded CSIR-JRF (2009).
6. University Merit Scholarship during B.V.Sc. & A.H programme 2000-2005.
7. Best Scientist Award in Veterinary Parasitology by IMRF, Chandigarh, 2017.
8. DBT-CTEP international travel grant fellowship award by DBT, Govt. India, 2017.
9. Qualified National Eligibility test by CSIR, 2009
10. Qualified National Eligibility test by ASRB in Veterinary Parasitology, 2010.
11. Ahluwalia Memorial Best Article Award by IAAVP in 2011.

12. Best Poster award by XXII National Symposium at Mathura in 2012.
13. Best Poster award by XXIV National Symposium at Manuty in 2014.
14. Best Oral presentation award by XXV National Symposium at Chennai in 2016.
15. Best Poster award by XXV National Symposium at Chennai in 2016.
16. Best Oral Presentation at XXVI NCVP and International symposium, Shivamoga 2017.
17. Best Oral Presentation at XXVIII NCVP and International symposium, Tirupati 2019
18. Best Poster Presentation at XXVIII NCVP and International symposium, Tirupati 2019
19. Best Oral Presentation at XIX NCVP and International symposium, Jabalpur 2020
20. Conferred First Prize in Induction Training Programme organized by Director HRM, LUVAS.
21. Best presentation award at 3rd convention of SVBBI, LUVAS, Hisar, 2018.
22. Executive member, Indian Association for Advancement of Veterinary Parasitology, 2020
23. Member of National Academy of Veterinary Science, 2020
24. Certificate of Appreciation for the research work on 'Assessment of irradiation attenuated *T.evansi* induced protective immune response in murine & rabbit model' at 26th International conference of WAAVP, Kualalumpur, Malaysia, 4-8th Sept. 2017.
25. Certificate of Appreciation for the research work on 'Assessment of comparative immunoprophylactics efficacy of gamma irradiated *T.evansi* and recombinant PFR in murine model' at 26th International conference of WAAVP, Kualalumpur, Malaysia, 4-8th Sept. 2017.
26. Appreciation certificate from worthy Vice-chancellor, LUVAS, Hisar as front line animal welfare worker during COVID19 pandemic.
27. Awarded as Associate Fellow of National Academy of Dairy Science (India), since 2019
28. Awarded '**Dr. V. S. Alwar Best Research Article Award**' by Indian Association for advancement of Veterinary Parasitology during XXX NCVP and symposium at college of Veterinary Science & A.H., Parbhani, Dec. 2021.
29. Acting as rapporteur/co-chairman in various technical/scientific sessions
30. Best poster presentation award at XXX NCVP and symposium at college of Veterinary Science & A.H., Parbhani, 14th to 16th Dec. 2021.

Detailed List of Publications

Research Papers

1. **Maharana B R**, Sudhakar N R, Jawalagatti V, Saravanan B C, Blake D P, Tewari A K. (2020). Evaluation of the Immunoprotective Potential of Recombinant Paraflagellar Rod Proteins of *Trypanosoma evansi* in Mice. *Vaccines* 8: 84. **NAAS rating: 10.09**
2. **Maharana B R**, Rao J R, Tewari A K, Singh H, Allaie I M, Varghese A. (2014). Molecular Characterization of Paraflagellar Rod Protein Gene (PFR) in *Trypanosoma evansi*. *Journal of Applied Animal Research* 42 (1): 1-5. **NAAS rating:8.29**
3. **Maharana B R**, Potliya S, Ganguly A, Bisla R S, Mishra C, Ganguly I. (2020). First report of the isolation and phylogenetic characterization of equine *Setaria digitata* from India based on mitochondrial COI, 12S rDNA, and nuclear ITS2 sequence data. *Parasitology Research* 119 (2): 473-481. **NAAS rating:8.29**
4. **Maharana B R**, Gupta S, Gupta S, Ganguly A, Kumar B, Bisla R S. (2021) First report of molecular and phylogenetic analysis of *Physaloptera praeputialis* in naturally infected stray cats from India. *Parasitology Research*. <https://doi.org/10.1007/s00436-021-07163-2>. **NAAS rating:8.29**
5. Kumar B, **Maharana B R***, Brahmabhatt N N, Thakre B J, Parmar V L. (2021). Development of a loop-mediated isothermal amplification assay based on RoTat1.2 gene for detection of *Trypanosoma evansi* in domesticated animals. *Parasitology Research* **120**: 1873–1882. **NAAS rating:8.29**
6. Nangru A, **Maharana BR**, Vohra S, Kumar B. (2022). Molecular identification of *Theileria* species in naturally infected sheep using nested PCR-RFLP. *Parasitology Research*. 121(5):1487-1497. doi: 10.1007/s00436-022-07489-5 **NAAS rating:8.29**
7. Nangru A, **Maharana BR**, Vohra S, Kumar B, Ganguly A. (2022). Molecular Detection and Differentiation of Different *Theileria* Species in Naturally Infected Goats Using Nested PCR-RFLP: A First Report from Northern India. *Acta Parasitologica* **NAAS rating:7.44**
8. Ganguly A, **Maharana B R**, Ganguly I. (2020). Pentaplex PCR assay for rapid differential detection of *Babesia bigemina*, *Theileria annulata*, *Anaplasma marginale* and *Trypanosoma evansi* in cattle. *Biologicals*, 63: 81-88. **NAAS rating:7.80**
9. **Maharana B R**, Rao J R, Tewari A K, Singh H. (2011). Isolation and characterization of Paraflagellar rod like protein gene (PFR1) in *Trypanosoma evansi* and its conservation among other kinetoplastids. *Indian Journal of Animal Research* 45(4):283-288. **NAAS rating:6.44**
10. **Maharana B R**, Ganguly A, Bisla RS, Kumar A, Potliya S, Arora D. (2018) Development of a duplex PCR assay for simultaneous detection of *Babesia bigemina* and *Theileria annulata* infections in cattle. *Indian Journal of Animal Sciences* 88 (4): 402-406. **NAAS rating:6.32**
11. **Maharana B R**, Ganguly A, Bisla RS, Kumar A, Potliya S, Arora D. (2019) Direct PCR-RFLP based detection and differentiation of *Anaplasma* species in naturally infected goats of eastern Haryana, India. *Indian Journal of Animal Sciences* 89 (4): 385-389. **NAAS rating:6.32**
12. Agrawal V, Das D, **Maharana B R**, Jayraw A, Shakya M, Jatav G P, Jamara N. (2021). First molecular study of caprine *Trypanosoma evansi* infection in central India. *Indian Journal of Animal Research*. 10.18805/IJAR.B-4484. **NAAS rating:6.44**
13. **Maharana B R**, Kumar B, Prasad A, Patbandha T K, Sudhakar N R, Joseph J P, Patel B R. (2016) Prevalence and assessment of risk factors for haemoprotozoan infections in cattle and buffaloes of South-West Gujarat, India. *Indian Journal of Animal Research* 50(5):733-739. **NAAS rating:6.44**
14. **Maharana B R**, Kumar B, Joseph J P, Patbandha T K. (2019) A comparative analysis of microscopy and PCR based detection methods for *Babesia* and *Trypanosoma* infecting bovines and assessment of risk factors. *Indian Journal of Animal Research* 53: 382-387. **NAAS rating:6.44**
15. Ganguly A, **Maharana B R**, Ganguly I, Kumar A, Potliya S, arora D, Bisla R S. (2018). Molecular diagnosis and hematobiochemical changes in *Anaplasma marginale* infected dairy cattle. *Indian Journal of Animal Sciences*, 88 (9): 989-993. **NAAS rating:6.32**

