BIBLIOGRAPHY

Adams, H. and Weniger, J. P. (1968). Effect of cortisol on growth and uric acid excretion in the chick. *J. Endocr.* **40:** 145.

Akiba, Y; Ngano, H. and Horiguchi, M. (1992). Effects of corticosterone injected at graded dose levels and implanted with tube at low levels on growth and hepatic lipid and abdominal fat deposition in broiler chickens. *Jap. Poult. Sci* . **29:** 287-295.

Asmundson, V. S. and Pinsky, P. (1935). The effect of the thyroid on the formation of the hen's egg. *Poultry Sci.* **14:** 99-104.

Assenmacher, I. (1973). The peripheral endocrine glands. *In: Avian biology* (D.S. Farner, and J. R. King eds.). Academic press New York. **3:**183-286.

Ayyar, C. B. (1987). Adrenal-Gonad relationship : A histophysiological study in feral blue rock pigeons, *(Columba livia)*. Thesis submitted to M. S. University of Baroda.

Ayyar, C. B; Singh, D. and Ramachandran, A. V. (1992). Seasonal gravimetric changes in the organs of normal and adrenal manipulated feral pigeons *(Columba livia)*. *Journal of Reproductive Biology and Comparative Endocrinology*. **4(1):** 9-25.

Ayyar, C. B; Devkar, R. V. and Ramachandran, A. V. (1999). Seasonal alterations in blood glucose level, tissue glycogen content and hepatic glucose-6-phosphatase activity in normal and adrenal manipulated pigeons, *Columba livia*. *J. anim. Morphol. Physiol.* **46(1&2):** 63-70.

Bacq, Z. M. and Alexander, P. (1961). *In: fundamental of Radiobiology*. Pergamon Press, newYork.

Ballard, F. J. and Hanson, R. W. (1967). Changes in lipid synthesis in rat liver during development. *Biochem. J.* **102:** 952-958.

Ballard, F. J. and Oliver, I. T. (1963). Glycogen metabolism in embryonic chick and neonatal rat liver. Biochem. Biophys. Acta. 71: 578-588.

Ballard, F. J. and Oliver, I. T. (1965). Carbohydrate metabolism in liver from foetal and neonatal sheep. *Biochem. J.* **95:** 191-200.

Bartov, I; Jensen, L. S and Veltmann, J. R. (1980a). effect of corticosterone and prolactin on fattening in broiler chicks. *Poultry Science*. **59:** 1328-1334.

Bartov, I; Jensen, L. S and Veltmann, J. R. (1980b). effect of dietary protein and fat levels on fattening of corticosterone injected broiler chicks. *Poultry Science*. **59:** 1864-1872.

Bartove, I. (1982). Corticosterone and fat deposition in broiler chicks: Effect of injections, time, breed, sex and age. *Brit. Poult. Sci.* **23:** 161-170.

Baum, G. J. and Meyer, R. K. (1960). Effect of adrenal steroids and diethylstilbestrol on growth and fat content of cockerels. Am. J. Physiol. **198:** 1263-1266.

Bellamy, D. and Leonard, R. A. (1965). Effects of cortisol on the growth of chicks. *Gen. Comp. Endocrinol.* **5:** 402-410.

Bellamy, D; Dulieu, K. and Leonard, R. A. (1968a). Glutamic pyruvic trans aminase and glucconeogenesis in liver slices: A comparision of the effect of cortisol injection with treatment in vitro. *Endocrinology.* **38:** 359-360.

Bellamy, D; Leonard, R. A. and Dulieu, K. (1968b). hepatic gluco neogenesis in rats treated with cortisol. *Gen. Comp. Endocrinol.* **10:** 434-437.

Berg, C; Halldin, K; Frodolfsson, A. K; Brandt, I; Brunstrom, B. (1999). The avian egg as a test system for endocrine disrupters: effects of diethylstilbestrol and ethynylestradiol on sex organ development. *Sci. Total Environ.* **15:** 233(1-3): 57-66.

Beuving, G and Vonder, G. M. A. (1978). Effect of stressing factors on corticosterone levels in plasma of laying hens. *Gen. Comp. Endocrinol.* **35:** 153-159.

Bell, D. J and Freeman, B. M (Eds.) (1984). Physiology and Biochemistry of the domestic fowl. Vols. 1,2,3,4 and 5. London: academic Press.

Bilezikian, J. P; Loeb, J. N; Gammon, D. E. (1980). Induction of sustained hyperthyroidism and hypothyroidism in the turkey: Physiological and Biochemical observations. *Poult. Sci.* **59:** 628-635.

Biswas, N. N. and Deb, C. (1970). In vitro studies on the effects of ascorbic acid and dehydroascorbic acid on □^{5} 3β-hydroxysteroiddehydrogenase in testis. *Endocrinology*, **87:** 170-173.

Blivaiss, B.B. (1947). Development of secondary sexual characters in thyroidectomized Brown Leghorn hens. *J. Exp. Zool.* **104:** 267-305.

Blem, C. R. (1976). Patterns of lipid storage and utilization in birds. *Am. Zool.* **16:** 671.

Broody, S. (1945). "Bioenergetics and growth", New York, Reinhold.

Bruni, J. F; Marshall, S; Dibbett, J. A and Meites, J (1975). Effects of hyper and hypothyroidism on serum LH and FSH levels in intect and gonadectomised male and female rats. *Endocrinology* **97:** 558-562.

Buyse, J; Decuypere, E; Sharp, P. J; Huybtrechts, L. M; Kuhn, E. R. and whitefield, C. (1987). Effect of corticosterone on circulating concentrations of corticosterone, prolactin, thyroid hormones and somatomedin C and on fattening in broilers selected for high or low fat content. *J. Endocrinol.* **112:** 229-237.

