

Appendix I. Publications from Academy of Climate Change Education and Research (ACCER), for last five years (2014 to 2018)

**Research papers published in peer reviewed journals with Impact factor**

1. **Archana, P.R.,** Sejian, V., Ruban, W., Bagath, M., Krishnan, G, **Aleena, J.,** Manjunathareddy, G.B., Beena, V and Bhatta, R (2018). Comparative assessment of heat stress induced changes in carcass traits, plasma leptin profile and skeletal muscle myostatin and HSP70 gene expression patterns between indigenous Osmanabadi and Salem Black goat breeds, **Meat Science**, 141: 66-80 (<https://doi.org/10.1016/j.meatsci.2018.03.015>). **NASS Score: 9.13; International Impact: 3.55.**
2. **Pragna, P.,** Sejian, V., Bagath, M., Krishnan, G., **Archana, P.R.,** Soren, N.M., Beena, V and Bhatta, R (2018). Comparative assessment of growth performance of three different indigenous goat breeds exposed to summer heat stress, **Journal of Animal Physiology and Animal Nutrition**, DOI: 10.1111/jpn.12892. **NASS Score: 7.24; International Impact: 1.607.**
3. **Vandana, G.D.,** Bagath, M., Sejian, V., Krishnan, G., Beena, V and Bhatta, R (2018). Summer Season Induced Heat Stress Impact on the Expression Patterns of Different Toll-Like Receptor Genes in Malabari Goats. **Biological Rhythm Research**, <https://doi.org/10.1080/09291016.2018.1464638> . **NASS Score: 6.62; International Impact: 0.69.**
4. **Pragna, P.,** Sejian, V., Soren, N.M., Bagath, M., Krishnan, G., Beena, V., Indira Devi, P and Bhatta, R (2017). Summer season induced rhythmic alterations in metabolic activities to adapt to heat stress in three indigenous (Osmanabadi, Malabari and Salem Black) goat breeds. **Biological Rhythm Research**, (DOI: 10.1080/09291016.2017.1386891). **NASS Score: 6.62; International Impact: 0.69.**
5. **Abdul Niyas, P.A.,** Sejian, V., Bagath, M., Parthipan, S., Selvaraju, S., Manjunathareddy, G., Kurien, E.K., Varma, G and Bhatta, R (2017). Effect of heat and nutritional stress on growth and testicular HSP70 expression in goats. **Journal of Agrometeorology**, 19(3): 189-194. **NASS Score: 6.40.**
6. Sengupta, S., Borgaonkar, H., **Reji Mariya Joy K.,** & Ram, S. (2017). Monsoon climate response

in Indian teak (*Tectona grandis* L.f.) along a transect from coast to inland. *Theoretical and Applied Climatology*, **Impact factor: 2.321**.

7. T.Unnikrishnan, P.Anilkumar and C.S.Gopakumar 2018. SARIMA models forecasting of weather parameters for Thrissur district. *Int. Journal of Statistics and Applied Mathematics* 2018; 3(1): 360-367. **Impact Factor (RJIF): 5.34**
8. **Jineesh, V. K.**, Muraleedharan, K. R., John, K. L., Revichandran, C., Kumar, P. H., & Kumar, K. N. (2015). Mesoscale process-induced variation of the West India Coastal Current during the winter monsoon. *Environmental monitoring and assessment*, 187(8), 508. **Impact factor: 1.804 (2018)**
9. Vinita, J., Shivaprasad, A., Manoj, N. T., Revichandran, C., Naveenkumar, K. R., & **Jineesh, V. K.** (2015). Spatial tidal asymmetry of Cochin estuary, West Coast, India. *Journal of coastal conservation*, 19(4), 537-551. **RG Journal Impact: 1.29**
10. Vinita, J., Lallu, K. R., Revichandran, C., Muraleedharan, **K. R.**, **Jineesh, V. K.**, & Shivaprasad, A. (2015). Residual fluxes of water and nutrient transport through the main inlet of a tropical estuary, Cochin estuary, West Coast, India. *Environmental monitoring and assessment*, 187(11), 675. **Impact factor: 1.804 (2018)**
11. Lix, J. K., Venkatesan, R., Grinson, G., Rao, R. R., **Jineesh, V. K.**, Arul, M. M., & Atmanand, M. A. (2016). Differential bleaching of corals based on El Niño type and intensity in the Andaman Sea, southeast Bay of Bengal. *Environmental monitoring and assessment*, 188(3), 175. **Impact factor: 1.804 (2018)**
12. Fernandes, C. E., Malik, A., Jineesh, V. K., Fernandes, S. O., Das, A., Pandey, S. S., & Helekar, S. (2015). An appraisal of biological responses and network of environmental interactions in non-mining and mining impacted coastal waters. *Environmental Science and Pollution Research*, 22(16),

