

BIBLIOGRAPHY

- Aire, T. A. 1997. The structure of the interstitial tissue of the active and resting avian testes. *Onderstepoort, J. Vet. Res.*, **64**(4):291-299.
- Ali, S. 1993. *The Book of Indian Birds*. Bombay Natural History Society.
- Ambadkar, P.M. and Kotak, V.C. 1976. Seasonal variations of lipids and cholesterol in wild Pigeon, *Columba livia*: a quantitative study. *J. Anim. Morphol. Physiol.*, **23** (1&2): 101-114.
- Ambadkar, P. M. and Padate, G. S. 1993. Seasonal variation in ascorbic acid and cholesterol content of liver, blood and testes in two species of mynas, *Acridotheres ginginianus* and *Sturnus pagodarum* as related to reproductive cycles. *Pavo*, **31** (1&2):93-102.
- Ambadkar, P. M. and Padate, G. S. 1995. Seasonal variation in ascorbic acid and cholesterol content of liver, blood and ovaries in two species of mynas, *Acridotheres ginginianus* and *Sturnus pagodarum* as related to reproductive cycles. *Pavo*, **33** (1&2):17-24.
- Andrews, M. I. 1968. *Ecology of the social system of Jungle babbler, Turdoides striatus (Dumont)*. Ph.D. Thesis submitted to the M.S. University of Baroda.
- Asnani, M. V., Yadav, P. L., Pilo, B. and Shah, R. V. 1975. Comparative histochemical studies on avian liver. 6. Distribution

patterns of lipids and some enzymes in the liver of nectar feeder, Sunbird. *Pavo*, **11**(1&2): 85-91.

Astheimer, L. B., Buttemer, W. A. and Wingfield, J. C. 1995. Seasonal and acute changes in adrenocortical responsiveness in an arctic breeding bird. *Horm. Behav.*, **29**(4):442-457.

Azhar, S., Khan, I. and Gibori, G. 1989. The influence of estradiol on cholesterol processing by the corpus luteum. *Bio. Of Reprod.*, **40**:961-971.

Baillie, A. H., Ferguson, M. M. and McHart, D. 1966. In: *Developments in steroid histochemistry*. Acad. Press, New York.

Balthazart, J. 1983. Hormonal correlates of behavior. In: *Avian Biology*. Vol VII, Ed. Farner, D.S., King, J.R. and Parkes, K.C. Acad. Press, New York.

Banhegyi, G. and Mandl, J. 2000. The hepatic glycogeno-reticular system. *Pathol. Oncol. Res.*, **7**(2):107-110.

Bensadoun, A. and Rothfeld, A. 1972. The form of absorption of lipids in the Chicken (*Gallus domesticus*). *Proc. Soc. Exp. Biol. Med.*, **141**:814. As cited by Griminger, P. 1986. Loc Cit.

Biorn, A. C. and Graves, D. J. 2001. The amino terminal tail of glycogen phosphorylase is a switch for controlling phosphorylation confirmation, activation and response to ligands. *Biochemistry*, **40**(17): 5181-5189.

Biswas, N. M. 1969a. In vitro effects of Ascorbic acid and dehydroascorbic acid on diphosphopyridine nucleotide diaphorase in toad testis. *Endocrinol.*, **67** (1): 107-110.

Biswas, N. M. 1969b. Delta-5, 3 α HSDH in toad testes. Synergistic action of ascorbic acid and LH. *Endocrinol.*, **85**:981-983.

Biswas, N. M. and Deb, C. 1970. Invitro studies on the effects of ascorbic acid and dehydroascorbic acid on Δ^5 3 α - HSDH in toad testis. *Endocrinol.*, **87**:170-172.

Biswas, N. M., Chaudhari, A., Sarkar, M. and Biswas, R. 1996. Effects of Ascorbic acid on in vitro synthesis of testosterone in rat testis. *Indian, J. Exp. Biol.*, **34** (6): 612-613.

Bjersing, L. 1977. *Ovarian histochemistry*. In: The Ovary. Eds. Zuckerman, L. and Weir, B.J. Vol I. IInd Ed. Acad. Press, New York.