16. Panigrahi P N, Dey S, **Maharana B R**, Mahajan S, Dan A. (2018) Diminazeneaceturate attenuates oxidative/nitrosative imbalance in rats experimentally infected with *T.evansi* steel. Indian Journal of Experimental Biology, 56: 812-819. **NAAS rating:6.82**
17. Kumar B, **Maharana B R**, Prashad A, Joseph J P. and Patel B R. (2017). Incidence of *Buxtonella Sulcata* in Jaffrabadi buffaloes of South-Western Gujarat, India. Buffalo Bulletin 36 (4): 623-628. **NAAS rating:6.17**
18. Singh H, Tewari A K, Mishra A K, **Maharana B R**, Rao J R., Raina O K. (2011) Molecular cloning, comparative sequence analysis and prokaryotic expression of GRA5 protein of *Toxoplasma gondii*. Indian Journal of Animal Sciences, 81 (3): 209-215. **NAAS rating:6.32**
19. Singh H, Tewari A K, Mishra A K, **Maharana B R**, Rao J R. (2013). A purified tachyzoites protein based ELISA for the sero-surveillance of *Toxoplasma gondii* specific antibodies in domestic ruminants. Indian Journal of Animal Sciences, 83 (1):20-23. **NAAS rating:6.32**
20. Raina O K., Nagar G., Varghese A., Gopinath P., Alex A., **Maharana B R**, Joshi P. (2011) Lack of protective efficacy in buffaloes vaccinated with *Fasciola gigantica* leucine aminopeptidase and peroxiredoxin recombinant proteins. Acta tropica, 118: 217-222. **NAAS rating: 9.11**
21. Varghese A, Raina O K, Nagar G, Garg R, Banerjee P S., **Maharana B R**, Justin D. K. (2012) Development of cathepsin-L cysteine proteinase based Dot-Enzyme Linked Immunosorbent assay for the diagnosis of *Fasciola gigantica* infection in buffaloes. Veterinary Parasitology, 183:382-385. **NAAS rating: 8.74**
22. Ganguly A, Bisla R S, Singh H, Vandna B, Kumar A, Kumari S, **Maharana B R**, Ganguly I. (2017) Prevalence and haemato-biochemical changes of tick-borne haemoparasitic diseases in crossbred cattle of Haryana, India. Indian Journal of Animal Sciences, 87(5): 552-557. **NAAS rating: 6.32**
23. Baithalu R K, Singh S K, Kumaresan A, Kumar S, **Maharana B R**, Mohanty T.K, Mohanty A K. Targeted transcript analysis revealed association of suboptimal expression of certain endometrial immunity-related genes with disparate uterine diseases in zebu cows. Tropical Animal Health & Production, 2019. DOI:10.1007/s11250-019-01958-3. **NAAS rating:7.56**
24. Singh Harkirat, Tewari, A K, Mishra A K, **Maharana B R**, Sudan V, Raina O K and Rao J R. (2015). Detection of antibodies to *Toxoplasma gondii* in domesticated ruminants by recombinant truncated SAG2 enzyme linked immunosorbent assay. Tropical Animal Health and Production, 47(1): 171–178. **NAAS rating:7.56**
25. Kumar A, Ganguly A, Potliya S, Thakur V, Singh H, **Maharana B R**, Arora D, Bisla R S. Hematobiochemical and clinical studies on clinical cases of rumen impaction in Murrah buffaloes. Indian Journal of Animal Research, 2019. 53(4):533-636. **NAAS rating: 6.44**
26. Shashikumar N G, Baithalu R K, Bathla S, Ali S, Rawat A P, Kumaresan S, **Maharana B R**, Singh G, Puneeth Kuamr D S, Singh S K, Singh S S, Lathwak S S, Jaiswal T K, Mohanty T K, Mohanty A K. (2019) Global proteomic analysis of water buffalo (*Bubalus bubalis*) saliva at different stages of estrous cycle using high throughput mass spectrometry. Theriogenology, 110: 52-60. **NAAS rating: 8.74**
27. Baithalu R K, Singh S K, Kumaresan A, Mohanty A K, Mohanty T K, Kumar S, Kerketta S, **Maharana B R**, Patbandha T K, Attupuram N, Agarwal S K. Transcriptional abundance of antioxidant enzymes in endometrium and their circulating levels in Zebu cows with and without uterine infection. Animal Reproduction Science. 2017. 177:79-87. **NAAS rating: 8.15**
28. Patbandha T K., Ravikala K, **Maharana B R**, Pathak R, Marandi S, Gajbhiye P U, Mohanty T K, Malhotra R. Receiver Operating Characteristic Analysis of Milk Lactose for Identification of Mastitis in Buffaloes. Indian Journal of Animal Research. 2016. 50(6):969-973. **NAAS rating: 6.44**
29. **Maharana B R**, Rao J R, Tewari A K, Singh H. Cloning and Expression of Paraflagellar Rod Protein 2(PFR2) Gene of *Trypanosoma evansi*. Journal of Veterinary Parasitology, 2011. 25 (2):118-123 **NAAS rating:4.80**
30. **Maharana B R**, Vala K B, Panigrahi P N, Behra S K. Therapeutic management of Anaplasmosis in a Jaffrabadi buffalo Indian Journal of Veterinary Medicine. 2014. 34 (2): 158-159. **NAAS rating:4.57**

