## **Curriculum Vitae**

#### **Deepak Sumbria**

**Permanent Address:-** Dr. Deepak Sumbria S/O Sh. Narain Datt. Ward Number 10, Near Old Bus Stand, Teh & Distt:- Kathua. Pin. No:-184101,

State:- Jammu & Kashmir (J&K), India.

**Mobile:** +91-9906070221 (Personal), +91-9419226826 (Home)

**Landline home:** 01922-236588

E-mail: deepak\_sumbria@yahoo.com, sumbria.deepak31@gmail.com

**Personal Specification:** 

Father's Name: Sh. Narain Datt Date of Birth: 09 Sept, 1984 Languages Proficiency:

English, Hindi, Chhattisgarhi, Punjabi, Dogri, French.

Marital Status: Single Nationality: INDIAN

Personality and Traits: Independent, Ambitious, Able To Follow Deadlines, Good

Communication and Interpersonal Skills, Hardworking, Great Adaptability



**OBJECTIVE:** A challenging position in Veterinary professional organization where I can exchange my skills and Strength in conjunctions with company/institutional goal and objectives.

## Educational Qualification:

Examination	Division/ Grade	% of marks / O.G.P.A.	Year of passing	Subject(s) with Major field of specialization	Institution/Board / University	Rank/Medal/Awa rd, if any
Matriculation	Second	57.10	2000	Mathematics, Social Studies, Science, English, Hindi	Army School, Janglote/CBSE	-
Intermediate	First	70.33	2002	Biology, Physics, Chemistry & English	Cosmic Heart Senior Secondary School, Kathua/JKBOSE	-
Bachelor's Degree	Second	69.60/6.96	2008	All subject as per VCI guidelines	COVS-IGKV, Chhattisgarh	-
Master's Degree	First	85.15/8.15	2010	Veterinary Parasitology	COVS-IGKV, Chhattisgarh	Departmental topper
Doctorate Degree	First	79.40/7.40	2015	Veterinary Parasitology	GADVASU, Punjab	University Fellowship
NET	Qualified	69.00/-	2014	Veterinary Parasitology	ICAR/ASRB	-

## Others Short-term Course/Programs Completed:

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S.No	Short-term course/Exams/Programs/Traini ngs	Status	Duration	% of marks	Institution/Board/Universit y				
1	Training for Civil Defense	Completed	05-05-2001 to 16-05-2001	NA	Home Guard-cum-Civil Defense Organization-Jammu				
2	Training by National Institute of Agricultural Extension  Management	Completed	20-08-2010 to 25-10-2010	NA	MANAGE (India)				
3	Advances in the knowledge of	Completed	26-09-2011 to	NA	EMBRAPA (Brazil)				

	parasite resistance of ruminant		07-10-2011		
	hosts and parasites				
	International workshop on	Workshop	08-02-2016 to		The University of Sydney, Charles Sturts University
4	"Diseases Prioritization and Risk	completed	12-02-2016	NA	Wagga Wagga and
	Analysis"	r			GADVASU
		Qualified			
5	French Language	(PhD extra	2015	NA	Punjab Agricultural
3	Trenen Language	language	2013	IVA	University-Punjab
	ı	course)			
6	Punjabi Language	Qualified	2016	48%	Punjab school education board

<sup>\*</sup>Not Applicable

# Details of Employment and Nature of Duties:

S.No	Details of	Duration		Nature of Duties/Name of Project if any	
3.110	<b>Employment</b>	From	To	Nature of Duties/Name of Project if any	
1.	Teaching Associate	02-04-2016	Continue	Conduction of theory and practical classes of B.V.S.c & A.H 2 <sup>nd</sup>	
	(PGIVER- Rajasthan)			year (VPA)	
2.	Senior Research Fellow	06-01-2016	01-04-2016	Conduction of PCR, RT-PCR, etc on the concerned bacterial	
	(GADVASU-Punjab)			infection (Evaluation of diagnostic assays for quicker diagnosis of	
				Mycobacterial infection in cattle and buffalo)	
	Senior Research Fellow	24-11-2010	19-01-2012	Conduction of in-vitro and in-vivo on egg parasitic fungi	
3.	(IGKV-Chhattisgarh)			(Biological control of trematodosis in livestock by egg parasitic	
				fungi as a component of integrated parasite management, by	
				Department of Science and Technology (D.S.T), New Delhi,	
				India)	