Bollen, M., Keppens, S. and Stalmans, W. 1998. Specific features of glycogen metabolism in the liver. *J. Biochem.*, **336**(1): 19-31.

Byrd, J. A., Pardue, S. L. and Hargis, B. M. 1993. Effects of ascorbate on LH stimulated progesterone biosynthesis in chicken granulosa cells in vitro. *Comp. Biochem. Physiol. Comp. Physiol.*, **104** (2): 279-281.

Chalana, R. C. and Guraya, S. S. 1979. Seasonal fluctuations and histochemical characteristics of the interstitial cells in the ovary of crow and Myna. *Pavo*, **17**(1&2): 65-70.

- Cahill, G. F. Jr., Zottu, A. J. and Hastings, A. B. 1957. Studies on carbohydrate metabolism in rat liver slices. IX. Ionic and hormonal effects on phosphorylase and glycogen. *J. Biol. Chem.*, **224**: 234-250.
- Cano, N. 2001. Inter- relationships between renal metabolism (both in physiology and renal dysfunction) and the liver. *Curr. Opin. Clin. Nutr. Metab. Care.*, **4** (4): 279-285.
- Casotti, G. 2001. Effects of season on kidney morphology in house sparrows. *J. Exp. Biol.*, **204**(6):1201-1206.
- Cheng, M. F. 1977. Role of gonadotrophin releasing hormones in the reproductive behavior of female ring doves (*Streptopelia risoria*). *J. Endocrinol.*, **74**(1): 37-45.
- Cheng, M. F. and Silver, R. 1975. Estrogen-progesterone regulation of nest building and incubation behavior in ovariectomised ring doves. *J. Comp. Physiol. Psychol.*, **88**:256-263. As cited by Balthazart, 1983. Loc. Cit.
- Chinoy, N. J. 1972. Ascorbic acid levels in avian tissues and its metabolic significance. *Acta. Zoologica*, **53**:121-126.
- Chinoy, N. J., Seethalaxmi, L. and Rao, M. V. 1978. Interaction of steroids with ascorbate via charge transfer complex formation. 5th International congress on hormonal steroids, New Delhi.
- Chinoy, N. J. and Rao, M. V. 1979. Inter-relationship between ascorbic acid and sex hormones in steroidogenic tissues and ascorbic acid synthesizing tissues of Albino rats. *J. Anim. Morphol. Physiol.*, **26**:36-43.

- Chinoy, N. J., Mehta, R. R., Seethalaxmi, L., Sharma, J. D. and Chinoy, M. R. 1986. Effects of vitamin C deficiency on physiology of male reproductive organs of guinea pigs. *Int. J. Fertil.*, **31** (3): 232-239.
- Cori, C. F., Cori, G. T. and Grean, A. 1943. Crystalline muscle phosphorylase, III. Kinetics. *J. Biol. Chem.*, **151**: 39-55.
- Crawford, N. 1958. An improved method for the determination of free and total cholesterol using ferric chloride reaction. *Clin. Chim. Acta.*, **3**: 357-367.
- Dharmakumarsinghji, 1954. *Birds of Saurastra, India.*
- Dhindsa, M. S and Saini, H. K. 1994. Agricultural ornithology: an Indian perspective. *J. Biosci.*, **19** (4): 391- 402.
- Dhindsa, M. S., Saini, H. K., Saini, M. S. and Toor, H. S. 1994. Food of Jungle Babbler and Common Babbler: A comparative study. *JBNHS*, **92**:182-189.
- Dletschy, J. M. and Weigh, H.J. 1974. Cholesterol synthesis by the gastrointestinal tract. *J. Amer. of Clin. Nutr.*, **24**:70-76.
- Donham, R. S. 1979. Annual cycle of plasma LH and sex hormones in male and female mallards (*Anas platyrhynchos*), *Biol. Reprod.*, **21**:1273.
- Farner, D .S. and King, J. R. 1971. In: *Avian biology*. Vol I-VII, Acad. Press, New York.