Carsia, R. V; Morin, M. V; Rosen, H. D. and Weber, H. (1987). Ontogenic corticosteroidogenesis of the domestic fowl. Response of isolated adrenocortical cells. *Proc. Soc. Exp. Boil. Med.* **184**: 436-445.

Callenbach, E. W; Nicholar, J. E. and Murphy, R. R. (1943). Effect of light and availability of feed on egg production. *Penn. Agri. Exp. Sta. Bull.* 455.

Carasia, R. V, and M. V, Rosen, H. D. and Weber, H. (1987). Ontogenic corticosteroidogenesis of the domestic fowl. Response of isolated adrenocortical cells. *Proc. Soc. Exp. Boil. Med.* **184:** 436-445.

Chandola, A. Thapliyal, J.P and Murty, GSRC. (1973). Photoperiodism and sexual activity in Indian birds. In *Proc. UNESCO International Congress on "The sun in the service off mankind."* **PP B 14** (1-10) 2-6th July, Paris.

Chandola, A. Thapliyal, J.P. (1978). Regulation of reproductive cycles of tropical Spotted Munia and Weaver birds. *In Environ. Endocrinol.* **PP**:61-63. Eds. Assenmacher, I and Farner, D.S. (Berlin: Springer-Verlag).

Charles, D. R. (1984). A model of egg production. *Poultry Science*. **25:** 309-321.

Chiasson, R. B; Sharp, P. J; Klandorf, H; Scanes, C.G and Harvey, S. (1979). The effect of rapeseed meal and Methimazole on levels of plasma hormones in growing broiler cockerels. **58:** 1575-1583.

Chinoy, N. J. (1972a). Ascorbic acid levels in avian tissues and its metabolic significance. Acta Zoologica. **53:** 121-126.
Chinoy, N. J. (1972b). Ascorbic acid levels in mammalian tissues and its metabolic significance. *Comp. Biochem. Physiol.* **43A:** 945-952.

Chinoy, N. J; Laliwala, S. M; Parmar, P. Y. and Shah, V. C. (1974a). Ascorbic acid turnover in developing chick embryonic tissues and its metabolic significance. *Acta. Zoologica.* **55:** 1-6.

Chinoy, N. J; Laliwala, S. M; Parmar, P. Y. and Shah, V. C. (1974b). Metabolism of ascorbic acid in developing chick embryos and its significance. *Acta Histochem. Japan.* **7:** 140-146.

Chinoy, N. J. and Parmar, P. Y. (1975a).

Christie, W. W and Moore, J. H. (1970). The structure of egg yolk triglycerides. *Biochem. Et. Biophys. Acta.* **218:** 83-88.

Christie, W. W and Moore, J. H. (1972). The lipid composition of eggs from triglyceride structure of eggs from several avian species. *Comparative Biochemistry and Physiology.* **41B:** 297-306.

Coock, P. S; Porcilli, J. and Hess, R. A. (1992) Induction of increased testis growth and sperm production in adult rats by neonatal administration of goitrogen propyl thyouracyl (PTU): The critical period. *Biol Reprod.* **46:** 146-154.

Cooke, P.S; Holsberger, D.R; Witorsch, R.J; Sylvester, P.W; Meredith, J.M; Treinen, K.A and Robert, E. (2004):*Toxicology and applied pharmacology*. **194**:309-335.

Cunningham, F.E and Lee, H. W. (1978). A Study of turkey egg yolk. Comparison and electrophoretic separation of components. *Journal of Food Biochemistry*. **2**: 251-257.

Cuzzocrea, G; Stefano, F. De and Lino, A. (1959). Free ascorbic acid in the liver of adrenalectomized rats. *Sperimentale*, **109**: 413.

Dandekar, D.S. (1998). Effect of timed step-up photoperiod and mild hypo/hypercorticalism in domestic fowl. A Ph.D. thesis submitted to M. S. University of Baroda.

Dandekar, D. S; Devkar, R. V. and Ramachandran, A. V. (2000). Influence of hyper and hypo corticalism in RIR pullets reared under LD 6:18 on organ growth kinetics and serum hormone profile. *Indian Journal of poultry science*. **35(1)**: 37-44.

Dandekar, D. S; Devkar, R. V and ramachandran, A. V. (2001). Effect of short photoperiod on organ growth kinetics and serum hormone profile in pullets of domestic fowl, *Gallus gallus domesticus*. *Indian journal of Experimental Biology*. **39**: 230-237.

Davison, T. F; Rea, J. and Rowell, J. G. (1983). Effects of corticosterone on growth and metabolism of immature *Gallus domesticus*. *Gen. Comp. Endocrinol.* **50**: 463-468.

Dawkins, M. J. R. (1963). Glycogen synthesis and breakdown in fetal and newborn rat liver. *Ann. N. y. acad. Sci.* **111:** 203-211.

Dawson, A; King, V.M; Bentley, G.E; Ball and G.E. (2001). Photoperiodic control of seasonality in birds. *J. Biol. Rhythm.* **16:** 365-380.

Decuypere, E; Scanes, C. G and Kuhn, E. R. (1983). Effect of glucocorticoids on circulating concentrations of T_3 and T_4 on peripheral monodeiodination in pre and post hatching chickens. *Hormone and metabolic research.* **15:** 233-236.

Decuypere, E; Buyse, J; Scanes, C. G; Huybrechts, L; kuhn, E. R. (1987). Effect of hyper or hypothyroid status on growth, adiposity and levels of growth hormone, somatomedin C and thyroid metabolism in broiler chickens. *Reprod. Nutr. Dev.* **27(2B):** 555-5565.

De la Cruz, L. F; Mataix, F. J. and Illera, M. (1981). Effects of glucocorticoids on protein metabolism in laying quails *(Coturnix coturnix japonica). Comp.Biochem. Physiol.* **70:** 649.

Devkar, R. V. (1998). Effect of timed transition from long to short photoperiod in combination with hypo or hyper corticalism in RIR pullets. Ph.D thesis submitted to M. S. University of Baroda.