# Distinctions/Prizes/Awards/Medals/Honors/ Recognition, etc:

S.N	Particulars	Year	Subject context	Place	Remarks
1	Best poster award (1st Position)	2016	Molecular detection of  Mycobactrium avium subsp.  paratuberculosis in cattle and buffalo tested for bovine tuberculosis	15 <sup>th</sup> Convocation of National Academy of Veterinary Science. Khalsa College of Veterinary and Animal Science, Punjab	Certificate of award
2	Completion of course at BRAZIL	2011	Advances in the knowledge of parasite resistance of ruminant hosts and parasites	EMBRAPA (Brazil)	Out of 24 foreign world wise only first candidate selected from India with international grant for air-travel and stay (Certificate)
3	Departmental topper for M.V.Sc.	2008	Veterinary Parasitology	COVS-IGKV, Chhattisgarh	-
4	University Fellowship	2014	Veterinary Parasitology	GADVASU, Punjab	Certificate
5	National Level Mathematics Aptitude Test (Rohtak)	1996	National level mathematics aptitude test	Bright Career Rohtak	Certificate
6	Relief to the needy aged	-	Relief to the needy aged	HelpAge India	Certificate of effort
5	Reviewer of paper (1 in nos.)	2016	Agriculture, Ecosystems and Environment	Elsevier (Impact Factor- 4.23)	Certificate from Editors

6	Reviewer of paper (1 in nos.)	2016	Veterinary Parasitology	Elsevier (Impact Factor- 2.72)	Certificate from Editors
7	Reviewer of paper (1 in nos.)	2016	Virology & Antiviral Research (ISSN: 23248955)	Scitechnol	Certificate under process
7	Official Reviewer	2015	Indian Journal of Animal Research (NAAS rating-6.04)	Agricultural Research Communication Centre	Reviewed 1 papers
8	Official Reviewer	2015	Applied Biological Research (NAAS rating-4.35)	Centre for Advancement of Applied Sciences	Reviewed 5 papers
9	Nominated as Editorial Board Member	2016	International Journal of Vaccine and Technology	Clyto Access (Chicago-USA)	On Journal website (Certificate under process)
10	Nominated as Associate Editor	2016	International Journal of Entomology Research (ISSN- 24554758)	AkiNik Publications	Certificate of Publisher
11	Nominated as Associate Editor	2016	Journal of Entomology and Zoology Studies (ISSN: 23207078)	AkiNik Publications	Certificate of Publisher

<sup>\*</sup>International Standard Serial Number

## Research experience:

- Worked on Master's Thesis entitled as- "Studies on strain improvement of predacious Fungi: Generation and characterization of Mutant Strains".
- ➤ Worked on PhD Thesis entitled as "Studies on diagnosis and haematobiochemical alterations in Theileriosis of Equines in Punjab".

Summary of Publications/Tours

Total Research Papers (International/National)	Total Review Paper (International/National)	Popular Articles	Total Abstracts Published (International/National)	Books/Manuals Published	Foreign Tour (Country)
14: 7 (International); 7 (National)	<b>6:</b> 3 (International); 3 (National)	1 (National)	8: 2 (International); 6 (National)	1 (Book- Germany); 3 (Manuals)	1 (Brazil)

## Research papers (Published or Accepted):

S. no.	Research paper detail	NAAS Score*	Impact factor
1	<b>Sumbria, D.</b> , Singla, L.D., Kumar, S., Sharma, A., Dahiya, R.K., and Setia, R. Spatial distribution, risk factors and haematobiochemical alterations associated with <i>Theileria equi</i> infected equids of Punjab (India) diagnosed by indirect ELISA and nested PCR. <i>Acta Tropica</i> , 155, 2016: 104-112 (ISSN: 0001-706X)	8.27	2.710
2	<b>Sumbria, D.,</b> Singla, L.D., Sharma, A., Bal, M.S., and Kumar, S. Multiplex PCR for detection of <i>Trypanosoma evansi</i> and <i>Theileria equi</i> in equines of Punjab, India. <i>Veterinary Parasitology</i> , 211, 2015: 293-299 (ISSN: 0304-4017)	8.46	2.719
3	<b>Sumbria, D.,</b> Singla, L.D., Sharma, A., Moudgil, A.D., and Bal, M.S. Equine trypanosomosis in central and western Punjab: Prevalence, haematobiochemical response and associated risk factors. <i>Acta Tropica</i> , 138, 2014: 44-50 (ISSN: 0001-706X).	8.27	2.710