Farner, D .S and McCreery, B. R. 1979. Progesterone in male white crowned sparrows (*Zonotrichia leucophrys gambelii*). *Gen. Comp. Endocrinol.*, **37**:1

Fiske, C. H. and Subbarow, Y. 1925. The colorimetric determination of phosphorus. *J. Biol. Chem.*, **66**: 375.

Folch, J., Lees, M. and Sloane, H.G.H. 1957. A simple method for isolation and purification of total lipids from animal tissues. *J. Biol. Chem.*, **226**: 497-505.

Free, M. J. 1970. Carbohydrate metabolism in testis. In: *The Testis*. Vol II Eds. Johnson A.D., Gomes, W.R. and Van Demerk, N.L. Acad. press, New York.

Furuse, M., Murai, A., Kita, K., Asakura, K. and Okumura, J. 1991. Lipogenesis depending on sexual maturity in female Japanese quail, *Coturnix coturnix japonica*. *Comp. Biochem. Physiol. B.*, **100**(2): 343-345.

Furr, B. J. A. 1973. Radioimmunoassay of progesterone in peripheral plasma of domestic fowl in various physiological states and in follicular venous plasma. *Acta. Endocrinol.*, **72**: 89.

Gaston, A. J. 1978. Ecology of the Common Babbler, *Turdoides caudatus*. *The Ibis*, **120** (4): 415 – 432.

Gokhale, V. G. 1992. Annual reports of "AINP", Indian Council of Agriculture Research.

Griminger, P. 1986. Lipid metabolism. In: *Avian physiology*. IIIrd edition. Ed. Sturkie, P.D. Springer- Verlag, NY.

Griminger, P. and Scanes, C. G. 1986. Protein metabolism. In: *Avian physiology*. IIIrd Ed. Ed. Sturkie, P.D. Springer- Verlag, NY.

Guraya, S. S. and Chalana, R. K. 1976. Histochemical observations on the seasonal fluctuations in the follicular atresia and interstitial gland tissue in the house sparrow ovary. *Poult. Sci.*, **55**(5):1881-1885.

Gupta, R. C. and Midha, M. 1994. Feeding ecology of the Jungle Babbler *Turdoides striatus*. From: Abstracts. 1st National symposium on birds in agricultural ecosystem. pp 30.

Haber, B. A., Chin, S., Chaung, E., Buikhrusen, W., Nagi, A. and Taub, R. 1995. *J. Clin. Invest.*, **95**:832-841. As cited by Mithieux, et al., 1998 Loc. Cit.

Harper, A. E. 1963. Glucose-6-phosphatase. In: Enzymic Analysis. Ed. Bergmeyer Hane- Ulrich. pp: 758-792. Academic press, New York.

Haase, E., Paulke, E. and Sharp, P. J. 1976. Effects of seasonal and social factors on testicular activity and hormone levels in domestic pigeons. *J. Exp. Zool.*, **197**: 81.

Hau, M. 2001. Timing of breeding in variable environment: tropical birds as model system. *Horm. Beh.*, **40**(2): 281-290.

Hazelwood, R .L. 1972. The intermediary metabolism in birds. In: *Avian Biology*. Eds. Farner, D.S., King, J.R. and Parkes, K.C. Vol II, Acad. Press. New York.

Hazelwood, R .L. 1986. Carbohydrate metabolism. In: *Avian physiology*. IIIrd Ed. Ed. Sturkie, P.D. Springer- Verlag, NY.

Hegner, R. E. and Wingfield, J. C. 1986. Behavioral and endocrine correlates of multiple brooding in the semi colonial House sparrow, *Passer domesticus* II. Females. *Horm. Behav.*, **20**(3):313-326.

Hickey and Elias, 1954. as cited by Ross, M. H. and Reith, E. J. 1985. In: *Histology. A Text and Atlas*. Harper and Row publishers.

Hirschenhauser, K., Mostl, E. and Kotrschal, K. 1999. Seasonal patterns of sex steroids determined from the feces in different social categories of Greylag Geese (*Anser anser*). *Gen. Comp. Endocrinol.*, **114**(1):67- 79.