Devkar, R. V; Dandekar, D. S and Ramachendran, A. V. (1998). Effect of step-down photoperiod and transient hyper or hypocorticalism on serum hormone profile and gravimetry of some organs post hatch development of domestic fowl. *Pavo.* **36(1and 2):** 59-68.

Devkar, R. V; Dandekar, D. S and Ramachendran, A. V. (1999). Influence of hyper or hypo corticalism in RIR pullets reared under a long photoperiod (LD 18:6) on the composition of eggs. *J. adv. Zool* . **20(2):** 59-70.

Devkar, R. V; Dandekar, D. S and Ramachendran, A. V. (2000). Influence of step-down photoschedule (18:6 to 12:12) in pullets of RIR breed. Indian. *J. Poult. Sci.* **35(2):** 132-139.

deKrester, D. M; Risbridger, G. P; Curminoid, A. E; Gonzales, G and Sun, Y. T. (1985). Paracrine mechanisms in regulation of testicular functions. In: Growth Factors in Fertility Regulation ,(FP. Haseltine and J.K Finlay eds.) Cambridge University press, Cambridge, **pp.**143-156.

Dieter, M. P. (1969). Hormonal control of the synthesis and distribution of ascorbic acid in cockerels (*Gallus domesticus*). *Proc. Exp. Biol. Med.* **130:** 210-213.

Dieter, M. P. (1971). Vitamin C in lymphoid organs of rats and cockerels. *Proc. Soc. Exp. Boil. Med.* **133:** 357-364.

Dunn, I.C., Sharp, P.J. and Hocking, P.M. (1990). Effect of interaction between photostimulation, dietary restriction and dietary maize oil dilution on plasma LH and ovarian and oviduct weights in broiler breeder females during rearing. *Brit. Poult. Sci.* **31:** 415-427.

Dunn, I.C. and Sharp, P.J.(1992). The effect of photoperiodic history on egg laying in dwarf broiler breeder hens. *Poul. Sci.* **71:** 2090-2098.

Edens, F. W and Siegel, T. (1975). Adrenal responses in high and low ACTH response lines of chickens during acute heat stress. *Gen. Comp. Endocrinol.* **125:** 64-73.

Epple, A; Orians, G.H; Farner, D.S, and Lewis, R.A. (1972). The photoperiodic testicular response of a tropical finch (*Zonotricha capensis costaricensis*). *Condor.* **74:** 1-4.

Etches, R.J. and Cunningham, F. J. (1976). The interrelationship between progesteronea dn luteinizing hormone during the ovulation cycle of the hen. *Acta. Endocrinologica.* **84:** 357-366.

Etches, R.J. (1996). Reproduction in poultry. CAB international Waltingford, Oxon, Ox 108 DE, UK.

Eitan, Y. and Sollar, M. (1991). Two-Way selection for threshold body weight at first egg in broiler strain females. 2. effect of Supplemental light on weight and age at first egg. *Poul. Sci.* **70:** 2017-2022.

Felicioli, R. A; Gabrielli, F. and Rossi, C. A. (1967). The synthesis of phosphoenol pyruvate in gluconeogenesis. Enzyme levels of chick embryo livers. *Eur. J. biochem.* **3:** 19-24.

Francavilla, S; Cordeschi, G; Properzi, G; Dicicco, L; Jannini, E. A; Palmero, S; Fugassa, E; Loras, B and D'Armiento, M. (1991). Effect of thyroid hormone on the pre and post-natal development of the rat testis. *J. Endocrinol.* **129:** 35-42.

Freeman, B.M. and Vince, M.A. (1974). Development of Avian Embryo. Chapman and Hall, London.

Freeman, B.M. and Manning, A. C. C. (1978). Ontogenic circadian rhythm in the lipacidaemic response of *Gallus domesticus* to glucagon. *Comparative Biochemistry and Physiology.* **61:** 23-27.

Follett, B. K; mattocks, P.W. and Farner, D. S. (1974). Circadian functions in the photoperiodic induction of gonadotropin secretion in white crowned sparrow. *Proc. Of the national academy of sciences, USA.* **71:** 1666-1669.

Follet, B.K and Robinson, J.E. (1980). Photoperiod and gonadotropin secretion in birds. *Progr. Reprod. Biol.* **5:** 39-61.

Fromme-bouman, H. (1962). Jahresperiodische Unterscuchungen an der Nebennierenrixde der Amsel (Turdus merula. I.). *Volgelwarte.* **21:** 188-198.

Giovanni, C; Gerruccio, Di. So and Andrea, L. (1957). The existence in the rat liver of a probable combined form of Vitamin C and its behaviour after adrenalectomy. *Att. Soc. Peloritana Sci. Fis. Mat. Natur.* **4:** 289.

Gous, R.M; Bradford, G. D; Johnson, S. S; Morris, T. R. (2000). Effect of age of release from light or food restriction on age at sexual maturity and egg production of laying pullets. *Br. Poult. Sci.* **41(3):** 263-271.

Goodlad, G. A. G. and Munuro, H. N. (1959). Diet and action of cortisone on protein metabolism. *Biochem. J.* **73:** 343-348.

Griminger, P. and Scanes, C. G. (1986). Protein metabolism. *In: Avian Physiology*. **51:** 1464-1465.

Griminger, P. and Gamarsh, J. L. (1972). Body composition of pigeons. *Poult. Sci.* **51:** 1464-1465.

Hall, G. O. and Marble, D. R. (1932). The relationship between the first year egg production and later years. *Poultry Science*, **11:** 194-203.

Hall, L.M. and Mckay, L.C. (1993). The relationship between the first year egg production and later years. *Poult. Sci.* **11:** 194-203.