4	<b>Sumbria, D.,</b> Singla, L.D., Sharma, A., Kumar, S., and Bal, M.S. Comparative sensitivity and specificity of PCR assays for the detection of <i>Theileria equi</i> coupled with different DNA template extraction methods. <i>Journal of Equine Veterinary Science</i> , 38, 2016, 87-93 (ISSN: 0737-0806).	6.87	0.871
5	<b>Sumbria, D.,</b> Singla, L.D., and Sharma, A. <i>Theileria equi</i> and <i>Babesia caballi</i> infection in equines in Punjab: A study on serological and molecular prevalence. <i>Tropical Animal Health and Production</i> , 48, 2016: 45-52 (ISSN: 0049-4747).	6.82	0.817
6	<b>Sumbria, D.,</b> Singla, L.D., Sharma, A., and Kaur, P. Detection of <i>Theileria</i> species infecting equine population in Punjab by 18s rRNA PCR. <i>Indian journal of animal research</i> , 50(2), 2016: 218-223 (ISSN: 0367-6722).	6.04	-
7	Diallo, T., Singla, L.D., <b>Sumbria, D.,</b> Kaur, P., and Bal, M.S. Conventional and molecular diagnosis of haemo-protozoan infections in cattle and equids from Republic of Guinea and India. <i>Indian journal of animal research</i> (Accepted).	6.04	-
8	Singla L.D., <b>Sumbria D</b> , Mandhotra A, Bal M.S., and Kaur P. Canine vector-borne infections: <i>Babesia canis</i> , <i>Babesia gibsoni</i> , <i>Ehrlichia canis</i> and <i>Hepatozoon canis</i> in Punjab, India. <i>Acta parasitologica</i> 61(4), 2016: 697-706 (ISSN 1230-2821)	6.91	0.963
9	<b>Sumbria, D.,</b> Singla, L.D., Mandhotra, A., and Randhawa, C.S. Molecular detection and treatment of equine piroplasmosis. <i>Philippine Journal of Veterinary Medicine</i> , 52(2), 2015: 131-136 (ISSN: 0031-7705).	5.00	-
10	<b>Sumbria, D.,</b> Sanyal, P.K., Bukhari, S., Pal, S., and Mandal, S.C. Studies on strain improvement of predacious fungi: Generation of mutant strains by random mutagenesis. <i>Journal of Veterinary Parasitology</i> , 25(1), 2011: 30-33 (ISSN: 0971-6157).	4.72	-
11	<b>Sumbria, D.,</b> Sanyal, P.K., Bukhari, S., Pal, S., and Mandal, S.C. Studies on strain improvement of predacious fungi: <i>In vitro</i> screening of mutant strains. <i>Journal of Veterinary Parasitology</i> , 25(1), 2011: 34-38 (ISSN: 0971-6157).	4.72	-
12	Sanyal, P.K., <b>Sumbria, D.,</b> Pal, S., and Mandal, S.C. Factors affecting growth of a new isolate of egg parasitic fungus <i>Pochonia suchlasporia</i> on <i>in vitro</i> culture media. <i>Journal of Veterinary Parasitology</i> , 26(2), 2012: 99-103 (ISSN: 0971-6157).	4.72	-
13	Bukhari, S., Sanyal, P.K., <b>Sumbria, D.,</b> Pal, S., and Mandal, S.C. Strain improvement of predacious fungi: <i>In vitro</i> screening of mutant strains for heavy metal tolerance. <i>Journal of Veterinary Parasitology</i> , 26(1), 2012: 1-6 (ISSN: 0971-6157).	4.72	-
14	Bukhari, S., Sanyal, P.K., <b>Sumbria, D.,</b> Pal, S., and Mandal, S.C. Strain improvement of predacious fungi: <i>In vitro</i> screening of mutant strains for benzimidazole tolerance. <i>Journal of Veterinary Parasitology</i> , 26(1), 2012: 7-12 (ISSN: 0971-6157).	4.72	-

<sup>\*</sup>National academy of agricultural sciences

## Review papers (Published or Accepted):

S. no.	Review paper detail
1	Sumbria, D., Singla, L.D., and Gupta S.K. Arthropod invaders pedestal threats to public vigor: an
1	overview. Asian Journal of Animal and Veterinary Advances, 11(4), 2016: 213-225. (NAAS-4)
2	Sumbria, D., and Singla, L.D. Mammalian parasitic vaccine: A consolidated exposition. Journal of
	Vaccine and Immunology, 1(2), 2015: 50-59.
3	Sumbria, D., and Singla, L.D. Recent diagnostic and control approaches in Equine piroplasmosis.

