

Research: **Veterinary Pharmacology**

1. List of Research Projects: Completed & Ongoing- Nil

Sr. No.	Title of the Project	Name of PI/ Major Advisor/ Research Worker	Funding Agency	Total Cost of the project (Rs in Lakh)	Extra-mural (Funding agency)/ Intra-mural	Status (Completed/ Ongoing)	Duration
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2. List of Private Agency Projects:

Sr. No.	Title of the Project	Name of PI/ Major Advisor/ Research Worker	Funding Agency	Total Cost (Rs in Lakh)	Extra-mural / Intra-mural	Status (Completed/ Ongoing)	Duration
1	Establishment of small laboratory animal house and research laboratory at PGIVAS, Akola	Dr. G. D. Ranvir	VSDB (M. S.)	25.75	Extra-mural	Completed	2005-2008
2	Evaluation of Prophylactic and Therapeutic Efficacy of Salcochek and Salcochek Pro against Escherichia coli-induced infection in broiler chicks	PI-Dr. S. W. Hajare	Ayurvet Limited, Distt. Solan, H.P.	1.28	Extra-mural	Completed	2016-17
3	Evaluation of the acute toxicity study of Salcocheck pro premix, Pulmofarm T PREMIX, AV/AGP/30 premix, Ayucal Gold premix, Superliv Gold Liquid, AV/PFE/15 (Poultry feed Emulsifier) premix, Methiorep liquid, Coccihar, AV/MCC/18, Chickimmune Granules, Mastilep spray (topical) and Charmil gel (topical).	PI-Dr. S. W. Hajare	Ayurvet Limited, Distt. Solan, H.P.	1.24	Extra-mural	Completed	2017-18
4	Evaluation of Acute toxicity study of Digestive powder Galactagogue Powder, Anti-diarrhoeal liquid, Hepatoprotective liquid,	PI-Dr. S. W. Hajare	Siddhayu Ayurvedic Research Foundation Private Limited, Nagpur.	1.0	Extra-mural	Completed	2018-19

	Immunity booster liq., Ecobolic and uterine cleanser, Anti-tick, Anti-flee, Anti-mange shampu (topical) and Wound healing cream (topical)						
5	Evaluation of the acute oral toxicity of AV/EFE/19, AV/EIF/19, AV/OIP/22, Exapar Liquid, Goldeg, Pachoplus, Seminogen powder, and acute dermal toxicity of Charmil Plus Gel, Charmil Spray and Mastilep Gel	PI-Dr. S. W. Hajare	Ayurved Ltd., Baddi (HP)	1.51	Extra-mural	Completed	2020-21
6	Evaluation of the acute oral toxicity of Afnil emulsion, Ayucal liquid, Ayucee premix, Ayusel E forte, Exapar bolus, Exapar premix, Renotreat liquid, Repchol Premix AV/PMQ/19 and XlivPro Premix	PI-Dr. S. W. Hajare	Ayurved Ltd., Baddi (HP)	1.65	Extra-mural	Completed	2021-22
7	Evaluation of the acute oral toxicity of Ayurved Ltd Animal products	PI-Dr. S. W. Hajare	Ayurved Ltd., Baddi (HP)	1.98	Extra-mural	Ongoing	2024-25 To 2025-26

2. Research Priorities:

Sr. No.	Research Area	Aim	Objective	Benefits of Farmers
1	Pharmacological evaluation of medicinal plants and Scientific validation of Ethnoveterinary practices, study on Pharmacological active principles, preparation of formulations and their applications in the diseases of animals	Scientific validation of Ethnoveterinary practices, preparation of formulations and possible applications in the diseases of animals	To evaluate the pharmacological activity of Ethnoveterinary practices or preparation/formulation.	The generated knowledge would be helpful in therapeutic strategies; Preparation of formulations and possible application in the diseases of animals
2	Study on nanoparticles of metals and chemicals and their possible applications in animal health or diseases	Preparation of nanoscale drugs/materials to reduce dose	To use nanomedicines in animal diseases	Availability of affordable and effective medicine

3	Study on various toxicities and their possible amelioration or development of antidotal therapy.	Development of antidotal therapy	To study toxic effects in animals and poultry and their amelioration	To know the prevention and therapeutic aspects of toxicities in animals
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3. Thesis:

Master:

Name of Department : VETERINARY PHARMACOLOGY AND TOXICOLOGY				
Sr. No.	Name of the Student	Title of Thesis	Year of Completion	Name of the Advisor
1	RAMTEKE V. D.	CLINICAL EVALUATION OF INDIGENOUS HERBAL FORMULATION AGAINST HELMINTH INFECTION IN LIVESTOCK	2002	Dr. V.P. Vadlamudi
2	GAIKWAD S. S.	ANTHIHELMENTIC ACTIVITY OF FEW INDIGENOUS PLANTS	2002	Dr. V.P. Vadlamudi
3	TALOKAR S. S.	ANTHELMINTIC EVALUATION A COMPOSITE HERBAL EXTRACT AGAINST HEMATODIASIS IN GOAT	2003	Dr. A. A. Deshmukh
4	GHUTKE K. A.	ANTHELMINTIC EVALUATION A COMPOSITE HERBAL EXTRACT AGAINST HEMATODIASIS IN SHEEP	2003	Dr. A. A. Deshmukh
5	SHENDE N. G.	ANTHELMINTIC EVALUATION OF DIFFERENT PLANT EXTRACT FORMULATION IN SHEEP	2004	Dr. A. A. Deshmukh
6	VASULKAR R. A.	ANTHELMINTIC EVALUATION OF DIFFERENT PLANT EXTRACT FORMULATION IN GOAT	2004	Dr. A. A. Deshmukh
7	JADHAV N. D.	ANTIBACTERIAL ACTIVITY OF <i>Piper betle</i> LEAF EXTRACTS <i>IN VITRO</i>	2005	Dr. G.D. Ranvir
8	WAGHAMBARE S. S.	EVALUATION OF ANTIBACTERIAL ACTIVITY OF <i>Catheranthus roseus</i> LINN EXTRACTS IN VITRO	2006	Dr. G.D. Ranvir
9	Miss NEHA S.	EVALUATION OF ANALGESIC, ANTIPYRETIC AND ANTI-INFLAMMATORY ACTIVITIES OF <i>Curcuma longa</i> LINN IN RATS	2006	Dr. G.D. Ranvir

10	Miss DESHMUKH L. P.	STUDIES ON ANTIBACTERIAL ACTIVITY OF <i>Allium sativum</i> LINN EXTRACTS	2007	Dr. G.D. Ranvir
11	KHEDEKAR N. K.	HEPATOPROTECTIVE ACTIVITY OF <i>Tinospora cordifolia</i> MIERS AGAINST CARBON TETRACHLORIDE INDUCED LIVER INJURY IN RATS.	2008	Dr. G.D. Ranvir
12	Miss PATIL M. S.	STUDIES ON ANTIBACTERIAL ACTIVITY AND IMMUNOMODULATORY POTENTIAL OF <i>Tinospora cordifolia</i> IN POULTRY.	2009	Dr. G.D. Ranvir
13	Miss BORGHARE A.T.	<i>IN VITRO</i> STUDIES ON ANTITUMOR AND ANTIBACTERIAL ACTIVITIES OF ROOT EXTRACT OF <i>Trichosanthes tricuspidata</i>	2010	Dr. S.W. Hajare
14	KAYANDE P. B.	<i>IN VITRO</i> STUDIES ON ANTITUMOR AND ANTIBACTERIAL ACTIVITIES OF LEAF EXTRACT OF <i>Cassine glauca</i>	2010	Dr. S.W. Hajare
15	Miss RATHOD S.B.	STUDIES ON ANTITUMOUR AND ANTIBACTERIAL ACTIVITIES OF <i>Careya arborea</i> <i>IN VITRO</i>	2011	Dr S.W. Hajare
16	KAMBLE M. S.	<i>IN VITRO</i> ANTITUMOUR AND ANTIBACTERIAL ACTIVITIES OF <i>Cassine glauca</i> SILVER NANOPARTICLES	2011	Dr S.W. Hajare
17	RATHOD N. R.	EFFECT OF MELOXICAM ON PHARMACOKINETIC OF MOXIFLOXACIN IN GOATS	2012	Dr S.W. Hajare
18	ARDE V. S.	PROTECTIVE EFFECT OF <i>Tinospora cordifolia</i> AGAINST GENTAMICIN INDUCED NEPHROTOXICITY IN RATS	2012	Dr. S.W. Hajare
19	KUKADE S. V.	EVALUATION OF ANTI-INFLAMMATORY AND ANALGESIC ACTIVITIES OF <i>cassine glauca</i> (ROTTB.) LEAVES IN MICE	2013	Dr. S.W. Hajare
20	Miss BHAISARE T. N.	<i>IN-VITRO</i> AND <i>IN-VIVO</i> EVALUATION OF ANTI-	2014	Dr. S.W. Hajare