Hamner, W.M. (1965). Avian photoperiodic response rhythms: evidence and inference. In circadian clocks: *Proceedings of the Feldafing summer school (ed. J. aschoff), North- Holland, Amsterdam.* **PP:** 379-384.

Hann, P. and Greenberg, R. (1968). The development of pyruvate kinase, glycerol kinase and phosphoenol pyruvate carboxykinase activities in rat liver and adipose tissue of rat. *Experiientia,* **24:** 428-429.

Harvey, S; Scanes, C. G and Brown, K. I. (1986). Adrenals. In: Avian physiology. Pp. 479-493. (4th ed.) (P. D. Sturkie ed.) Springerverlag New York Berlin Heidelberg Tokyo.

Hassanzadeh, M; Fard, M. H; Buyse, J; Decuypere, E. (2003) Beneficial effects of alternative lighting schedules on the incidence of ascites and on metabolic parameters of broiler chickens. *Acta Vet Hung.* **51(4):**513-20.

Hayashi, K; Nagai, Y; Ohtsuka, A. and Tomita, Y. (1994). Effect of dietary corticosterone and trilostane on growth and skeletal muscle protein turnover in broiler cockerels. *Brit. Poult. Sci* . **35:***789-798.*

Hazelwood, R. L. (1986). The avian endocrine pancreas. *Amer. Zool.*, **13:** 699-709.

Howard, A. N and Constable, B. j (1958). The metabolism of adrenocorticotroic hormone on ascorbic acid in the chick. *Biochem. J.* **69:** 501-505.

Howarth, B. Jr. and Marks, H. L. (1973). Thyroidal I^{131} uptake of Japanese quail in response to three different dietary goitrogens. *Poultry Science.* **52:** 326-331.

Hutchinson, J.D.C., and Taylor, W.W. (1957). Seasonal variation in the egg production of fowl: effect of temperature and changes of day length. *J. Agri. Sci.* **49:** 419-434.

Jannin, E. A; Ulisse, S and Armiento, M. D. (1995). Thyroid hormone and male gonadal function. *Endocrine Rev.* **16:**443-459.

Jallages, M. and Assenmacher, I. (1973). Effects de la photoperiode et du taux d'androgene circulant sur la function thyroidienne du canard. *General and Comparative Endocrinology*, **22:** 13-20.

Jallages, M. and Assenmacher, I. (1974). Thyroid-gonadal interactions in the domestic duck in relationship with the sexual cycle. *General and Comparative Endocrinology*. **22:** 13-20.

Joseph, J and Ramachandran, A. V. (1992). Alterations in carbohydrate metabolism by exogenous dexamethasone and corticosterone in post-hatched white leghorn chicks. *British Poultry Science* (1992) **33:** 1085-1093.

Joseph, J and Ramachandran, A. V. (1993). Effect of exogenous DXM and corticosterone on weight gain and growth in post-hatched white leghorn chicks. *Indian Journal of Experimental Biology*, **31:** 858-860.

Joseph, J; Dandekar, D. S; and Ramachandran, A. V. (1996). Dexamethasone-induced alterations in glucose tolerance, insulin, glucagon and adrenalie responses during the first month in White Leghorn chicks. *British Poultry Science*. **37:** 665-676.

Joyce, K. L; Porcelli, J; and Cooke, P. S. (1993). Neonatal goitrogen treatment increases adult testis size and sperm production in the mouse. *J. Androl.* **14:** 448-455.

Kallend , G. A; Vora, A; Peterson, M. and Swerdloff, R. S. (1978). Reproductive hormonal axis of the male rats in experimental hypothyroidim. *Endocrinology,* **102:** 476-484.

Kalliecharan, R. and Hall, B. K. (1974). A developmental study of the progesterone, corticosterone, cortisol and cortisone circulating in plasma of chick embryos. *Gen. and Comp. Endocrinol.* **24(4):** 364-372.

King, D. B (1969). Effect of hypophysectomy of young cockerels, with particular reference to body weight, and liver glycogen level. *Gen. Comp. Endocrinol.* **21:** 242-255.

King, D. B. and King, C.R. (1973). Thyroidal influence on early muscle growth of chickens. *Gen. Comp. Endocrinol.* **21:** 517-529.

Kirby, J.D;Manakar, M. V; Hardesty, D; Kreider, D. L. (1996). Effect of transient pre pubertal 6-N-propyl-2-thiouracil treatment on testis development and function in the domestic fowl. *Biol Reprod.* **55(4):** 910-916.

Kuhn, E. R; Decuypere, E. and Rudas, D. (1984). Hormonal and environmental interactions on thyroid function in the chick embryos and post-hatching chicken. *J. Exp. Zool.* **232:** 653-658.

Kumar, V (1988). Investigations of photoperiodically induced fattening in migratory black headed bunting. (*Emberiza melanocephala*) (Aves): *J.Zool (London).* **216:** 253-263.

Lal, P. and Thapliyal, J.P. (1985 a). Photorefractoriness in migratory Red headed Bunting (*Emberiza bruniceps*). In Endocrine system and the environment. Eds. Follett, B.K., Ishii, S. and Chandola, A. *(Berlin: Jap. Sci. Soc. Press, Springer - Verlag).* **PP: 137-148.**

Lal, P. and Thapliyal, J.P. (1985 b). Role of thyroid in sexual and body weight cycles of the female migratory Red headed Bunting (*Emberiza bruniceps*). *Indian J. Exp. Biol.* **23**: 75-78.

Lang, G. F; Etches, R. J. and Walton, J. S. (1984). Effects of luteinizing hormone, progesterone, testosterone, estradiol and corticosterone on ovulation and LH release in hens treated with aminoglutethimide. *Boil of Repro.* **30:** 278-288.

Langslow, D. R; Butler, E. J; hales, C. N and Pearson, A. W. (1970). The response of plasma insulin, glucose and non-esterified fatty acids to various hormones, nutrients and drugs in the domestic fowl. *J. Endocrinol.* **46:** 243.