	Veterinaria, 2(1), 2015: 1-6.
4	Sumbria, D., Moudgil, A.D., and Singla, L.D. Equine Piroplasmosis: Current status. Veterinaria, 1(1),
	2014: 9-14.
5	Sumbria, D., and Sanyal, P.K. Exploiting Nutrition-Parasite Interaction for Sustainable Control of
	Gastrointestinal Nematodosis in Sheep. Vet Scan, 4(2), 2009: 10-16.
6	Singla, L.D., and <b>Sumbria, D.</b> Human atypical trypanosomosis in Indian subcontinent. <i>Veterinaria</i> , 4(1)
0	2016: 7-10.

# Popular article:

S. no.	Popular paper detail	Name of magazine
1	Amit Sharma, <b>Deepak Sumbria</b> , Yogesh Choudhary. Unnat pashu-palan ke	Pashu-palan Naye
	parmukh stembed. 2016, 4.	Aayam (RAJUVAS)

## Book/Manuals Published:

S. no.	Authors name	Name of the Book/Manuals	Publication House/ISBN/Institute/University
1	<b>Deepak Sumbria,</b> Kunal Kshatriya and Divya Deepak Sharma	Clinical textbook for budding Veterinary Parasitologists (Book)	Lambert academic publishing (Germany), ISBN-9783659945922
2	Dr. Vikas Galav, Dr. Bhavna Rathor, <b>Dr. Deepak Sumbria</b> and Dr. Yogesh Kumar Gupta	General Veterinary Parasitology and Helminthology, VPA-211 (Manual)	PGIVER (RAJUVAS)
3	Dr. Vikas Galav, Dr. Bhavna Rathor, <b>Dr. Deepak Sumbria</b> and Dr. Yogesh Kumar Gupta	Veterinary Entomology & Acarology, VPA-221 (Manual)	PGIVER (RAJUVAS)
4	Dr. Vikas Galav, Dr. Bhavna Rathor, <b>Dr. Deepak Sumbria</b> and Dr. Yogesh Kumar Gupta	Veterinary Protozoology, VPA-222 (Manual)	PGIVER (RAJUVAS)

# Research papers (Communicated):

S. no.	Research paper detail		Impact factor
1	<b>Sumbria, D.,</b> Singla, L.D., Sharma, A., and Bal, M.S. Detection of <i>Theileria equi</i> infection of Ixodid ticks in equines using nested polymerase chain reaction from Punjab, India. ( <i>Proceedings of the National Academy of Sciences India Section B: Biological Sci.</i> )	6.00	0.394
2	<b>Sumbria, D.,</b> Singla, L.D., Sharma, A., Bal, M.S., and Randhawa, C.S. Risk factors and haemato-biochemical alteration associated with <i>Theileria equi</i> diagnosed by 18S rRNA PCR in naturally infected equine in Punjab province. ( <i>Veterinary Medicine and Science-Wiley</i> )		-
3	<b>Sumbria, D.,</b> Singla, L.D., Kumar, R., Bal, M.S., and Kaur, P. Sero-prevalence of <i>Trypanosoma evansi</i> infections in equines by different serological tests from agroclimatic zones of Punjab. ( <i>Veterinary research communication</i> )		-
4	Singla L.D., <b>Sumbria D</b> , Mandhotra A, Bal M.S., and Kaur P. Investigation of 18S rRNA gene sequence of <i>Hepatozoon canis</i> detected in two Indian dogs. ( <i>Journal of Parasitic Diseases</i> )	4.65	-

#### Review papers (Communicated):

S. no.	Review paper detail		
1	Sumbria, D., Singla, L.D., and Mandhotra A. Immunodiagnostic tools for parasitic diseases.		
1	Punjab Veterinary Journal		