12544-12558. **Impact factor: 2.828**

13. Fernandes, S. O., Halarnekar, R., Malik, A., Vijayan, V., Varik, S., Kumari, R., **K. R., Jineesh,** & LokaBharathi, P. A. (2014). Nitrate reducing activity pervades surface waters during upwelling. *Journal of Marine Systems*, 137, 35-46. **Impact factor: 2.476**
14. Mamatha, S. S., Malik, A., Varik, S., Parvathi, V., **Jineesh, V. K.,** Gauns, M. U., & LokaBharathi, P. A. (2015). Alkaline phosphatase activity at the southwest coast of India: A comparison of locations differently affected by upwelling. *Journal of Sea Research*, 95, 196-205. **Impact factor: 1.99**
15. **Priya CB, K.,** & Mookhambika, N. (2013). EFFICIENT BROADCASTING AND ROUTING TO MINIMIZE TRANSMISSION DELAY FOR CRITICAL EVENT MONITORING. *International Journal of Information Technology & Computer Sciences Perspectives*, 2(1), 230-234. **Global Impact Factor: 0.716**
16. Venkateswari, S. (2017). Application of Gustafson-Kessel-like clustering algorithm in Delineation of management Zones in precision Agriculture. *International Journal of Applied*, 12(3), 279-293. **Impact factor: 1.420**
17. **Priya CB, K.,** Venkateswari, S. (2018). Delineation of Management Zones in Precision Agriculture using Different Clustering Algorithms S. Venkateswari. *International Journal of Applied Engineering Research*, 13(22), 15951-15955 **RG Journal Impact: 0.14**
18. **Priya CB, K.,** Venkateswari, S. (2018). Depiction of Management zones in Precision agriculture using Farthest First Clustering Algorithm, *International Journal of Applied Engineering Research*, 13(20), 14479-14482 **RG Journal Impact: 0.14**
19. **Sreekala, P. P.,** Rao, S. V. B., & Rajeevan, M. (2012). Northeast monsoon rainfall variability over south peninsular India and its teleconnections. *Theoretical and applied climatology*, 108(1-2), 73-83.