Laurent, F. and Miahel, P. (1978). Effect of free fatty acids and aminoacids on glucagons and insulin secretions in normal and diabetic ducks. *Diabetologia.* **15:** 313

Larochelle, F. T and M. E. Freeman, 1974. Super imposition of thyroid hormone regulation on gonadotrophin secretion. *Endocrinology* **95:** 379-387.

Lein, R.J and Siopes, T.D. (1989).Effect of thyroidectomy on egg production moult and plasma thyroid hormone concentration of turkey hens. *Poultry Sci.* **68(8):** 1126-1132.

Legait, H. and Legit, E. (1959). Variations d'active du systeme hypothalamo-neuro-hypophysaire et modifications surrenaliennes chez le prouceaucours du cycle. *Annual CR Soc. Biol.* **153:** 668-670.

Leung, F. C; Taylor, J. E; Van Iderstine, A. (1984). Effect of dietary thyroid hormones on growth and serum T3, T4 and growth hormone in sex -linked dwarf chickens. *Proc. Soc. Exp. Biol. Med.* **177(1):** 77-81.

Leung, F. C; Taylor, J. E; Van Iderstine, A. (1985). Effects of dietary thyroid hormones on growth, plasma T3 and T4 and growth hormone in normal and hypothyroid chickens. *Gen. Comp. Endocrinol.* **59(1):** 91-99.

Lewis, P.D., Perry, G.C. and Morris, T.R. (1992). Effect of timing and size of light increase on sexual maturity in two breeds of domestic hen. *Proceedings of XIX World Poultry Congress, Amsterdam.* **Vol 1**, 889-692.

Lewis, P.D., Perry, G.C., Morris, T.R. and Follet, B.K. (1994). Effects of timing and size of day length change on brown egg laying domestic hens, plasma luteinizing hormone concentration and sexual maturity. *Brit. Poult. Sci.* **35:** 25-31.

Lewis, P.D., Perry, G.C. and Morris, T.R. (1996a). Effects of changes in photoperiod and feeding opportunity on the performance of two breeds of laying hen. *Brit. Poult. Sci.* **37:** 279-293.

Lewis, P.D., Perry, G.C. and Morris, T.R. (1996b). Effects of constant and of changing photoperiod on age at first egg and related traits in pullets. *Brit. Poult. Sci.* **37:** 885-894.

Lewis, P.D., Perry, G.C. and Morris, T.R. (1996c).Effect of 5 hour increase in photoperiod and in feeding opportunity on age at first egg. . *Brit. Poult. Sci.* **37(1):** 15-19.

Lewis, P.D., Perry, G.C. and Morris, T.R. (1997). Effect of size and timing of photoperiod increase on age at first egg and subsequent performance of two breeds of laying hens. *Brit. Poult. Sci.* **38 (2):** 142-150.

Lewis, P.D., Sharp, P.J., Wilson, P.W. and Leeson, S. (2004). Changes in light intensity can influence age at sexual maturity in domestic pullets. *Brit. Poult. Sci.* **45 (1):** 123-132.

Lin, D.S., Connor, W.E. and Anderson, G.J. (1991). The incorporation of n-3 and n-6 essential fatty acids into the chick embryo from egg yolks having vastly different fatty acids compositions. *Pediatric Res.* **29:** 601-605.

Lofts, B (1962). Photoperiod and the refractoryperiod of reproduction in an equatorial bird *(Quelea quelea Linn.) Ibis*. **104:** 407-414.

Majumdar, P. K. and Chattergee. G. C. (1974). Effect of administration of testosterone and human chorionic gonadotrophin on the enzymes involved in the metabolism of L-ascorbic acid in rats. Indian. *J. Exp. Biol.* **12:** 387-388.

Marshal,A.J and Disney, H. J. (1956). Photostimulation of an equatorial bird *(Quelea quelea Linn.)*. *Nature,* London, **177:** 143-144.

Marks, H. L. (1969). Fertility of chickens fed thiouracil prior to maturity. *Poult. Sci.* **48:** 1612-1618.

Marks, H. L. (1971). Selection for four-week body weight in japanese quail under two nutritional environments. *Poultry Science*. **50:** 931-937.

Martin, A. W. (ed.) (1961). Comparative physiology of carbohydrate metabolism in heterothermic animals. University of Washington Press, Scattle.SS.

McDonnell, L.R., Feeney, B.E., Hanson, H.L., Campbell, A. and Sugihara, T.F. (1954). The functional properties of egg white proteins. *Food. Technol.* **9:** 49-53.

Meier, A. H. (1977). Daily rhythms of lipogenesis in fat and lean white throated sparrows (*Zonotrichia albicollis*). *Am. J. Physiol.* **232:** E 193 E 196.

Mitchell, H. H;Card, L. E. and Hamilton, T. S. (1931). A technical study of the growth of white leghorn chickens. Bull. Agr. Exp. Stn. Ill, No.367.

Morriss, T.R. annnd Jennings, R. C. (1963). The effect of changing day lengths on the reproductive responses of the pullet. *Proceedings XII World Poultry Congress,* Symposia Reports. **Pp.** 115-124.

Morris, T.R. and Fox, S. (1958). Light and sexual maturity in the domestic fowl. *Nature.* **181:** 1453-1454.

Morris, T.R., Fox, S. and Jennings, R.L. (1964). The response of laying pullets to abrupt changes in day length. *Brit. Poult. Sci.* **5:** 133-147.

Morris, T.R. (1968). Light requirements of the fowl. *In: Carter, T.C. (Ed.), Environmental control in poultry production.* Edinburgh, Oliver and Boyd, **pp:** 15-39.

Murton , R. K. and Kear , JJ. (1978). Photoperiodism in waterfowl phasing of breeding cycles and zoogeography. *Journal of Zoology.* **186:** 243-283.