#### Gene Bank Accessions numbers in NCBI\*:

S. no.	Accession number	Detail	
1	LC042536.1	Sumbria, D., Singla, L.D., and Sharma, A. Babesia equi genes for 18S	
	1	rRNA, partial sequence, isolate: Punjab-430.	
2	LC037953.1	Sumbria, D., Singla, L.D., Sharma, A., and Kaur, P. Theileria sp. Punjab	
		gene for 18S ribosomal RNA, partial sequence,	
3	LC053448.1	Singla, L.D., Sumbria, D., Mandhotra, A., Bal, M.S., and Kaur, P. Babesia	
		gibsoni gene for 18S ribosomal RNA, partial sequence.	
4	LC053449.1	Singla, L.D., Sumbria, D., Mandhotra, A., Bal, M.S., and Kaur, P. Babesia	
		canis gene for 18S ribosomal RNA, partial sequence.	
5	LC053450.1	Singla, L.D., Sumbria, D., Mandhotra, A., Bal, M.S., and Kaur, P.	
		Hepatozoon canis gene for 18S ribosomal RNA, partial sequence.	
6	LC053451.1	Singla, L.D., <b>Sumbria, D.,</b> Mandhotra, A., Bal, M.S., and Kaur, P. <i>Ehrlichia</i>	
		canis gene for 18S ribosomal RNA, partial sequence	
7	LC008132.1	Sharma, A., Sumbria, D., Singla, L.D., and Bal, M.S. Babesia equi gene for	
		18S ribosomal RNA, partial sequence, isolate: Ludhiana.	
8	LC008133.1	Sharma, A., Sumbria, D., Singla, L.D., and Bal, M.S. Trypanosoma evansi	
		VSG gene, partial cds, isolate: Punjab.	
9	LC010333.1	Sharma, A., Sumbria, D., Singla, L.D., and Bal, M.S. Babesia equi gene for	
		18S ribosomal RNA, partial sequence, tick isolate: Ludhiana.	

<sup>\*</sup>National Center for Biotechnology Information

#### Papers presented/Abstract published in various conferences at International and National level:

- 1. Abstract- Lachhman Das Singla, **Deepak Sumbria**, Mandeep Singh Bal and Paramjit Kaur. Molecular epidemiological investigation of equine piroplasmosis in Punjab, India. pp 50, World Association for the Advancement of Veterinary Parasitology, **25th International Conference of the World Association for the Advancement of Veterinary Parasitology, Liverpool, United Kingdom**, during 16-20 August, 2015. P.50.
- 2. Abstract- **D. Sumbria** and P. K. Sanyal. Screening of Indian isolates of egg parasitic fungi for biological control of trematodiosis in livestock "Sao Paulo advanced school of science" EMBRAPA, Brazil during 26 September-7 October, 2011.
- 3. Abstract- Deepti Narang, Girsher Singh Sidhu, **Deepak Sumbria**, Mudit Chandra, Gursimran Filia, Amarjit Singh and Sikh Tejinder Singh. Molecular detection of *Mycobactrium avium* subsp. paratuberculosis in cattle and buffalo tested for bovine tuberculosis in 15<sup>th</sup> Convocation of National Academy of Veterinary Science and National Symposium on "Sustainable Livestock Development for Food and Nutritional Security: Way forward" on 22-23<sup>rd</sup> October, 2016 at Khalsa College of Veterinary and Animal Science, Punjab, P.: 38-39.
- 4. Abstract- **Deepak Sumbria**, L. D. Singla, Amrita Sharma, Aman Dev Moudgil and M. S. Bal. Molecular and Serological detection of latent trypanosomosis in equines. XXIV National congress of Veterinary Parasitology, Kerala during 05-07 February, 2014. P.40.
- 5. Abstract- **D. Sumbria**, P. K. Sanyal, S. Pal and S. C. Mandal. Isolation egg parasitic fungus *Pochonia suchlasporia* from Durg, Chhattisgarh in XXII National Congress of Veterinary Parasitology in DUVASU (Uttar Pradesh) during 15-17 March, 2012., V.11, 73

- 6. Abstract- **D. Sumbria**, Sadaf Bukhari, P. K. Sanyal, S. Pal and S. C. Mandal. Strain improvement of predatory fungi: Characterization of mutant strain of *D. flagrans* and *V. chlamyodosporium* in XX National Congress of Veterinary Parasitology in Mumbai (Maharashtra) during 05-07 January, 2011. S5-04, 163.
- 7. Abstract- Sadaf Bukhari, **D. Sumbria,** P. K. Sanyal, S. Pal and S. C. Mandal. *In vitro* tolerance to benzimidazole anthelmintics by mutant strain of *D. flagrans* and *V. Chlamyodosporium* in XX National Congress of Veterinary Parasitology in Mumbai (Maharashtra) during 05-07 January, 2011. S5-05, 163.
- 8. Abstract- Sadaf Bukhari, **D. Sumbria**, P. K. Sanyal, S. Pal and S. C. Mandal. *In vitro* tolerance to sodium arsenate anthelmintics by mutant strain of *D. flagrans* and *V. chlamyodosporium* in XX National Congress of Veterinary Parasitology in Mumbai (Maharashtra) during 05-07 January, 2011. S5-06, 164.