**Impact factor: 2.321**

20. Rajeevan, M., Unnikrishnan, C. K., Bhate, J., Niranjan Kumar, K., & **Sreekala, P. P.** (2012). Northeast monsoon over India: variability and prediction. *Meteorological Applications*, 19(2), 226-236. **Impact factor: 2.391**
21. **Sreekala, P. P.**, Rao, S. B., Arunachalam, M. S., & Harikiran, C. (2014). A study on the decreasing trend in tropical easterly jet stream (TEJ) and its impact on Indian summer monsoon rainfall. *Theoretical and applied climatology*, 118(1-2), 107-114. **Impact factor: 2.321.**
22. **Vipin, P.**, Sarkar, K., Aparna, S. G., Shankar, D., Sarma, V. V. S. S., Gracias, D. G., & Rao, N. S. (2015). Evolution and sub-surface characteristics of a sea-surface temperature filament and front in the northeastern Arabian Sea during November–December 2012. *Journal of Marine Systems*, 150, 1-11. **RG Journal Impact: 3.10**
23. **Pragna, P., Archana, P. R., Aleena, J., Sejian, V., Krishnan, G., Bagath, M., & Bhatta, R.** (2017). Heat stress and dairy cow: impact on both milk yield and composition. *Int J Dairy Sci*, 12(1), 1-11. **RG Journal Impact: 1.83**
24. **Aleena, J., Pragna, P., Archana, P. R., Sejian, V., Bagath, M., Krishnan, G., & Bhatta, R.** (2016). Significance of metabolic response in livestock for adapting to heat stress challenges. *Asian J Animal Sci*, 10(4-5), 224-234. **RG Journal Impact: 0.35**

**2. Research papers published in peer reviewed journals with no Impact factor**

1. **Afsal, A** and Sejian, V (2018). Somatotropic Axis Associated Growth Governance in

Livestock. **Open Access Journal of Veterinary Science and Research**, 3(1): 000150.

2. **Afsal, A**, Sejian, V, Bagath, M, Krishnan, G, Devaraj, C, Bhatta, R (2018). Heat Stress and Livestock Adaptation: Neuro-endocrine Regulation. *International Journal of Veterinary Animal Medicine*, 1(2):108.
3. **Angel, S.P., Amitha, J.P., Rashamol, V.P., Vandana, G.D., Savitha, S.T., Afsal, A**, Bagath, M, Krishnan, G and Sejian, V (2018). Climate Change and Cattle Production: Impact and Adaptation. **Journal of Veterinary Medicine and Research**, 5(4): 1134.
4. **Angel, S.P.**, Bagath, M., Sejian, V (2018). Climate change and hypothalamic-pituitary-adrenal axis in livestock: what we know and what needs to be explored? *Advanced Journal of Environmental Science and Technology*, 5(4):245-246.
5. Bagath, M., Sejian, V., Krishnan, G., Vidya, M.K., **Pragna, P., Archana, P.R and Aleena, J** (2017). Nutrition and Immune System in Livestock: Mini Review. **Journal of Dairy and Veterinary Sciences**, 2(2): 555582.
6. **Rashamol, V.P.**, Sejian, V (2018). Climate Resilient Livestock Production: Way Forward. **Journal of Dairy and Veterinary Sciences**, 5(5): 5556673. DOI: 10.19080/JDVS.2018.05.555673.
7. **Rashamol, V.P.**, Sejian, V., Bagath, M., Krishnan, G., **Archana, P.R** and Bhatta, R (2018). Physiological adaptability of livestock to heat Stress: an updated review. **Journal of Animal Behaviour and Biometeorology**, 6: 62-71.
8. Angel SP, Amitha JP, Rashamol VP, Vandana GD, Savitha ST, et al. (2018) Climate Change and Cattle Production: Impact and Adaptation. *J. Vet Med Res* 5(4): 1134.
9. **M. NAVYA , K.M. SUNIL , P.S. ABIDA , V. THULASI AND E.K. KURIEN**,(2017) Screening of High Temperature Stress Tolerance in Popular Rice Varieties of Kerala Using DSSAT Model. *Trends in Biosciences* 10(31), 6608-6610.
10. Gopika, S., Lekshmi Mudra, B., Chaidanya, K. and Varsha, K.M. (2014) Rainfall variability and rice productivity over kerala. *Journal of Aquatic Biology and Fisheries*.2,162-164.
11. Sejian, V., Krishnan, G and **Amitha, J.P** (2018). Thermal Indices and Heat stress Assessment in Livestock: Way Forward. **Biomedical Journal of Science and Technology Research**,

BJSTR.MS.ID.000839. DOI: 10.26717/BJSTR.2018.03.000839.