		INFLAMMATORY AND ANALGESIC ACTIVITIES OF CURCUMIN		
21	VIVEK KUMAR SAROJ	TOXICODYNAMIC STUDIES OF CADMIUM IN RAT MYOMETRIUM	2014	Dr. S.W. Hajare
22	Miss AMRUTKAR Y. K.	EVALUATION OF ANTIDIARRHOEAL, ANTIBACTERIAL AND ANTI-INFLAMMATORY ACTIVITIES OF ETHANOLIC LEAF EXTRACT OF <i>Dalbergia sissoo</i>	2015	Dr. S.W. Hajare
23	Miss SONTAKKE A. R.	EVALUATION OF ANTIDIARRHOEAL ACTIVITY OF POLYHERBAL LEAF FORMULATION IN MICE AND GOATS	2016	Dr. S.W. Hajare
24	GODBOLE P. V.	EVALUATION OF PROPHYLACTIC AND THERAPEUTIC EFFICACY OF CURCUMIN AGAINST <i>E. Coli</i> -INDUCED INFECTION IN BROILER CHICKS	2017	Dr. S.W. Hajare
25	MISS BHOSALE P. B.	AMELIORATIVE EFFECT OF <i>Curculigo orchoides</i> ON SUBACUTE CYPERMETHRIN TOXICITY WITH SPECIAL REFERENCE TO MALE REPRODUCTIVE SYSTEM IN WISTAR RATS	2018	Dr. S.W. Hajare
26	Miss PAWAR P. S.	EFFECT OF ACETAMIPRID ON MALATHION INDUCED TOXICITY WITH SPECIAL REFERENCE TO MALE REPRODUCTIVE SYSTEM IN WISTAR RATS	2019	Dr. S.W. Hajare
27	Miss RATHOD P. D.	AMELIORATIVE EFFECT OF <i>Tribulus terrestris</i> ON SUBACUTE ACEPHATE INDUCED TOXICITY WITH SPECIAL REFERENCE TO MALE REPRODUCTIVE SYSTEM OF WISTAR RATS	2019	Dr. S.W. Hajare
28	Miss JAMGADE S. S.	CARDIO-PROTECTIVE EFFECT OF <i>Ficus religiosa</i> ON ISOPRENALINE	2020	Dr. S.W. Hajare

		INDUCED MYOCARDIAL INFARCTION IN WISTAR RATS		
29	DIWADKAR D. G.	COMPARATIVE STUDY ON AMELIORATIVE EFFECT OF SILYMARIN AND CURCUMIN ON TOXICOLOGICAL EFFECTS CAUSED BY DOXORUBICIN IN MALE WISTAR RATS	2021	Dr. S.W. Hajare
30	AUTADE P. D.	CARDIOPROTECTIVE EFFECT OF <i>Terminalia arjuna</i> GOLD NANO PARTICLES ON ISOPRENALINE INDUCED MYOCARDIAL INFARCTION IN WISTAR RATS	2022	Dr. S.W. Hajare
31	ASWAR A. P.	EFFECT OF POLYHERBAL FORMULATION ON GENTAMICIN INDUCED NEPHROTOXICITY IN WISTAR RATS	2022	Dr. S.W. Hajare
32	KARANDE A. D.	EFFECT OF <i>Ficus religiosa</i> GOLD NANOPARTICLES ON ISOPRENALINE INDUCED MYOCARDIAL INFARCTION IN WISTAR RATS	2023	Dr. S.W. Hajare
33	Miss MISTU TRIPURA	EFFECT OF LEMON PEEL EXTRACT GOLD NANO PARTICLES ON SUBACUTE TOXICITY OF LEAD, ARSENIC AND THEIR COMBINATION IN WISTAR RATS	2023	Dr. S.W. Hajare
34	KASHYAP R. S.	EFFICACY OF COW URINE DISTILLATE OINTMENT ON WOUND HEALING	2024	Dr. S. W. Hajare
35	Miss PATIL P. R.	EFFECT OF ETHANOLIC EXTRACT OF <i>Citrus limon</i> PEEL ON ETHYLENE GLYCOL INDUCED UROLITHIASIS IN WISTAR RATS	2024	Dr. S. W. Hajare

4. Research Papers Published:

List of Research Publications:

Sr.	Authors	Year	Title of the Research	Name of the	Volume;	NAAS
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No.			Paper	Journal	Page Nos.	Rating, if any
1	Jaiswal, J. V., Wadegaonkar, P. A. and S.W. Hajare	2012	Bioflavonoid galangin suppresses the growth of ehrlich ascites carcinoma in swiss albino mice : a molecular insight.	Applied Biochemistry and Biotechnology	167 :1325-1339.	9.0
2	Rathod S.B., S.W. Hajare, S.V. Kukade, S.P. Rothe and P. A. Wadegaonkar	2013	Studies on antitour and antibacterial activities of <i>Careya arborea</i> Roxb. <i>in vitro</i>	International Journal of Pharmaceutical and Chemical Sciences	Vol. 2(4) (2013) 1746-51	-
3	Rathod N. R., S. Kukade, M.K. Lonare and S.W. Hajare	2014	Pharmacokinetics of moxifloxacin following intramuscular administration in berari goat a saline track breed of Vidharabha region	Ruminant science	Vol. I, P 45-49	4.45
4	Trupti Bhaisare, S. W. Hajare, Yogita Amrutkar, N. M. Bhojane, M. V. Ingawale and S.P. Rothe	2015	Anti-Nociceptive Effect Of Curcumin In Mice 5(4) 21-28	International Journal Of Institutional Pharmacy and Life Sciences	5(4) 21-28	-
5	Rathod N.R, S. Kukade, M.K. Lonare and S.W. Hajare.	2015	Influence of meloxicam on Pharmacological alteration of moxifloxacin in male goats	Ruminant science	Vol.4 (1) P 103-108	4.45
6	Amrutkar Y. K., S.W. Hajare, A. R. Sontakke, N. M. Bhojane, R. S. Ingole and M. V. Ingawale	2016	Antidiarrhoeal Activity of Dalbergia Sissoo Leaves in Goats.	The Indian Journal of Veterinary Sciences And Biotechnology	Vol. 12 No. 2: 66-69	5.25
7	Saroj V.K. , U.P. Nakade, A Sharma, R.S. Yadav, S.W. Hajare and S.K. Garg	2016	Functional involvement of L-type calcium channels and cyclic nucleotide-dependent pathways in cadmium-induced myometrial relaxation in rats	Human Experimental Toxicology	DOI: 10.1177/0960327116646840, sagepub.com: pp1-11	8.80
8	Saroj V.K., Nakade U.P., Sharma A, Choudhary S, Hajare S.W., Garg S.K.	2.17	Dose- Dependant Differential Effect of In Vivo Exposure of Cadmium on Myometrial Activity in Rats: involment of VDCC and Ca ²⁺ - Mimicking Pathways	Biological Trace Element Research	DOI 10.1007/s12011-017-1040-0, 2017	9.90

9	Yogita Amrutkar, S W Hajare, M V Ingawale, N M Bhojane, Madhuri Hedau and R S Ingole	2017	Anti-Inflammatory Activity of Ethanolic Leaf Extract of <i>Dalbergia Sissoo</i> <i>In Vitro</i> and <i>In Vivo</i>	Advances in Tissue Engineering and Regenerative Medicine	2(3): 028	-
10	Bhosale Poonam, Hajare SW, Ingole RS, Ingawale MV, Rathod Payal, Hedau MS and Waghmare SP	2019	Protective effect of <i>Curculigo orchoides</i> on hemato-biochemical alterations induced by cypermethrin subacute toxicity in wistar rats	The Pharma Innovation Journal	8(7):482-485	5.23
11	Abhilash D Jadhao, Sudhir Shende, Pramod Ingle, Aniket Gade, Sunil W Hajare, Ranjit S Ingole	2020	Biogenic Synthesis of Zinc Oxide Nanoparticles by <i>Bryophyllum pinnatum</i> and its Acute Oral Toxicity Evaluation in Wistar Rats	IEEE Transactions on Nano Bioscience	Vol.19(4) : 633-639	IF-3.206
12	Sunil Hajare, Ranjit Suresh Ingole, Mahesh Kumar Vitthal Ingawale, Vivek Borekar, David Kumar, Ravikanth Kotagiri, Bhaskar Ganguly	2021	Evaluation of acute oral toxicity of a herbal semen quality enhancer	The Journal of Phytopharmacology	Vol.10(6): 496-499	5.16
13	Sunil Hajare, Ranjit Suresh Ingole, Maheshkumar Vitthal Ingawale, Vivek Borekar and Bhaskar Ganguly	2021	Evaluation of acute oral toxicity of a phytogenic egg laying stimulant	The Pharma Innovation Journal	SP-10(8): 664-666.	5.23
14	Anand P Aswar, Sunil W Hajare*, Ranjit S Ingole, Maheshkumar V Ingawale, Prajakta S Kuralkar and Sunil P Waghmare	2022	Nephroprotective Effects of Polyherbal Formulation on Gentamicin-induced Toxicity in Wistar Rat	Indian Journal of Veterinary Science and Biotechnology	18(4): 10-14	5.25
15	Sunil Hajare, Mistu Tripura, Shubham Belkhede, Ranjit Ingole, Bhupesh Kamdi and Shreya Gupta	2024	Evaluation of Acute Oral Toxicity of Ayurvedic Premix Polyherbal Poultry Formulation Containing Natural Vitamin C and Bioflavonoids	Journal of Advances in Biology & Biotechnology	Volume 27, Issue 2, Page 211-215	5.30
16	Mistu Tripura ¹ , S. W. Hajare*, B. P. Kamdi ³ , K. Y. Deshpande, S. A. Belkhede, R. S. Ingole	2024	Therapeutic assessment of lemon peel extract mediated gold nanoparticles against lead and arsenic induced	Exploratory Animal Medical Research	Vol. 14, Issue 2, 210-218 DOI: 10.52635/	6.1 (IF-0.1)