Hodges, R. D. 1975. In: *The histology of the fowl*. Acad. Press, New York, London.

Hutchison, R. E. 1975. Effects of ovarian steroids and prolactin on the sequential development of nesting behavior in female Budgerigars. *J. Endocrinol.*, **67**(1): 29-39.

Immelman, K. 1971. Ecological aspects of periodic reproduction. In: *Avian Biology*. Ed. Farner, D.S. and King, J.R. Acad. Press, New York.

Itoh, R., Yamada, K., Oka, J., Echizen, H., Suyama, Y. and Murakami, K. 1990. Serum ascorbic acid and HDL cholesterol in a healthy elderly Japanese population. *Int. J. Vitam. Nutr.*, **60** (4): 360-365.

- Jacquet, J. M. 1997. Photorefractory period of the Muscovy duck: endocrine and neuroendocrine responses to day length after a full reproductive cycle. *Br. Poult. Sci.*, **38**(2):209-216.
- Jenkins, S. A. 1980. Vitamin C status, serum cholesterol levels and bile consumption in the pregnant guinea pigs. *Br. J. Nutr.*, **43** (1):95-100.
- Johnson, A. D. 1970. Testicular lipids. In: *The Testes*. Vol II Ed. Johnson, A.D., Gomes, W.R. and Vandemark, N.L. Acad. Press, New York.
- Johnson, A. L. 1986a. Reproduction in males. In: *Avian physiology*. IIIrd Ed. Ed. Sturkie, P.D. Springer- Verlag, NY.
- Johnson, A. L. 1986b. Reproduction in females. In: *Avian physiology*. IIIrd Ed. Ed. Sturkie, P.D. Springer- Verlag, NY.
- Khan, I., Azhar, S., Chen, Y-Cl. and Gibori, G. 1985. Steroid effect on HMG CoA reductase and side chain cleavage enzyme in luteal cells. In proceedings of 5th ovarian workshop, Urbana, IL, Ovarian workshop press. 83-87. Loc. Cit. Azhar, S., Khan, I. and Gibori, G. 1989. The influence of estradiol on cholesterol processing by the corpus luteum. *Bio. Of Reprod.*, **40**:961-971.
- Klopfenstein, C. F. and Clegg, R. E. 1980. Effects of Ascorbic acid, vitamin E and fatty acids on lipid composition in cockerels. *Poult. Sci.*, **59** (10): 2267-2272.
- Kotze, J. P. 1975. The effects of vitamin C on lipid metabolism. *S. Afr. Med. J.*, **49** (40): 1651-1654.

- Krebs, H. A. and Yoshida, T. 1963. Renal gluconeogenesis 2. The gluconeogenic capacity of the kidney cortex of various species. *J. Biochem.*, **89**: 398-400.
- Kun, E. and Abood, L. G. 1949. Colorimetric estimation of Succinate dehydrogenase by triphenyl tetrazolic chloride. *Science*, **109**:144-146.
- Lack, D. 1950. The breeding seasons of European birds. *Ibis*, **91**:288-316.
- Liu, Z., Gardner, L. B. and Barrett, E. J. 1993. An endogenous glycogen associated compound modulates glucose-6-phosphatase activity in rat liver microsomes. *Biochem. Biophys. Res.Commun.*, **195**(1): 173-178.
- Lofts, B. and Murton, R. K. 1973. Reproduction in birds. In: *Avian Biology*. Vol III. Ed. Farner, D.S. & King, J.R. Academic press Inc, NY.
- Logan, C. A. and Wingfield, J. C. 1995. Hormonal correlates of breeding status, nest construction and parental care in multiple brooded northern Mocking birds, *Mimus polyglottos*. *Horm. Behav.*, **29**(1): 12-30.
- Lowry, D. H., Rosenrough, N. J., Farr, A. and Randall, J. 1951. Protein measurement with the Folin-Phenol reagent. *J. Biol. Chem.*, **193**: 265-275.
- Luck, M. R., Jeyaseelan, I. and Scholes, R. A. 1995. Ascorbic acid and fertility. *Biol. Reprod.*, **52** (5): 262-266.