#### Participation in Conferences, Symposia and Professional memberships:

- Participated in XIX National Congress of Veterinary Parasitology in Ludhiana (Punjab) during 03-05 February, 2009.
- Participated in XX National Congress of Veterinary Parasitology in Mumbai (Maharashtra) during 05-07 January, 2011.
- Completed Communication skill and personality development program organized by NSFI (National skills foundation of India).
- Poster presentation in XXIV National congress of Veterinary Parasitology.
- Attended the XXIV convention of Indian association of Veterinary Microbiologists.
- Life time member of IAAVP [Indian association for the advancement of Veterinary Parasitology] (S.no-540).
- Registered member of J&K State Veterinary Council (JKSVC-688)
- Oral presentation at "Sao Paulo advanced school of science" EMBRAPA. Brazil 2011.
- Attended FICCI workshop on 11<sup>th</sup> January 2016

#### **Professional Skill:-**

- *In-vitro* and *In-vivo* fungal culturing along with its mutation.
- Micro Aerophilus stationary phase technique (MASP) for culturing of *Theileria equi*.
- DNA extraction from blood, tissue and arthropods samples.
- Scanning electron microscopic on ticks samples.
- Molecular techniques (Primary-PCR, Nested-PCR and real time PCR)
- Serological techniques (ELISA, IFAT and CATT assays)
- Proficiency in bioinformatics tools (Phylogenetic analysis and Primer designing)
- BLAST analysis of DNA sequences.
- Micro Soft-Office, Effective Use of Internet & World Wide Web.
- Worked with reputed scientist of National Research Centre on Equines, Haryana and Punjab Remote Sensing Centre, Punjab, India
- Basic clinical techniques like blood collection, administration of medicaments, fecal examination, hematology and biochemistry of laboratory, domestic animals.
- Stains (Giemsa/Leishman) and various solution (Sedimentation, Floatation) preparation

#### **Interests and Personal Attributes:-**

- Travelling hill station
- Swimming
- Internet surfing
- Good communication skills

- Quick in learning and self motivated
- Good team leader

#### Others Achievements and Activities:-

- Observer/External Examiner (Practical examiner) for AHDP Examination from 15-09-2016 to 30-09-2016 by PGIVER, Jaipur, Rajasthan
- Participated 6 times in farm fair (Pashu Palan Mela) conducted by GADVASU.

#### **Computer Proficiency:-**

- Well versed with Internet application, MS Office and operations in Windows, 2007, 2016, PowerPoint presentation, Microsoft word and excel work.
- Enthusiastic in working with latest computer software like MEGA, CLC-Genomioc, online software (BLAST-NCBI, JAVA etc).

#### **Seminars presented:**

- Overview on equine piroplasmosis
- Impact of Global Climate Change on Vector and Vector-borne Parasitic Diseases
- Screening of Indian isolates of egg parasitic fungi for biological control of trematodiosis in livestock (Brazil)
- Exploiting nutrition-parasite interaction with respect to protein & energy for sustainable control of gastrointestinal nematodosis in small ruminants

## **Recommendations:-**

#### 1. Dr. L.D. Singla

Professor

Address: Department of Veterinary Parasitology, College of Veterinary Sciences, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana-141004, Punjab, India.

Phone: +91-9316061974 E-mail ID: ldsingla@gmail.com

#### 2. Dr. P. K. Sanyal

Director Research Services and Professor-cum-Head

Address: Department of Veterinary Parasitology, College of Veterinary Sciences, Chattisgarh Kamdhenu Vishwavidyalaya, Durg (C.G), India.

Phone: +91-9691922200

E-mail ID: sanyalprabir54@gmail.com

#### 3. Dr. M.S. Bal

Assistant Scientist

Address: Department of Veterinary Parasitology, College of Veterinary Sciences, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana-141004, Punjab, India.

E-mail ID: bal\_epi@rediffmail.com

I hereby declared that the above-mentioned information is correct to the best of my knowledge.

Sign: Dr. Deepak Sumbria
Teaching Associate
Department of Veterinary Parasitology
PGIVER-Jaipur
Rajasthan