31. **Maharana B R**, Kumar B, Thakre B J, Hirani N D, Patbandha T K. Alternation of haematological and serum biochemical profile in dog naturally infected with *Hepatozoon canis* in south west Gujarat, India. *Indian Journal of Veterinary and Animal Sciences Research*, 2016. 45 (3): 689-694. **NAAS rating:4.28**
32. Singh H, Tewari A K, Mishra A K., **Maharana B R**, Rao J R, Raina O K. (2011) Molecular cloning and comparative sequence analysis of open reading frame of SAG2 gene of *Toxoplasma gondii*. *Journal of Veterinary Parasitology*, 25 (2):107-112. **NAAS rating:4.80**
33. Hirani N D, Hasnani J J, **Maharana B R**, Kumar B, Patel P V, Pandya S S. (2016) Comparative Efficacy of Coccidiostats on Growth and Feed Conversion Efficiency in Broiler Birds Experimentally Infected with *E. tenella*. *Journal of Animal Research* 3(6):385-391. **NAAS rating:5.63**
34. Allaie I M, Prasad A, Sankar M, Raina O K, **Maharana B R**. (2011) Cloning and characterization of glutamate dehydrogenase gene of *Haemonchus contortus*. *Journal of Veterinary Parasitology*, 25(2):113-117. **NAAS rating:4.80**
35. Bachan M, Deb A R, **Maharana B R**, Sudhakar N R, Sudan V, Saravanan B C, Tewari A K. (2018) High seroprevalence of *Toxoplasma gondii* in goats in Jharkhand state of India. *Veterinary Parasitology: Regional Studies & Reports*, 12:61-68.
36. **Maharana B R**, Ganguly A, Arora D, Bisla R S. Development and validation of direct PCR-RFLP assay for rapid detection and differentiation of *Anaplasma* species in naturally infected goats. *Journal of Veterinary Parasitology*, 2019. 33(1): 12-21. **NAAS rating:4.80**
37. Rather H A, Din M M, Sheikh A A, Tewari A K, **Maharana B R**. (2017) PCR-RFLP based genotyping of Indian isolates of *Toxoplasma gondii*. *Journal of Parasitic Disease*, 41 (2): 551-556.
38. Sudhakar N R, Tewari A K, **Maharana B R**, Sobharani M, Venkatesha M D, Sreevastava V, Ranganatha S, Jagapur R V, Sahu S, Irungbam K, Saravanan S, Manjunathachar H V. Seroprevalence of *Trypanosoma evansi* in cattle of Karnataka. *Indian Journal of Veterinary Medicine*, 2014. 34 (2):106-110. **NAAS rating:4.57**
39. Varghese A., Raina O K, Kumar S., Kantaraja, Chandra D., Gupta S, Samanta S., Banerjee P S, Garg R, **Maharana B R**. A cell penetrating peptide in the delivery of plasmid DNA encoding *Fasciola gigantica* fatty acid binding protein in mice. *Journal of Veterinary Parasitology*, 2010. 24(2):173-179 **NAAS rating:4.80**
40. Kumar B, **Maharana B R**, Prasad A, Joseph J P, Patel B, Patel J S. (2016). Seasonal incidence of parasitic diseases in bovines of southwestern Gujarat (Junagadh), India. *Journal of Parasitic Disease*, 40(4): 1342:1346
41. Behera S K., Banerjee P S., Garg R., **Maharana B R** (2012). A case of *Babesia equi*. *Indian Veterinary Journal*, 89 (12): 87-88.
42. **Maharana B R**, Kumar B (2017). Pseudomalaria in a domestic Pigeon: A case Report. *Journal of Parasitic Disease*, 41(1): 295-297.
43. **Maharana B R**, Patel B R., Patel J S, Joseph J P. and Hirani N D. (2018). Parasitological and molecular based detection of cerebral babesiosis in a Kankrej bullock and its successful therapeutic management. *Asian Journal of Animal and Veterinary Advances* 13 (2): 122-127.
44. Kumar B, **Maharana B R**, Prasad A, Hirani N D, Joseph J P. (2015). Epidemiological survey of gastrointestinal parasites of dogs in south-western Gujarat (Junagadh), India. *Journal of Veterinary Parasitology* 29(1):50-60. **NAAS rating:4.80**
45. Samal A K, Patra P B, **Maharana B R** (2011). Simultaneous Infestation of a Buffalo calf with *Ascaris* and *Stroglyoides*: A case study. *Veterinary World*, 4(7): 322-323. **NAAS rating:4.83**
46. **Maharana B R**, Joseph J P, Thakre B J, Patel J S. (2016). Generalised demodicosis in a hypothyroid dog and its successful therapeutic management. *The Indian Journal of Veterinary Sciences and Biotechnology*, 11(4): 62-64. **NAAS rating:5.58**
47. **Maharana B R**, Kumar B, Sudhakar N R, Behera S K, Patbandha T K (2016). Prevalence of gastrointestinal parasites in and around Junagadh (Gujarat). *Journal of Parasitic Disease* 40(4): 1174-1178.