12. **Vandana, G.D** and Sejian, V (2018). Towards identifying climate resilient poultry birds. **Journal of Dairy, Veterinary and Animal Research**, 7(3): 84-85.
13. **Sushna K** and B Ajithkumar (2017). Influence of weather parameters on growth of black pepper. **CONTEMPORARY RESEARCH IN INDIA**, 7(2): 165-173.

### 3. Papers presented in National and international conferences

#### Conference Abstracts

1. **Pragna, P.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V., Indira Devi, P and Bhatta, R (2017). Effect of summer heat stress on the rumen fermentation profile of native Osmanabadi goats. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 47.
2. **Aleena, J.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V and Bhatta, R (2017). Assessment of thermotolerant ability of Malabari goats based on endocrine profile and PBMC HSP70 expression during heat stress challenges. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 67.
3. **Archana, P.R.**, Sejian, V., Krishnan, G., Bagath, M., Ruban, W., Manjunathareddy, G.B., Beena, V and Bhatta, R (2017). Heat stress and goat meat production: impact on plasma leptin profile and skeletal muscle hsp70 expression pattern in Salem black. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 68.
4. **Aleena, J.**, Sejian, V., Bagath, M., Krishnan, G., Veeranna, R.K., Manjunathareddy, G.B., Beena,

V and Bhatta, R (2017). Superior adaptive capability of indigenous Salem black goats to summer heats stress based on endocrine variables and relative PBMC HSP70 gene expression. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 146.

5. **Aleena, J.,** Sejian, V., Bagath, M., Krishnan, G., Manjunathareddy, G.B., Beena, V and Bhatta, R (2017). Effect of summer season related heat stress on blood biochemical profile in Osmanabadi goat. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp, 147.
6. **Archana, P.R.,** Sejian, V., Ruban., W., Krishnan, G., Bagath, M., Manjunathareddy, G.B., Beena, V and Bhatta, R (2017). Carcass characteristics and bodyweight changes in Osmanabadi goats subjected to summer season induced heat stress. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 148.
7. **Archana, P.R.,** Sejian, V., Bagath, M., Krishnan, G., Ruban, W., Manjunathareddy, G.B., Beena, V and Bhatta, R (2017). Impact of heat stress on the meat quality as evidenced by the changes in the physico-chemical attributes, proximate composition and organoleptic attributes in Malabari goat. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 148.
8. **Pragna, P.,** Sejian, V., Krishnan, G., Bagath, M., Soren, N.M., Beena, V and Bhatta, R (2017). Growth Performance as Affected by Heat Stress in Salem Black Goats. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the

Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 149.

9. **Pragna, P.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V and Bhatta, R (2017). Growth efficiency as indicated by endocrine responses in three indigenous (Osmanabadi, Malabari, Salem black) goat breeds exposed to summer heat stress. In: XXVI Annual conference of SAPI and national symposium on Physiological Innovations to Forecast the Impact of Climate Change and to Evolve Strategies for Sustainable Livestock Production held at Veterinary College, KVAFSU, Nandinagar, Bidar, Karnataka, India between 21 -22 December 2017, pp 150.
10. **Aleena, J.**, Sejian, V., Bagath, M., Krishnan, G., Manjunathareddy, G.B., Beena, V., Indira Devi, P and Bhatta, R (2017). Assessing the physiological adaptability of Malabari goats when shifted from its native track to different agro-ecological zone In: National Seminar on Food Adequacy and Climate Change: Strategies for Sustainable Food Production held at Thrissur, Kerala, India between 3-14 November 2017, pp 603
11. **Aleena, J.**, Sejian, V., Bagath, M., Krishnan, G., Veeranna, R.K., Beena, V., Indira Devi, P and Bhatta, R (2017). Assessment of adaptive capability of indigenous Malabari goats to heat stress based on changes in blood biochemical response. In: Kerala Veterinary Science Congress 2017” held at Nedumbassery, Cochin, Kerala on 11 th and 12 th November 2017, pp 118.
12. **Pragna, P.**, Sejian, V., Bagath, M., Krishnan, G., Manjunathareddy G.B., Beena, V., Indira Devi, P and Bhatta. R (2017) Impact of summer heat stress on the growth performance of Malabari goats. In National seminar on Food Adequacy and Climate Change: Strategies for Sustainable Food Production organized by Association of Meat Scientists & Technologists and Kerala Veterinary & Animal sciences University held at Thrissur, Kerala on 3<sup>rd</sup>and 4<sup>th</sup> November 2017, pp 594.
13. **Pragna, P.**, Sejian, V., Bagath, M., Beena, P., Indira Devi, P and Bhatta. R (2017) Impact of summer heat stress on the rumen fermentation profile of Osmanabadi goats. In: 9th Kerala Veterinary Science Congress organized by Indian Veterinary Association, Kerala held at Nedumbassery, Cochin on 11th and 12th November 2017, pp 250.
14. **Archana, P.R.**, Sejian, V., Krishnan, G., Bagath, M., Ruban, W., Manjunathareddy, G.B., Beena,