Marshall, A. J. 1961. Reproduction. In: *Biochemistry and comparative physiology of birds*. Vol II, Ed. Marshall, A.J., Acad. Press, New York.

Mayes, P. A. 2000. Structure and function of water soluble vitamins. In Harper's Biochemistry. Ed. Murray, R.K., Granner, D.K., Mayes, P.A., and Rodwell, V.W. Appleton and Lange, NY.

Mehta,P.C.1985. *Neural and endocrine regulation of gluconeogenesis in the kidney of the blue rock pigeon (Columba livia)*. Ph.D. thesis submitted to M.S. University.

Michel, G. F. 1977. Experience and progesterone in ring dove incubation. *Anim. Behav.*, **25**(2): 281-285.

Mithieux, G., Nathalie, D., Payrastre, B. and Zitoun, C. 1998. Liver microsomal glucose-6-phosphatase is competitively inhibited by the lipid products of phosphatidyl inositol 3- kinase. *J. Biolchem.*, **273**(1): 17-19.

Mithieux, G., Vidal, H., Danielle, N., Bruni, N., Zitoun, C. and Minassian, C.1996. *Diabetes*, **45**:891-896. As cited by Mithieux, et al., 1998. Loc. Cit.

Minassian, C., Mithieux, G. and Zitoun, C. 1996. *Mol. Cell, Biochem.*, **155**:73-41. As cited by Mithieux, et al., 1998. Loc. Cit.

Morton, M. L., Peterson, L. E., Burns, D. M. and Alban, N. 1990. Seasonal and age related changes in plasma testosterone

levels in mountain White crowned sparrows. *The Condor*, **92**:1162-1173.

Murray, R. K., Granner, D. K., Mayes, P. A. and Rodwell, P. A. 2000. In: Harper's Biochemistry." 25th Ed. McGraw Hill Pub.

Nalbandov, A. V. 1970. In: *Reproductive physiology*. IIInd Ed. D. B. Taraporewala Sons & Co. Pvt. Ltd. Bombay.

Naik, R. M. and Naik, S. 1965. Studies on the House swift (G. E. Gray) 4. Gonadal cycle. *Pavo*, **3**(2):77-88.

Naik, R. M. and Razack, A. 1967. Studies on the House swift, *Apus affinis*: breeding seasons and their regulation. *Pavo*, **5**(1&2): 74-96.

Nordlie, R. C., Foster, J. D. and Lange, A. J. 1999. Regulation of glucose production by liver. *Annu. Rev. Nutr.*, **19**: 379-406.

Oelrichs, B. A. and Kratzing, C. C. 1980. Ascorbic acid in intestinal tissues. *Aust. J. Exp. Biol. Med. Sci.*, **58** (5): 515-520.

O'Neill, T. E. and Bannister, D.W. 1986. Gluconeogenic and lipogenic properties of isolated kidney tubules from the domestic fowl, *Gallus domesticus*. *Comp. Biochem. Physiol. B.*, **83**(3): 595-598.

Padate, G. S. 1990. *A comparative study of certain metabolic changes accompanying breeding cycles of two closely related species of mynas 1. Acridotheres ginginianus 2. Sturnus pagodarum*. Ph.D. Thesis submitted to the M.S. University of Baroda.

Parasharya, B. M., Dodia, J. F., Mathew, K. L and Yadav, D. N. 1994. Natural regulation of White grubs by birds in agro ecosystem. *J. Biosci.*, **19**: 381-389.

Parasharya, B. M., Mathew, K. L and Yadav, D. N. 1994. Community structure of bird pests and their diurnal rhythm in ripening sorghum. *JBNHS*, **92**: 11- 15.

Parasharya, B. M. 1994. Role of beneficial birds in agricultural ecosystems. From "Birds and agriculture: a souvenir".^{1st} National symposium on birds in agricultural ecosystem. pp 29 – 31.