Nagra, C. L; Breitenbach, R. P and Meyer, R. K. (1963). Influence of hormones on food intake and lipid deposition in castrated pheasants. *Poult. Sci.* **42:** 770-775.

Nagra, C. L. and Meyer, R. K. (1963). Influence of corticosterone on the metabolism of palmatate and glucose in cockerel. *Gen. Comp. Endocrinol.* **73:** 131-138.

Nagra, C. L; Savers, A. K. and Wittamaier, H. W. (1965). Effect of testerone, progesterone and metapirone on adrenal activity in cockerels. *Gen. Comp. Endocrinol.* **36:** 250-254.

Nathani, M. G; Nath, I. N; Daginawala, H. F. and M. C. Nath. (1971). Ascorbic acid metabolism in adrenalectomized rats. *Metabolism,* **20:** 1036-1043.

Nicholls, T.J., Goldsmith, A.R. and Dawson, A. (1988). Photorefractoriness in birds and comparison with mammals. *Physiol. Rev.* **68:** 133-176.

Noble, R.C. and Coechi, M. (1990). Lipid metabolism and neonatal chicken. *Progress in Lipid Research.* **29:** 107-140.

Noble, R.C., Speake, B.H., McCartney, R., Foggin, C.M. and Deeming D.C. (1996). Yolk lipids and their fatty acids in the wild and captive Ostrich (*Struthio camelus*). *Comp. Biochem. Physiol.* **113B-4:** 733-756.

Oishi,T and Konishi ,T. (1978).Effects of photoperiod and temperature on testicular and thyroid activity of Japanese quail. *General and comparative Endocrinology.***36:** 250-254.

Okumura, J; Mori, N; Muramastu, T and Tasaki, I. (1988). Analysis of the factors affecting year round performance of single comb white leghorn laying hens reared under a open-sided housing system. *Poultry Science.* **67:** 1130-1138.

Okuno, G; Grillo, T. A. I; Price, S. and Foa, P. P. (1964). Development of hepatic phosphorylase in the chick embryo. *Proc. Soc. Exp. Boil. Med.* **117:** 524-526.

Overbeek, G. A. (1985). Hormonal regulation of ascorbic acid in the adrenal of the rat. *Acta Endocrinologica,* **109:** 393-402.

Oring, L. W. (1982). Avian mating systems. In: Avian Biology,Vol.VI (D. S. Farner, J. R. King and K. C. Parkes. Eds.) NewYork : Academic Press

Palmero, S; Prati, M; deMarchis, M; Gallo, G and Fugassa, E (1989). Thyroid hormone affects the development of Sertoli cell function in the rat. *J. Endocrinol.* **123:** 105-111.

Palmero, S; Benahmed, M; Morera, A. M; Trucchi, P and Fugassa, E. (1992). Identification of nuclear tri-iodothyronine receptors in certoli cells from immature piglet testis. *Journal of Molecular endocrinology.*
9: 55-59.

Palmero, S; Prati, M; deMarco, P; Trucchi, P and Fugassa, E. (1993). Thyroidal regulation of nuclear tri-iodothyronine receptors in the developing rat testis. *J. Endocrinol.* **136:** 277-282.

Panda, P.C. (1995). Formation, structure, food-value and chemical composition of eggs. *In: Textbook of egg and poultry technology.* **Pp:** 1-11.

Pandha, S.K and Thapliyal, J.P.(1964).Efeect of thyroidectomy upon the testis of Indian spotted munia (*Uroloncha punctulata*). *Naturwiss.* **5**:202-204.

Payne, C.G. (1975). Day length during rearing and the subsequent egg production of meat strain pullets. *Brit. Poult. Sci.* **16:** 559-563.

Pankokoshi, E and Klaus, M. T. (1982). Relation of adrenal weight to sex, maturity and season in five species of small mammals. *Ann. Zool. Fenn.* **19:** 225-232.

Patel, C. D; Ramachandran, A. V; Asnani, M. V and Shah, R. V (1985). Seasonal histological alterations in thyroid and adrenal glands of pinealectomised wild pigeons, (Columba livia). *Journal of Animal Morphology and Physiology*. **32:** 153-160.

Patel, C. D. and Ramachandran, A.V.(2000). Seasonal alterations in the levels of total lipids, total cholesterol and phosphor-lipids of normal and pinealectomized feral blue rock pigeon, *Columba livia. Pavo.* **38(1&2):** 47-54.

Patel, C. S. (1993). Pineal, Pineal indoles and photoperiodism in relations to seasonal reproductive functions and metabolic physiology of male feral blue rock pigeons. (Columba livia). Ph.D thesis submitted to M.S.University of Baroda. **PP:** 1-197.

Peebles, E. D; Miller, E. H; Brake, J. D; Schultz, C. D. (1992). Effects of ascorbic acid on plasma thyroxine concentrations and eggshell quality of leghorn chickens treated with dietary thiouracil. *Poultry Sci.* **71(3):** 553-559.

Peebles, E.D; Miller, E.H. Boyle, C.R; Brake, J.D and Latour, M.A. (1994).Effects of dietary thiouracil on thyroid activity, egg production, and egg shell quality in commercial layers. *Poultry science*. **73(12):** 1829-1837.

Peebles, E.D; Miller, E.H. Boyle, C.R; Brake, J.D and Latour, M.A; Thaxton, J. P. (1997). Effects of consecutive thiouracil exposure in the juvenile and adult single comb white leghorn chicken on body weight and reproductive performance. *Poultry science*. **76(2):** 236-243.

Proudfoot, F.G. (1980). Effect of dietary protein levels, ahemeral light and dark cycles, and intermittent photoperiods on the performance of chicken broiler parent genotypes. *Poult. Sci.* **59:** 1258-1267.

Rahn, (1976). Seasonal commercial egg production curve differences. *Poultry Science*. **55:** 1302-1312.