48. Rashid A, Darzi MM, Mir MS, Dar LM, Mir A, Kashani SB, **Maharana BR**, Patbandha TK, Allaie IM. (2017). Prevalence of cystic echinococcosis in Kashmir Valley, North India. *Vet Parasitol Reg Stud Reports*. 10:85-89.
49. Yadav S, Vohra S, **Maharana B R**, Gupta S. (2021) Molecular investigation on cross infection of *Babesia bigemina* and *Theileria annulata* in *Hyalomma anatolicum* and *Rhipicephalus (Boophilus) microplus* ticks. *Haryana Veterinarian* 60 (2): 263-267. **NAAS rating: 5.58**
50. Kalkal H, Sangwan A K, Vohra S, **Maharana B R** (2022). Systematic epidemiology and prevalence analysis of intestinal Ciliate *Buxtonella sulcata* in buffaloes of Haryana. *Asian Journal of Dairy and Food Research* DR-1731. **NAAS rating:5.75**

Review Published

1. Singh V and **Maharana B R**. (2018) Insight into trypanosomosis (surra) of Indian livestock: Recent Updates. *Indian Journal of Animal Sciences*, 88 (10): 1101-1111. **NAAS rating:6.32**
2. **Maharana BR**, Tewari AK, Saravanan BC, Sudhakar NR (2016) Important hemoprotozoan diseases of livestock: Challenges in current diagnostics and therapeutics: An update. *Veterinary World*, 2016. 9(5): 487-495. **NAAS rating:5.71**
3. **Maharana B R**, Panigrahi M, Baithalu R K., Parida S., Allaie I M (2010). Toxoplasmosis : Beware Of Cats. *Veterinary World*, 3(5): 247-249 **NAAS rating:4.83**
4. **Maharana B R.**, Tewari A K, Singh V (2015). An overview of kinetoplastid paraflagellar rod. *Journal of Parasitic Disease*, 39 (4): 589-595.
5. Tewari A K, **Maharana B R** (2011). Control of coccidiosis: changing trends. *Journal of Parasitic Disease*, 35(1):10-17.
6. **Maharana B R**, Panigrahi Manjit , Baithalu R K , Parida S (2010). Nanobiotechnology: A voyage to future. *Veterinary World*, 3(3): 145-147. **NAAS rating:4.83**
7. **Maharana B R**, Baithalu R K., Allaie I M (2011). Mechanism of Immunity to tick infestation in livestock. *Veterinary World*, 4(3): 131-135. **NAAS rating:4.83**
8. Baithalu R K., **Maharana B R.**, Mishra C., Sarangi S., Samal L (2010). Canine Pyometra. *Veterinary World*, 3(7): 340-342. **NAAS rating:4.83**
9. Samal L., Kumar A., Mishra C., **Maharana B R.**, Sarangi S., Baithalu R K (2011). Nutritional strategies to prevent urolithiasis in animals. *Veterinary World*, 4(3): 142-144. **NAAS rating:4.83**

Books

1. **Maharana B R**, Baithalu R K. (2017). *Vet Rapidex: A ready reckoner to Veterinary science, Animal science, Animal biochemistry and Biotechnology*, Kalyani Publisher, New Delhi, ISBN NO:978-93-272-6903-1
2. **Maharana B R**, Kumar B, Rao J R. (2013). *Vet Parasit: A question Bank*, Kalyani Publisher, New Delhi, 110002:ISBN 978-93-272-3476-3
3. **Maharana B R**, Kumar B, Allaie I M, Rao J R. (2017). *Veterinary Parasitology: A complete objective type guide*. Kalyani Publisher, New Delhi, ISBN NO:978-93-272-7635-0
4. Kumar B, **Maharana B R**. (2019). *Veterinary Parasitology: A clinical laboratory Manual*. Kalyani Publisher, New Delhi, ISBN NO: 978-93-5359-371-1

Gene Bank Submission:

- > **40 gene sequences** have been published in the NCBI GenBank database regarding molecular characterization of various economically important parasites like *Theileria annulata*, *Toxoplasma gondii*, *Haemonchus contortus*, *Trypanosoma evansi*. The accession numbers are: MN078131, MN078132, MN078133, MN153034, MN069046, FJ825705, FJ207520, FJ207519, FJ901341, FJ968743, GQ288402, GQ223790, GQ223789, GQ288401, GQ223792, GQ223791 *Theileria lestoquardi* (MZ220435.1, MZ220436.1); *Theileria ovis* (MZ220428.1, MZ220429.1); *T. luwenshuni* (MZ456813.1, MZ456814.1., MZ461926.1) and *T. annulata* (MZ220451.1), OM666861, MZ220430, OM666628, MZ220437, OM666637, OM721806.