V., Indira Devi, P and Bhatta, R (2017). Impact of heat stress on carcass traits, plasma leptin profile and skeletal muscle HSP70 gene expression pattern in Malabari goats. In: 9th Kerala Veterinary Science Congress (KVSC 2017) on “Basic Veterinary and Allied Sciences” organised by Indian Veterinary Association, Kerala at Nedumbassery, Cochin on 11<sup>th</sup> and 12<sup>th</sup> November 2017, pp 119.

15. **Archana, P.R.**, Sejian, V., Ruban, W., Bagath, M., Krishnan, G., Manjunathareddy, G.B., Beena, V., Indira Devi, P and Bhatta, R (2017). Impact of heat stress on meat quality as evidenced by changes in physico-chemical properties, proximate composition and organoleptic attributes in Malabari goats. In: *National seminar on Food Adequacy & Climate Change: Strategies for Sustainable Food Production* organized by Association of Meat Scientists & Technologists and Kerala Veterinary & Animal Sciences University held at Thrissur, Kerala on 3<sup>rd</sup> and 4<sup>th</sup> November 2017.
16. **Archana, P.R.**, Sejian, V., Bagath, M., Krishnan, G., Ruban, W., Beena, V., Indira Devi, P and Bhatta, R (2017). Effect of Heat Stress on meat quality characteristics, proximate composition, sensory attributes, plasma leptin profile and skeletal muscle HSP70 and myostatin gene expression in Osmanabadi Goats. In: *National seminar on Food Adequacy & Climate Change: Strategies for Sustainable Food Production* organized by Association of Meat Scientists & Technologists and Kerala Veterinary & Animal Sciences University held at Thrissur, Kerala on 3<sup>rd</sup> and 4<sup>th</sup> November 2017.
17. **Rashamol, V.P., Archana, P.R.**, Sejian, V., Krishnan, G., Bagath, M. Beena, P., Indira Devi, P and Bhatta, R (2017) Heat stress: Unprecedented Challenge for Meat Production. In: *National seminar on Food Adequacy & Climate Change: Strategies for Sustainable Food Production* organized by Association of Meat Scientists & Technologists and Kerala Veterinary & Animal Sciences University held at Thrissur, Kerala on 3<sup>rd</sup> and 4<sup>th</sup> November 2017, pp 401.
18. **Vandana, G.D.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V., Indira Devi, P and Bhatta, R (2017). Heat Stress Impact on Goat Production In: *National Seminar on Food Adequacy and Climate Change: Strategies for Sustainable Food Production* held at Thrissur, Kerala, India between 3-14 November 2017, pp 593.
19. **Vandana, G.D.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V., Indira Devi, P and Bhatta, R

(2017). Amelioration Strategies to Sustain Poultry Production in the Changing Climate Scenario In: Kerala Veterinary Science Congress 2017" held at Nedumbassery, Cochin, Kerala on 11<sup>th</sup> and 12<sup>th</sup> November 2017, pp 333.