Raheja, K.I; Snedecor, J. G. and Freedland, R. A. (1971a). Activities of some enzymes involved in lipogenesis, glucogenesis, glycolysis and glycogen metabolism in chicks (*Gallus domesticus*) from day of hatch to adulthood. Comp. *Biochem. Physiol*. **39(B):** 237-246.

Raheja, K.I; Snedecor, J. G. and Freedland, R. A. (1971). Effect of propyl thiouracil feeding on glycogen metabolism and malic enzyme in the liver of the chick (gallus domesticus). *Comp. Biochem. Physiol.* **39B:** 833-842.

Ramachandran, A. V .and Patel, M. M. (1986). Seasonal histomorphological alterations of adrenal and thyroid in normal and pinealectomized domestic pigeons (Columba livia). Indian Journal of *Experimental Biology*. **24:** 755-759.

Ramachandran, A. V; Patel, C. D; Asnani, M. V. and Shah, R. V. (1987). Seasonal histomorphological changes in the gonads of normal and pinealectomised feral blue rock pigeons, *Columba livia(Gmelin). Monitore Zool. Ital. (N.S.).* **21:** 1-10.

Ramachandran, A. V. and Patel, M. M. (1988). Histomorphological alterations in gonads of normal and pinealectomized domestic pigeons(*columba livia*), during breeding and post-breeding phases. *Indian Journal of Experimental Biology.* **26:** 835-838.

Ramachandran, A. V. (2002). Pineal and Glucoregulation in vertebrates with special emphasis on Aves. Chp. (13), *In: Treatise on pineal gland and melatonin.* Science Publishers, Inc. Enfield (NH), USA. Playmouth, UK. Page: 239-266

Renema, R. A and Robinson, F. E. (2001). Effect of light intensity from photostimulation in four strains of commercial egg layers: 1. ovarian morphology and carcass parameters. *Poult. Sci.* **80(8):** 1112-1120

Renema, R. A; Robinson,F. E; Feddes, J. J; Fasenko, G. M; Zuidhoft, M. J. (2001). Effect of light intensity from photostimulation in four strains of commercial egg layers: 2. Egg production parameters. Poult. Sci **80(8):** 1121-1131.

Renden, J.A. and Oates, S.S. (1989). Sexual maturity in broiler breeder pullets. *Poult. Sci.* **68 (Suppl. 1):** 120 (Abstr.).

Riddle, O; Honeywell, H.E. and Fischer, W. I. (1924). As cited by Holmes, W. N. and Phillips, J. G. "Adrenal cortex of Birds" pp. 291-340. In: *Gen. Clin. And comp. endocrinol. Of Adrenal cortex.* Academic Press, London, New York, San Francisco. **Pp:** 1-146

Ricklefs, R. E. (1977). Composition of eggs of several bird species. *Auk*, **94:** 350-356.

Roca, P. Sainz, F., Gonzalez, M. and Alemony, M. (1984). Structure and composition of the eggs from several avian species. *Comp. Biochem. Physiol.* **77A-2:** 307-310.

Romanoff, A.L. and Romanoff, A.J. (1949). "The avain egg", New York. Wiley.

Romanoff, A.L (1967). " Biochemistry of the Avian Embryo". New York: wiley. As cited by Hazelwood, 1986.

Rowan, W. (1926). On photoperiodism, reproductive periodicity and the annual migration of birds of birds and certain fishes. *Proceedings of Bostan society of Natural history*. **38:** 147-189.

Roy,R. N. and Guha, B. C. (1958). Species differences in regard to the biosynthesis of ascorbic acid. *Nature,* **182:** 319-320.

Sainz, F. Gonzale, M., Roca, P. and Alemony, M. (1983). Physical and chemical nature of eggs from six breeds of domestic fowl. *Brit. Poult. Sci.* **24:** 301-309.

Samsel, J. F. and Ledig, M. (1976). Effects of L' arginie et de L' enteroglucagon. *J. Physiol. (Paris).* **72:** 841.

Sandoval, D.M. and Gernat, A.G. (1996). Evaluation of early feed restriction on egg size and hen performance. *Poult. Sci,* **75:** 311-314.

Scanes, C. G; Denver, R. J; Bowen, S. J. (1986). Effect of thyroid hormones on growth hormone secretion in broiler chickens. *Poult. Sci.* **65(2):** 384-390.

Shanawany, M. M; Sorensen,P. and Pirchner, F. (1993) a. Genotypic differences in speed and magnitude of response to ahemeral lighting. *Brit. Poul. Sci.* **34:** 881-886.

Shanawany, M. M; Morris, T. R. and Pirchner, F. (1993) b. Influence of sequence length on the response to ahemeral lighting late in lay. *Brit. Poul. Sci.* **34:** 873-880.

Sharp, P. J. (1993). Photoperiodic control of reproduction in the domestic hen. *Poultry Science.* **72:** 897-905.

Sheid, B and Hirschberg, E. (1967). Glutamic dehydrogenase and aspartic and alanine aminotransferase activities in chick embryo liver. *Am. J. Physiol.* **213:** 1173-1176.

Singh, A, Reineke, E. P and Ringer, R. K. (1968). Influence of thyroid status of the chick on growth and metabolism, with observations on several parameters of thyroid function. *Poultry. Sci.* **47:** 212-219

Singh, A and Parshad, O. (1978). Precocious sexual maturity and enhanced egg production in chickens given goitrogen at an early age. *Br.Poult.Sci.* **19:** 521-527.

Singh, D. (1993). Pineal adrenal axis in reproductive functioning and metabolic physiology of birds. Ph. D Thesis submitted to M.S. University of Baroda.

Singh, D; Patel, C. S. and Ramachandran, A. V. (1995). Circannual variations in tissue ascorbic acid contents in relation to testicular cyclicity and influence of pinealectomy or altered adrenocortical activity in pigeons. *Indian Journal Of Experimental Biology*. **33:** 556-559.