Popular article

1. **Maharana B R**, Baithalu R K (2010). Clinical picture of trypanosomosis in livestock. *Livestock line*, pp 26-28.
2. Sarangi L, **Maharana B R**, Mishra C, Samal L, Baithalu R K (2010). Effect of climate change on zoonoses. *Livestock line*, pp 11-14.
3. **Maharana B R**, Baithalu R K, Sarangi L, Mishra C, Samal L (2010). Clinical application of nanobiotechnology: A look into future *Livestock Line*, 4(11):5-8
4. **Maharana B R**, Baithalu R K., Idrees I M., Panigrahi M., Sarangi L N., Mishra C., Samal L (2011). Role of immunostimulants in livestock. *Livestock Line*, pp 21-25.
5. **Maharana B R**, Mishra C., Baithalu R K., Panigrahi M., Sarangi L N., Idrees I M., (2009). H1N1- what does it mean? *Livestock Line*, pp 5-9.
6. Sarangi L, **Maharana B R**, Mishra C, Baithalu R K, Samal L (2010) Metagenomics-An application of genomics in identification of uncultured organisms. *Livestock Line*, pp 21-22.
7. **Maharana B R**, Sarangi L, Mishra C, Varghese A, Samal L, Baithalu R K, Samal L (2011). Peritrophic membrane: as a novel vaccine target. *Livestock Line*, pp 7-10.
8. **Maharana B R**, Panigrahi M (2010). Curbing a poignant menace. *Science reporter*, pp 45-46.
9. Sudan V, **Maharana B R**, Allaie I M (2010). Importance of parasites in detecting environmental pollution. *Livestock Line*, pp 7-9.
10. Allaie I M, **Maharana B R**, Allaie F M, Prasad A (2011). Adjuvants: Multifaceted properties for vaccines. *Livestock Line*, pp 19-21.
11. Sarangi L N, **Maharana B R**, Mishra C, Baithalu R K, Samal L (2010). *Livestock International*, pp.15-18.

Book Chapter in training/Laboratory Manual

1. Tewari A K, **Maharana B R**, Sarvanan B C, Sankar M. (2011). The Paraflagellar Rod of kinetoplastids: A novel therapeutic and prophylactic target. *Bytes and Bytes*, pp: 278-289, Bareilly, India.
2. **Maharna B R**, Kumar B and Singh V (2013). Status of Surra in India: Control problems. ASCAD training on 'Recent trends in diagnosis and control of emerging diseases of livestock' pp.39-44.
3. **Maharna B R**, Kumar B (2013). Emerging diseases of livestock and their control. ASCAD training on 'Recent trends in diagnosis and control of emerging diseases of livestock' pp.86-90
4. Kumar B, **Maharna B R** (2013). Integrated management of ectoparasites of livestock. ASCAD training on 'Recent trends in diagnosis and control of emerging diseases of livestock' pp.95-97
5. Kumar B., **Maharna B R** (2013). Diagnosis and control of theileriosis in Indian livestock. ASCAD training on 'Recent trends in diagnosis and control of emerging diseases of livestock' pp.137-142.
6. **Maharana B R**, Tewari A.K (2013). Application of Bioinformatics in identification of a novel vaccine candidate PFR in *T. evansi*. ICAR Summer school on Recent advances in bioinformatics for quality livestock production. Pp. 172-180.
7. Tewari A K, Sarvanan B C, Sudan V, **Maharana B R**, Sudhakar N R. (2013). Trypanosomosis caused by *Trypanosoma evansi*: An Insight In: Bhusan B, Gaur G K., Sharma D., Mendirata S K., Verma D., Pawde A K., Singh M., Khan T A., Patel B H M., Pandey H O., Panigrahi M (Eds.) *Livestock Management products technology and health*. Indian Veterinary Research Institute, Izatnagar, Bareilly. pp: 409-411.
8. Tewari A K, Sarvanan B C, **Maharana B R**, Sudhakar N R. Rather H A. (2013). Diagnosis of *Toxoplasma gondii*. *Molecular Biological approaches for diagnosis and control of Parasitic diseases*. Banerjee P S, Garg R, Saravanan R C, Hira ram, Tewari A K (Eds.) Indian Veterinary Research

Institute, Izatnagar, Bareilly. pp: 115-119.