Parasharya, B. M. 1988. Annual reports of "AINP", Indian Council of Agriculture Research.

Patankar, A. G., Giri, A. P., Harsulkar, A. M., Sainani, M. N., Deshpande, V. V., Ranjekar, P. K. and Gupta, V. S. 2001. Complexity in specificities and expression of *Helicoverpa armigera* gut proteases explains polyphagous nature of the insect pest. *Insect, Biochem. Molbiol.*, **31**(4-5):453-464.

Patel, C. D. 1982. *Certain investigations on the involvement of pineal in general metabolism and seasonal physiology of the feral blue rock pigeon, Columba livia.* Ph.D. Thesis submitted to the M.S. University of Baroda.

Patel, M. M. 1984. *Pineal in relation to breeding and carbohydrate metabolism: Histophysiological studies in domestic and wild pigeons, Columba livia.* Ph.D. Thesis submitted to the M.S. University of Baroda.

Patel, P. V. 1978. *Studies on certain aspects of metabolism and its regulation in the liver of growing and adult pigeons*. Ph.D. Thesis submitted to the M.S. University of Baroda.

Patel, M. M. and Ramachandran, A. V. 1987. Seasonal alterations in various lipid fractions of the testis and ovary in normal and pinealectomised domestic Pigeons, *Columba livia*. *J.Reprod. Biol. Comp. Endocrinol.*, **7** (2): 61-71.

Patel, P. V., Asnani, M. V., Shah, R. V. and Pilo, B. 1978. Studies on developing avian liver. 4. The correlation of lipogenic functions of the liver with thyroid activity in Pigeon during post - hatching development. *Pavo*, **15** (1&2): 94- 104.

Perrins, C. M. and Birkhead, T. R. 1983. In: *Avian ecology*. Ed. Perrins, C.M. and Birkhead, T.R., Blackie, New York.

Phillips, J. G., Butler, P. J. and Sharp, P. J. 1985. Environment and Reproduction. In: *Physiological strategies in avian biology*. Ed. Blackie, Chapman and Hall, New York.

Pilo, B., Shah, R. V., Asnani, M. V. and Yadav, P. L. 1975. Comparative histochemical studies on avian liver 4. Relationship of dietary preference of various representative birds with the fat and glycogen contents and distribution pattern of histochemical demonstrable lipids in their livers. *Pavo*, **11** (1&2): 12- 20.

Pilo, B. and Mehta, P. C. 1985. Dietary variation in kidney metabolism in three different species of birds, Pigeon, Sparrow & Swift. *Pavo*, **23** (1&2): 25-30.

Pintauro, S. J. and Bergan, J. G. 1982. Effects of Ascorbic acid on in vitro steroidogenesis in guinea pigs. *J. Nutr.*, **112** (3): 584-591.

Plewka, A., Kaminski, M., Plewka, D. and Nowaczyk, G. 2000. Glucose-6-phosphatase and age: Biochemical and histochemical studies. *Mech. Ageing, Dev.*, **113**(1): 49-59.

Prasad, R. K. and Guraya, S. K. 1982. Comparative studies on seasonal variations in ovarian lipids of the Crow, Myna and House Sparrow. *Proc. Natl. Acad. sci. India, Sect B (Biol Sci.)*, **52**(2): 215-221.

Pudney, J. 1995. Spermatogenesis in non-mammalian vertebrates. *Microsc. Res. Tech.*, **32**(6):459-497.

Raheja, K. L., Linscheer, W. G., Coulson, R., Wentworth, S. and Fineberg, S. E. 1980. Elevated insulin glucagons ratios and decreased cyclic AMP levels accompany the glycogen and triglyceride storage syndrome in the hypothyroid chick. *Horm. Metab. Res.*, **12**(2):51-55.

Raheja, A. K. and Tewari, G. C. 1995. Crop pest management- The environment friendly way. ICAR, New Delhi.

Rajvanshi, G., Gupta, M. M., Bhatnagar, V. K. and Bhatnagar, S. 1985. Cyclic changes in carbohydrate localization in gonad of male Indian Robin (*Saxicoloides fulicata linn.*) Pavo, **23**(1&2):41-46.