20. **Rashamol, V.P.**, Sejian, V., Krishnan, G., Bagath, M. Beena, P., Indira Devi, P and Bhatta, R (2017) Significance of Climate Change Modelling in Livestock Farms. In National *seminar on "Food Adequacy & Climate Change: Strategies for Sustainable Food Production"* organized by Association of Meat Scientists & Technologists and Kerala Veterinary & Animal Sciences University held at Thrissur, Kerala on 3<sup>rd</sup> and 4<sup>th</sup> November 2017, pp 592.
21. **Rashamol, V.P.**, Sejian, V., Krishnan, G., Bagath, M. Beena, P., Indira Devi, P and Bhatta, R (2017) Physiological Adaptability of Livestock to Heat Stress Challenges. In: 9<sup>th</sup> Kerala Veterinary Science Congress organized by Indian Veterinary Association, Kerala held at Cochin, Kerala on 11<sup>th</sup> and 12<sup>th</sup> November 2017, pp 332.
22. **Angel, S.P.**, Sejian, V., Bagath, M., Krishnan, G., Indira Devi, P and Bhatta, R (2017). Endocrine Responses of Goat to Heat Stress Challenges. In: National Seminar on Food Adequacy and Climate Change: Strategies for Sustainable Food Production held at Thrissur, Kerala, India between 3-14 November 2017, pp 587.
23. **Angel, S.P.**, Sejian, V., Bagath, M., Krishnan, G., Indira Devi, P and Bhatta, R (2017). Thermo-Tolerant Genes in Livestock. In: Kerala Veterinary Science Congress 2017" held at Nedumbassery, Cochin, Kerala on 11<sup>th</sup> and 12<sup>th</sup> November 2017, pp 180.
24. **Amitha, J.P.**, Sejian, V., Krishnan, G., Bagath, M., Indira Devi, P and Bhatta, R (2017) Mitigation of the Heat Stress Impact in Livestock Reproduction. In: National *seminar on Food Adequacy & Climate Change: Strategies for Sustainable Food Production* organized by Association of Meat Scientists & Technologists and Kerala Veterinary & Animal sciences University at Thrissur, Kerala, on 3<sup>rd</sup> and 4<sup>th</sup> November 2017, pp 602
25. **Amitha, J. P.**, Sejian, V., Krishnan, G., Bagath, M., Indira Devi, P and Bhatta, R (2017) Body Condition Scoring: A Simple Tool to Optimize Livestock Production. In: 9<sup>th</sup> Kerala Veterinary Science Congress organized by Indian Veterinary Association at, Cochin Kerala on 11<sup>th</sup> and 12<sup>th</sup> November 2017, pp 131.