9. Tewari A K, Sudhakar N R, **Maharana B R**, Rather H A, Maurya P S. (2014). Phenol chloroform extraction methods for genomic DNA isolation from parasites. In laboratory manual on Molecular Biological approaches for diagnosis and control of Parasitic diseases.pp.4-5.
10. Tewari A K, Sudhakar N R, **Maharana B R**, Rather H A, Maurya P S. (2014). Total RNA isolation from parasites by TRIZOL method. In laboratory manual on Molecular Biological approaches for diagnosis and control of Parasitic diseases.pp.6-7.
11. Thakre B J, **Maharana B R** (2015). Collection, Preservation and dispatch of biological samples for parasitological examination. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-6-10.
12. **Maharana B R**, Kumar B, Thakre B J. (2015). Recent trends in diagnosis of parasitic disease. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-6-10.
13. Thakre B J and **Maharana B R**. (2015). Qualitative and Quantitative examination of faecal sample. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-15-22.
14. Thakre B J and **Maharana B R**. (2015). Qualitative examination of faecal sample. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-23-25.
15. **Maharana B R**, Thakre B J. (2015).Status of Surra in India. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-67-72.
16. **Maharana B R**, Thakre B J. Kumar B (2015).Examination of skin scrapings, nasal scrapings and urine for diagnosis of parasitic diseases.
17. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-83.
18. **Maharana B R**, Thakre B J. (2015). Important haemoprotozoan diseases of livestock: Current Diagnostics and therapeutics. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-84-92
19. **Maharana B R**, Thakre B J. (2015). PCR and its application in parasitic disease diagnosis. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nov 2-7, 2015, pp-109-113.
20. Kumar B, Thakre B J, **Maharana B R**. (2016). Advanced techniques used for diagnosis of animal parasitic diseases. ASCAD training on Laboratory techniques for livestock disease diagnosis, Oct. 3-7, 2016, pp-195-203.
21. **Maharana B R**, Thakre B J, Patbandha T K, Patil S S. (2017) Integrated Parasitic control as means to augment animal health and productivity from Indian perspective. ASCAD training on Recent advances in Laboratory techniques for disease diagnosis in Veterinary Science Nopv 2-7, 2015, pp-1-5.
22. Tewari A K and **Maharana B R** (2017). Serodiagnosis of toxoplasmosis in Livestock: An update: An Update on Diagnosis and control of parasitic diseases Pradeep B S, Rakesh R L, Malatesh D S, Anand K J (Eds.)
23. **Maharana B R**, Singh V and Tewari A K (2018) Trypanosomosis in livestock: Current perspectives in diagnosis & control. In: Khatoon S and Vaishnava CS (ed) Parasitology Camera Lucida to omics. 1st edition, Himanshu Publications, Udaipur, Rajasthan, India, p 142-151.
24. **Maharana B R** and Kumar A (2018) Common diseases of dairy animals. Their symptoms, control, and preventive measures including vaccination and deworming. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 21st-26th May 2018 at NDRI Karnal.
25. **Maharana B R** (2018) Practical approach for ecto and endo parasite control. Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 4th -9th June 2018 at NDRI Karnal.

26. **Maharana B R** (2018) Integrated approach for control of livestock Parasitism. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 16th -21st July 2018 at NDRI, Karnal.
27. **Maharana B R** (2019). Application of qPCR/Real time PCR in Research and Diagnosis of Parasitic Diseases. In Vocational Training on “New Approaches and OMICS Tools for Identification and Control of Ticks and Tick Borne Disease”. Organised by College of Veterinary Science & Animal Husbandry, JAU, Junagadh under the aegis of NAHEP, ICAR, New Delhi, 18th to 22nd November 2019.
28. **Maharana B R** (2019). Tick borne parasitic diseases of Livestock and its diagnosis through PCR techniques. In Vocational Training on “New Approaches and OMICS Tools for Identification and Control of Ticks and Tick Borne Disease”. Organised by College of Veterinary Science & Animal Husbandry, JAU, Junagadh under the aegis of NAHEP, ICAR, New Delhi, 18th to 22nd November 2019.
29. **Maharana B R** (2019). Integrated approach for control of livestock Parasitism. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 26th -31st August 2019 at NDRI, Karnal.
30. **Maharana B R** (2020). Integrated approach for control of livestock Parasitism. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD 2020, at NDRI, Karnal.
31. **Maharana B R** (2020). Basket approach for control of parasitic diseases of livestock. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 20th -25th Sept. 2021 at NDRI, Karnal.Pp.41-49.
32. **Maharana B R** (2021). Improved Practices for Managing Parasitic Infestation in Dairy Animals.National training programme on upskilling of extension professionals in scientific dairying. Organized at Dairy Extension Division ICAR- National Dairy Research Institute (Deemed University), Karnal- 132001 (Haryana) INDIA from 20th Oct- 30th Oct. 2021 at NDRI, Karnal.pp.136-142.
33. **Maharana B R** (2022). Holistic approaches for the control of ecto and endo parasites of livestock in the age of drug resistance. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 21st -26th Feb. 2022 at NDRI, Karnal.Pp.45-51.

Practical Manual/Training Manual

1. **Maharana B R** (2011). Laboratory Manual for General Veterinary Parasitology and Helminthology (VPA 211). Department of Veterinary Parasitology, College of Veterinary Science and Animal Husbandry, JAU, Junagadh.
2. **Maharana B R** (2011). Laboratory Manual for Veterinary Entomology and Acarology (VPA-221). Department of Veterinary Parasitology, College of Veterinary Science and Animal Husbandry, JAU, Junagadh.
3. **Maharana B R**, Kumar B (2011). Laboratory Manual for Veterinary Protozoology (VPA-222). Department of Veterinary Parasitology, College of Veterinary Science and Animal Husbandry, JAU, Junagadh.
4. Binod Kumar and **Maharana B R** (2014). Laboratory Manual for General Veterinary Parasitology and Helminthology (VPA 211). Department of Veterinary Parasitology, College of Veterinary Science and Animal Husbandry, JAU, Junagadh.
5. Kumar B, **Maharana B R** (2014). Laboratory Manual for Veterinary Entomology and Acarology (VPA-221). Department of Veterinary Parasitology, College of Veterinary Science and Animal Husbandry, JAU, Junagadh.
6. Kumar B, **Maharana B R** (2014). Laboratory Manual for Veterinary Protozoology (VPA-222). Department of Veterinary Parasitology, College of Veterinary Science and Animal Husbandry, JAU, Junagadh.