			reproductive toxicity in male wistar rats		eamr/14.2	
17	Hajare S.W .*, Tripura M., Vaidya M.G. , Belkhede S.A., Damekar S.C. and Gupta S.	2024	Acute oral toxicity assessment of repchol in wistar rats: a liver protective herbal premix for poultry	Uttar Pradesh Journal of Zoology	Volume 45, Issue 20, Page 459-464	5.24
18	Mistu Tripura, Bhupesh Kamdi, Ranjit Ingole, Maheshkumar Ingawale, Prajakta Kuralkar, Sunil Hajare*	2024	Effect of Lemon peel extract mediated gold nanoparticles on hematobiochemical and sperm parameter alterations in lead- arsenic induced combined exposure in male rats	The Journal of Phytopharmacology	Vol.13(4) :341-344	5.16

List of Marathi and Popular articles published:

Sr. No	Authors	Year	Title	Name of the Journal/Magazine	Volume: Page Nos.
1	व्हि. आय. बोरेकर, एस. डब्लू. हजारे	2009	सायनाइड आम्ल वनस्पतिची जनावरांना होणारी विषबाधा	गोडवा शेतीचा	86, डिसेंबर 2009
2	एस. डब्लू. हजारे, व्हि आय बोरेकर	2010	गुळवेल एक बहुगुणी वनस्पति औषधि	गोडवा शेतीचा	77, मार्च 2010
3	एस. डब्लू. हजारे, पि. बि. कायानंदे	2010	अद्रकाचे औषधि उपयोग	गोडवा शेतीचा	75, मार्च 2010
4	एस. डब्लू. हजारे, योगिता अमृतकर	2014	इबोला एक गंभीर संसर्गजन्य आजार	कृषि पत्रिका	अंक 8 नोव्हेंबर 2014
5	एस. डब्लू. हजारे, सपना जामगाडे	2019	जनावरांना होणाऱ्या वनस्पतिजन्य विषबाधा: प्रतिबंध व उपाय	कृषि पत्रिका	अंक 11 नोव्हेंबर 2019

Book Published:

1. Ali S. Z. Hajare S. W. and Sharad Chepte (2016) Shatrokta Shelipalan, PGIVAS Akola-444104 (MS) (Pages 121).

5. Research Recommendations-02

Sr. No.	18
Year	2012-13 - XI JOINT ANIMAL SCIENCE RESEARCH COUNCIL, MAFSU, Nagpur
Project Title	Effect of meloxicam on pharmacokinetic of moxifloxacin in goats
Investigators	N. R. Rathod and Dr. S. W. Hajare
Recommendations	Meloxicam should not be co-administered with moxifloxacin in goats
Sr. No.	41
Year	2013-14 - XII-XII JOINT ANIMAL SCIENCE RESEARCH COUNCIL, MAFSU, Nagpur
Project Title	Evaluation of anti-inflammatory and analgesic activities of <i>cassine glauca</i> (ROTTB.) leaves in mice
Investigators	S. V. Kukade and Dr. S. W. Hajare
Recommendations	Hydroethanolic leaf extract of <i>Cassine glauca</i> (Rottb) possesses anti-inflammatory activity

MOU signed by the Colleges - Nil

Sr. No.	MOUS Between	Date of signing	Place	Duration
	Party – 1 & Party - II			

8. Research Priorities / Thematic areas: Department Wise – Already mentioned

9. Significant Research Achievement: Nil

Sr. No.	Achievements	Description
1	Patents Awarded	
2	Breed Registration	
3	IPR	
4	Copyright	
5	Trademark	