Rana, B. D. 1970. Some observations on food of Jungle babbler (*Turdoides striatus*) and the Common babbler (*Turdoides caudatus*) in the Rajasthan desert, India. *Pavo*, **8**: 35-44.

Ranjit Daniels, R. J. 1994. Conservation of birds in the Indian agricultural context. From: Abstracts. 1st National symposium on birds in agricultural ecosystem. pp 47.

Rapaport, R., Skian, D., Wolfenson, D., Shaham-Albalancy, A. and Hanukoglu, L. 1998. Antioxidant capacity is correlated with steroidogenic status of the corpus luteum during the bovine estrous cycle. *Biochim. Biophys. Acta.*, **1380** (1): 133-140.

Ravikumar, G. Senthilkumaran, B., Tewary, P. D. and Goel, A. K. 1995. Circadian aspect of photoperiodic time measurement in a female house sparrow, *Passer domesticus*. *J. Biol. Rhythms*, **10**(4):319-323.

Ray Chaudhari, C. and Chatterjee, I. B. 1969. L- Ascorbic acid synthesis in birds: Phylogenetic trend. *Science*, **164**:435-436.

Roe, J. H. 1954. Chemical determination of Ascorbic acid. In: Methods of biochemical analysis. Vol 1, Glick, D. (Ed.), New York Interscience publishers.

Rosebrough, R. W., Poch, S. M., Russell, B. A. and Richards, M. P. 2002. Dietary protein regulates in vitro lipogenesis and lipogenic expression in broilers. *Comp. Biochem. Physiol. A. Mol. Integr. Physiol.*, **132**(2): 423-431.

Rosenstrauch, A., Weil, S., Degen, A. A. and Friedlander, M. 1998. Leydig cell function, structure and plasma androgen level during

the decline in fertility in aging roosters. *Gen. Comp. Endocrinol.*, **109**(2):251-258.

Ross, M. H. and Reith, E. J. 1985. In: Histology. A Text and Atlas. Harper and Row publishers.

Sandberg, R. and Petterson, J. Magnetic orientation of Snow buntings, a species breeding in the high arctic: passage migration through temperate zone areas. *J. Exp. Biol.*, **199**(9): 1899-1905.

Sangha, G. K. and Guraya, S. S. 1989. Biochemical changes in lipids during follicular growth and corpora lutea formation and regression in rat ovary. *Ind. J. of Exp. Biol.*, **27**: 998-1000.

Sapna, S. 2002. *A comparative histoenzymological study of some tissues with reference to reproductive cycle in two species of birds*. Thesis submitted to M. S. University of Baroda, Vadodara.

Saxena, A. and Saxena, A. K. 1980. Gonadal cycle and secondary sexual characteristics of the grey quail (*Coturnix coturnix*). *Pavo*, **18**(172):62-77.

Seifter, S., Dayton, S., Horic, B. and Muntwyler, V. 1950. The estimation of glycogen with anthrone reagent. *Arch. Biochem.*, **25**: 191-200.

Seiler, H. W., Gahr, M., Goldsmith, A. R. and Guttinger, H. R. 1992. Prolactin and gonadal steroids during the reproductive cycle of the Bengalese finch (*Lonchura striata* var. *domestica*, Estrildidae), a non-seasonal breeder with biparental care. *Gen. Comp. Endocrinol.*, **88**(1): 83-90.