26. **Afsal, A.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V., Bhatta, R and Indira Devi, P (2017). Impact of heat stress on growth performance in goats. In: National conference for food adequacy and climate change: strategies for sustainable food production held at Thrissur between 3-4 November, pp 586.
27. **Afsal, A.**, Sejian, V., Bagath, M., Krishnan, G., Beena, V., Bhatta, R and Indira Devi, P (2017). Heat Stress and Livestock adaptation: Neuro-Endocrine Regulation. In: 9<sup>th</sup> kerala veterinary science congress organized by indian veterinary association held at nedumbassery between 11-12 November, pp 164.
28. **Pragna, P.**, Sejian, V., Bagath, M., Krishnan, G, Veeranna, R.K., Beena, V., Indira Devi, P and Bhatta, R (2017). Comparative Assessment of Growth Performance in Three Indigenous Goat Breeds during Heat Stress based on PBMC IGF-1 mRNA Expression Pattern. In: National Conference on Emerging trends in Environmental Biotechnology Approach to Conserve Biodiversity held at Garden City University, Bangalore, Karnataka, India between 21-22 September 2017, OP-8.
29. **Aleena, J.**, Sejian, V., Bagath, M., Krishnan, G, Veeranna, R.K., Beena, V., Indira Devi, P and Bhatta, R (2017). Impact of Heat Stress on Endocrine Profile and PBMC HSP70 Expression in Osmanabadi Goats. In: National Conference on Emerging trends in Environmental Biotechnology Approach to Conserve Biodiversity held at Garden City University, Bangalore, Karnataka, India between 21-22 September 2017, OP-6.
30. **Archana, P.R.**, Sejian, V., Bagath, M., Krishnan, G, Ruban, W., Manjunathareddy, G.B., Beena, V., Devi, P.I and Bhatta, R (2017). Impact of Heat Stress on the Meat Quality as Evidenced by the Expression patterns of Skeletal Muscle Myostatin Gene in three different Indigenous Goat Breeds. In: National Conference on Emerging trends in Environmental Biotechnology Approach to Conserve Biodiversity held at Garden City University, Bangalore, Karnataka, India between 21-22 September 2017, OP-7.
31. Unnikrishnan, T., **Gopakumar, C.S.**, Rao, GSLHVP and Anilkumar, P. 2018. Wind speed analysis across Thrissur, Central region of Kerala. Presented in the National Seminar on Recent Trends in Climate Change and Carbon Research. Organized by the Department of botany,

University of Calicut during 26-28, February 2018.

32. **Gopakumar, C.S** and Rao, GSLHVP 2018. Climate change over Kerala. . Presented in the National Seminar on Recent Trends in Climate Change and Carbon Research. Organized by the Department of botany, University of Calicut during 26-28, February 2018.
33. T.Unnikrishnan, Rao, GSLHVP and **Gopakumar, C.S.** 2018. Coconut projections over Kerala in future climate. Presented in the National Seminar on Recent Trends in Climate Change and Carbon Research. Organized by the Department of botany, University of Calicut during 26-28, February 2018.

### **Book Chapters**

1. Sejian, V., Bagath, M., Krishnan, G., Vaswani, S., **Archana, P.R., Pragna, P.,** Maurya, V.P and Bhatta, R (2017). Impact of Adverse Environmental Stress on Productive and Reproductive Performance in Osmanabadi Goats. In: Simões J., Gutiérrez C. (eds) Sustainable goat production under mountain, Semi-arid and Arid Agro-ecosystems. Volume I- Health, Welfare, Reproduction and Conservation, **Springer International Publisher**, Cham, Switzerland, pp 9-27.
2. Sejian, V., Krishnan, G., Bagath, M., Vaswani, S., Vidya, M.K., **Aleena, J.,** Maurya, V.P and Bhatta, R (2017). Adaptation strategies to sustain Osmanabadi goat production in a changing climate scenario. In: Simões J., Gutiérrez C. (eds) Sustainable goat production under mountain, Semi-arid and Arid Agro-ecosystems. Volume II-Local Goat Breeds and their Production Systems, Volume II, **Springer International Publisher**, Cham, Switzerland, pp 407-428.
3. Krishnan, G., Bagath, M., **Pragna, P.,** Vidya, M.K., **Aleena, J., Archana, P.R.,** Sejian, V and Bhatta, R (2017). **Mitigation of the Heat Stress Impact in Livestock Reproduction. In: Theriogenology. Carreira, R.P (Ed),** ISBN 978-953-51-3477-0, **InTech International Publisher**, Rijeka, Croatia pp 64-86.
4. Sejian, V., Hyder, I., Maurya, V.P., Bagath, M., Krishnan, G., **Aleena, J., Archana, P.R.,** Lees, A.M., Kumar, D., Bhatta, R., Naqvi, S.M.K (2017). Adaptive mechanisms of sheep to climate

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