Junagadh.

7. **Maharana B R**, Thakre B J, Patil S S, Padodara R J, Javia B B, Bhadania A R (Eds.). Recent advances in laboratory techniques for disease diagnosis in Veterinary Science. College of Veterinary Science & A.H., JAU, Junagadh. Pp-1-133.
8. Vohra, S., **Maharana, B.R.**, Gupta, S., Kumar, A. and Moudgil, A.D. 2020. Strategies for sustainable control of parasites of livestock, poultry and wild life and their public health significance. Department of Veterinary Parasitology, LUVAS, Hisar, 21-23rd August, pp 1-112.

Lead papers/invited Paper/Keynote Speaker in National/international Conferences/symposium

1. Tewari A K, **Maharana B R**. (2014). Molecular tools: New horizon in diagnosis of protozoan infections. XXIV National Congress, Manuthy, 5-7th Feb, page 118-122.
2. **Maharana B R**. (2017). Trypanosoma evansi and Surra: From Indian perspectives. International conference on recent trends in Agriculture, Environmental and Bioscience organized by IMRF, Chandigarh, 27-29th April, 2017.pp.
3. Singh V and **Maharana B R** (2018). Trypanosoma evansi and surra: From Indian perspectives. In XXVII NCVP & National symposium on Technologies for sustainable parasite control and redressal of detection methods directed for upliftment of rural economy being organized by Department of Veterinary Parasitology, RAJUVAS, Udaipur Rajsthan, 12-14th Feb 2018.pp. 209
4. Tewari A K and **Maharana B R** (2019). Quest for vaccine against Surra. In XXVIII NCVP & National symposium on Novel Technologies and strategies for sustainable control of parasitic diseases of livestock, poultry and public health significance. Organized by Department of Veterinary Parasitology, SVVU, Tirupati, 28th-30th Jan 2019.pp. 137-141
5. Singh V, **Maharana B R**, Rayulu V C (2019). Trypanosomosis (Surra) in Indian Livestock: A disease of serious concern. In XXVIII NCVP & National symposium on Novel Technologies and strategies for sustainable control of parasitic diseases of livestock, poultry and public health significance. Organized by Department of Veterinary Parasitology, SVVU, Tirupati, 28th-30th Jan 2019.pp.12-17.
6. **Maharana B R** (2021). Trypanosomosis (Surra): Current approaches in diagnosis, treatment and control in India. In 30th NCVP and National Symposium on Fundamentals of integrated parasite management and its relevance in one health, organised by College of Vety. Science & A.H., Parbhani, Nagpur, 14th to 16th Dec. 2021. pp. 107-112.

Radio/TV Talk

1. **Radio talk on 'पशुओं में बाह्यपरजीवी के कारण होने वाले रोग और उनका प्रबंधन' on 01.06.2021, Community Radio Station, CCS HAU, Hisar, 91.2 MHz.**
2. **Radio talk on 'आंतरिक परजीविओं से पशुओं में होने वाली बिमारियाँ एवं उनका प्रबंधन' on 01.06.2021, Community Radio Station, CCS HAU, Hisar, 91.2 MHz.**

Professional training attended outside the institution/ university

1. ICAR summer school on "Recent advances in Bioinformatics for quality livestock production" at TANVASU, Chennai, 02/05/13 to 22/05/2013(**21 days**)
2. Inception Workshop of GFD-WII-ZSL collaborative Project "Partnering to support Gir Lion conservation in Gujarat reg" (**3 days**)
3. Induction Training programme at Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar from 3.1.17 to 2.2.17 (**31 days**)
4. ICAR short course training on 'An update of molecular and advanced approaches for diagnosis of parasitic diseases in animals at ICAR-NIVEDI, Bengaluru from 2nd-11th Jan 2019. (**10 days**)
5. CAFT training programme on Application of omics tools and techniques for agriculture germplasm improvement by ICAR-IARI, New Delhi from 9th Feb-1st March, 2018.(**21 days**)
6. ICAR Short Course Training Programme on 'Advances in the management of drug resistance in economically important parasites' from 4th to 13th November 2019, organized by Division of Parasitology, ICAR-IVRI., 2019. (**10 days**)
7. Massive Open Online Course (MOOC) on Designing E learning content by ICAR-NAARM, Hyderabad from 1st to 31st July 2020 (**31 days**).

Conferences/symposium attended

1. XXX NCVP and National Symposium, Parbhani, Nagpur, 14-16th Dec, 2021.
2. XXIX NCVP and National Symposium, NDVSU, Jabalpur, 05-07th Feb, 2020.
3. XXVIII NCVP and National Symposium, SVVU, Tirupati, 28th-30th Jan, 2019.
4. 3rd Convention and National Symposium, SVBBI, Dept. of physiology & Biochemistry, LUVAS, Hisar, 2nd-3rd Nov. 2018
5. 26th International Conference of WAAVP in conjugation with 53rd MSPTM at Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia, 4th-8th Sept. 2017
6. XXVI NCVP and international symposium, Shivamoga, Karnataka Feb 15-17th, 2017
7. International Conference on Recent trends in agriculture, Veterinary & Life sciences, Goa Feb 02-04, 2017
8. XXV NCVP & National Symposium, TANUVAS, Feb. 17th-19th 2016.
9. XXII IAAVP and National symposium, DUVASU, Mathura, 15th -17th March, 2012.
10. XXNCVP and National Symposium, CCSHAU Hisar, 18th-20th Feb, 2010
11. XIX National congress of Veterinary Parasitology and National Symposium, GADVASU, Ludhiana, 3rd to 5th Feb. 2009.
12. X international Symposium on vector and vector borne diseases, Goa, 4th-6th Nov. 2009