- Silver, R., Reboulleun, C., Lehrman, D. S. and Feeder, H. H. 1974. Progesterone during the reproductive cycle of male and female ring doves. *Endocrinol.*, **94**(6): 1547-1554.
- Silverin, B. 1975. Reproductive organs and breeding behavior of male pied flycatcher, *Ficedula hypoleuca* (Pallas). *Ornis. Scand.*, **6**: 15-26.
- Spannhake, E. B. 1976. Insulin/Glucagon ratio- a determinant of glucose homeostasis. In: *Advances in modern nutrition*. Vol I. Ed. Berclanier, C.D. John Wiley and Sons., New York.
- Stevenson, P. C., Green, P.W., Stenso, P. C., Simmonds, M. S. and Sharma, H. C. 2002. Can larvae of pod borer, *Helicoverpa armigera* (Lepidoptera: Noctuidae), select between wild and cultivated pigeon pea, *Cajanus sp.* (Fabaceae)? *Bull. Entomol. Res.*, **92**(1):45-52.
- Sturkie, P. D. 1976. In: *Avian Physiology*. Ed. Sturkie, P.D. IIIrd Ed. Springer and Verlag, New York, Heidelberg, Berlin.
- Szepsi, B. 1976. Effect of starvation and food restriction on carbohydrate metabolism. In: *Advances in modern nutrition*. Vol I. Ed. Berclanier, C.D. John Wiley and Sons., New York.
- Thomas, V. G. 1982. Energetic reserves of Hudson Bay Willow Ptarmigans during winter and spring. *Can. J. Zool.*, **60**:1618. As cited by Whittow, G. C. 1986. Loc. Cit.

- Trainor, B.C. and Marler, C.A. 2001. Testosterone promotes parental behavior in a monogamous mammal via conversion to estrogen. *Proc. R. Soc. Lond. B. Biol. Sci.*, **269**(1493): 823- 829.
- Umbriet, W. W., Burris, R. H. and Stauffer, J. H. 1957. In: Manometric Techniques. Burgers public Co., Minneapolis.
- Vleck, C. M. and Brown, J. L. 1999. Testosterone and social and reproductive behavior in Aphelocoma jays. *Anim. Behav.*, **58**(5): 943-951.
- Voet, D., Voet, J. G. and Pratt, C. W. 1998. Glycogen metabolism and gluconeogenesis. In: *Fundamentals of biochemistry*. John Wiley and Sons, Inc.
- Watford, M. 1985. Gluconeogenesis in chicken: regulation of Phosphoenol pyruvate carboxykinase gene expression. *Fed. Proc.*, **44**(8): 2264-2274.
- Watford, M. 1989. Hormonal and nutritional regulation of phosphoenol pyruvate carboxykinase mRNA levels in chicken kidney. *J. Nutr.*, **119**(2): 319-322.
- Watford, M., Hod, Y., Chinoy, B. and Utter, M. F. 1981. The unique role of the kidney in gluconeogenesis in the chicken. *J. Biol. Chem.*, **256**: 10023- 10027.
- Whistler, H. 1949. *Popular hand book of Indian birds*. Gurney and Jackson, London.
- Whittow, G. C. 1986. "Energy metabolism". In: *Avian physiology*. IIIrd Ed. Ed. Sturkie, P.D. Springer- Verlag, NY.

- Williams, T. D. 1992. Reproductive endocrinology of Macaroni (*Eudyptes chrysolophus*) and Gentoo (*Pygoscelis papua*) Penguins. I. Seasonal changes in plasma levels of gonadal steroids and LH in breeding adults. *Gen. Comp. Endocrinol.*, **85**(2): 230-240.
- Yang, Y., Pang, X. and Liang, G. 2000. Life table of cotton Bollworm under different control conditions. *Ying, Yong, Sheng, Tai, Xue, Bao.*, **11**(6):856-860.
- Yeh, S. J C. and Leveille, G. A. 1973. Influence of dietary protein level on plasma cholesterol turn over and fecal steroid excretion in the chick. *J. Nutr.*, **103**: 407.
- Yuonne, L., Schmit, V. M. and Schreiber, J. R. 1988. "Localization and movement of newly synthesized cholesterol in rat granulosa cells. *Endocrinol.*, **123**(1):81-86.
- Zhou, X., Coll, M. and Applebaum, S. W. 2000. Effect of temperature and photoperiod on juvenile hormone biosynthesis and sexual maturation in the cotton Bollworm, *Helicoverpa armigera*: Implications for life history traits. *Insect, Biochem. Molbiol.*, **30**(8&9):863-868.
- Zuckerman, S. 1962. In: *The Ovary*. Acad. Press, New York.