Invited Lectures delivered at Farmer's/Entrepreneurs Training/ Meetings

1. Invited as eminent speaker to deliver lecture on 'Integrated control and management of ectoparasites in farm animal' in 21 days Advance National Training Programme (ANTP-2021) on "Strategies for one health approach to parasitic diseases" organised by NDVSU, Jabalpur, from 09th to 29th November, 2021.
2. Delivered lectures on the topic 'Basket approach for control of parasitic diseases of livestock'. Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 20th -25th Sept. 2021.
3. Invited as eminent speaker to deliver lecture on 'Implications of dietary nutritional supplements to combat livestock parasitism' Advanced dairy animal nutrition management: The way Forward' organised by Dept. of Animal Nutrition, ICAR-NDRI under NAHEP, ICAR during 22 to 27 Nov, 2021.
4. Invited as eminent speaker to deliver a lecture on 'Common diseases of dairy animals: their symptoms, control and preventive measures including vaccination and deworming' under Students READY Rural Dairy Work Experience programme organized by Dept. of Dairy Technology, ICAR-NDRI during September 24 - October 23, 2021.
5. Invited as technical expert to deliver lectures under Institutional Development plan, ICAR by Veterinary College, JAU, Junagadh during 18th- 22nd Nov. 2019.
6. Invited as technical expert to deliver lecture on remedial courses under IDP-NAHEP by SQUAST-K, 2020.
7. Delivered lectures on the topic 'Improved Practices for Managing Parasitic Infestation in Dairy Animals' in National training programme on upskilling of extension professionals in scientific dairying. Organized at Dairy Extension Division ICAR- National Dairy Research Institute (Deemed University), Karnal- 132001 (Haryana) INDIA from 20th Oct- 30th Oct. 2021.
8. Delivered lectures on the topic 'Holistic approaches for the control of ecto and endo parasites of livestock in the age of drug resistance' in Entrepreneurship development Programme on Commercial Dairy Farming being organized by National Dairy Research Institute, SINED TBI/BPD from 21st -26th Feb. 2022.

9. Delivered lectures on the topic 'Holistic approach for control of Parasitic diseases of Livestock' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 3rd to 9th April, 2021.
10. Delivered lectures on the topic 'Holistic approach for control of Parasitic diseases of Livestock' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 16th to 22nd Jan, 2021.
11. Delivered lectures on the topic 'Holistic approach for control of Parasitic diseases of Livestock' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 24th to 30th October 2020.
12. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 17th to 23rd September 2019.
13. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 23rd to 29th Nov. 2019.
14. Delivered lectures on the topic 'Control of ecto and endo parasites of pigs' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 14th to 20th October 2019.
15. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 9th to 15th July 2019.
16. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 27th March to 2nd April 2019.
17. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 15th to 21st May 2019.
18. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 28th Jan to 2nd Feb. 2019.
19. Delivered lectures on the topic 'Parasitic diseases: Practical approach for control of ecto and endo parasites' in Vocational Dairy Farming training organized by LUVAS at HPVK, Karnal from 22nd to 28th Nov. 2018.
20. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 1st to 6th Feb 2021.
21. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 2nd to 7th Nov. 2020.
22. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 16th to 25th March. 2020.
23. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 21st to 26th Sept. 2020.
24. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 14th to 19th Oct. 2019.
25. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 26th to 31st August 2019.
26. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 15th to 20th July. 2019.

27. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 17th to 22nd June. 2019.
28. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 22nd to 27th April. 2019.
29. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 25th to 30th March. 2019.
30. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 17th to 22nd December 2018.
31. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 1st to 6th October. 2018.
32. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 20th to 25th August 2018.
33. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 2nd July to 31st July 2018.
34. Delivered lectures on the topic 'Integrated approaches for control of livestock parasites' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 16th to 21st July 2018.
35. Delivered lectures on the topic 'Practical approach for ecto and endo parasitic control' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from from 4th to 9th June 2018.
36. Delivered lectures on the topic 'Common diseases of dairy animals: Their symptoms, control and preventive measures including vaccination and deworming' in Commercial Dairy Farming organized by SINED/BPD unit, NDRI from 21st to 26th May 2018.
37. Invited as technical expert to deliver lecture on 'Common Parasitic Diseases of equine' under Equine Management Training on 13th March 2013 at Horse Breeding Farm, Junagadh, Gujarat.

Reviewers of referred National/International Journal

1. Journal of Equine Veterinary Science, Elsevier
2. Veterinary Parasitology: Regional Studies and Reports, Elsevier
3. Ticks and Tick Borne Diseases, Elsevier
4. International Journal of Livestock Research, eJManager
5. BMC Veterinary Research, Springer
6. Journal of Parasitic Disease, Springer
7. Helminthologia, Sciendo
8. BioMED Research International, Hindawi
9. The Haryana Veterinarian, Indian Journals
10. Journal of Veterinary Parasitology, Indian Journals
11. Indian Veterinary Journal
12. Acta Tropica, Elsevier