Singh, D. and Ramachandran, A.V. (2000). Circannual variations in carbohydrate metabolism in relation to testicular cyclicity and the influence of pinealectomy on altered adrenocortical activity. *J. Anim. Morphol. Physiol.* **47(1&2):** 33-44.

Sinha, C. and Lahiri, S. (1964). Effect of corticotrophin on the concentration of vitamin Cin tissues of mice. Indian. *J. Exp. Biol.* **2:** 102.

Siopes, T.D. (1997). Transient hypothyroidism reinitiates egg laying in turkey breeder hens: Termination of Photorefractoriness by Propyl thiouracil. *Poultry science*. **76(12):** 1776-1782.

Siopes, T.D; Neely, E. R. (1997). Ahemeral lighting of turkey breeder hens. 2. Early age at lighting and reproductive performance. *Poultry Science*. **76(12):** 1783-1788.

Siopes, T.D. (2002). Circulating thyroid hormone levels in recycled turkey breeder hennns during a short day prelighting period and renewal of photosensitivity for egg production. *Poultry Science*. **81(9):** 1342-1346.

Sharp, P.J. (1993). Photoperiodic control of reproduction in the domestic hen. *Poult. Sci.* **72:** 897-905.

Snapir. N; Robinzon, B; Hoffman, Y and Berman, A. (1982). Adenohypophyseal cytology of chemically and surgically thyroidectomized cockerels. *Poultry science*. **61:** 1720-1728.

Chacko, sophy, (1987). Certain investigations on the involvement of adrenal and thyroid on tail regeneration in the gekkonid lizard, *Himidactylus flaviviridis*. Thesis submitted to M.S.University of Baroda.

Speake, B.J., Noble, R.C. and Murray, A.M.B. (1998). The utilization of yolk lipids by the chick embryo. *Worlds Poult. Sci. J.* **54:** 319-334.

Spies, A. A; Robinson, F.E; Renema, R. A; Feddes, J.J; Zuidhof, M.J; Fitzsimmons, R. C. (2000). The effects of body weight and long ahemeral days on early production parameters and morphological characteristics of broiler breeder hens. *Poult. Sci.* **79(8):** 1097-1100.

Spiers, E. D; McNabb, F. M. A. (1974). The development of thermoregulatory ability, heat seeking activities, and thyroid function in hatching Japanese quail (*Coturnix coturnix japonica*). *J. Comp. Physiol.* **89:** 159-174.

Stubbs, D. W. and McKernan, J. B. (1967). A sexual influence on the biosynthesis storage of L-ascorbic acid in rats. *Proc. Soc. Exp. Boil. Med.* **125:** 1326-1328.

Stewart, C. P; Horn, D. B. and Robson, J. S. (1953). Effect of cortisone and adrenocorticotropic hormone on the dehydroascorbic acid of human plasma. *Biochem. J.* **53:** 254.

Sturkie, P.D. (1986). "Avian Physiology". *Springer-verlag NNnewyork.Berlin Hiedelberg,Tokyo.* **PP:** 1-516

Superchi, P., Sussi, C., Sabbioni, A. and Beretti, V. (2002). Italian Ostrich (*Struthio camelus*) eggs: physical characteristics and chemical composition. *Ann. Fac. Medic. Vet. di Pharma.* **XXII:** 155-162.

Sykes, A.H. (1956). Short day length and egg production in the fowl. *J. Agri. Sci.* **44:** 591-595.

Szent; Gyorgii, A. (1957). Bioenergetics. Acad. Press, New York.

Tanabe,Y. (1965) relation of thyroxin secretion rate to age and growth rate in the cockerel. *Poultry Science.* **44:** 591-595.

Thapliyal, J. P and Pandh, S. K. (1967a). thyroid and the hypophyseal-gonadal axis in the female spotted munia. Uroloncha puncutulata. *General and Comparative Endocrinology*, **8:** 84-93.

Thapliyal, J. P and Pandh, S. K. (1967b). Thyroidectomy and gonadal recrudescence in lal munia, (*Estricala amandara*). *Endocrinology*, **81:** 915-918.

Thapliyal, J.P (1965). Thyroid-gonad relationship in spotted munia (*Uroloncha punctulata*). *J.Exp.Zool.***158:** 253-261.

Thapliyal, J.P (1969). Thyroid in avian reproduction. *Gen and Comp. Endo crinol Suppl.***2:** 111-122.

Thapliyal, J.P and Chondala, A. (1972). Thyriod in wild finches. *In Proc. Natl. Acad. Sci. India*. **42B, Part I:** 76-90.

Thapliyal, J.P (1978). Reproduction in indian birds.*Pavo* **16:**151-161

Thapliyal, J.P (1980).Thyroid in reptiles and birds. *In Hormones,Adaptation and Evolution.***PP:** 241-250

Thapliyal, J.P (1981).Endocrinology of avian reproduction. In Presidential address, proc. 68th session, Ind. Sci. Cong. Assoc. sec. *Zool. Ento. And fisheries*. **PP:** 1- 30.

Thapliyal, J.P; Patin, A.K; Singh, V.K; Lal, P. (1982). Thyroid, gonad, and photoperiod in the hemopoiecis of the migratory red headed bunting,(*Emberiza bruniceps*). *Gen Comp Endocrinol.* **46(3):** 327-332.

Thapliyal, J.P and Gupta, BBP. (1984). Thyriod and the annual gonadal development, body weight, plumage pigmentation and bill colour cycles of Lal Munia (*Estrilda amandava*). *Gen. Comp. Endocrinol.* **55:** 20-28.

Tucker ,S. A. and Charles, D. R. (1993). Light intensity, intermittent lighting and feeding regimen during rearing as affecting egg production and egg quality. Brit. *Poul. Sci.*, **34:** 255-266.

Umezu, M; Cons, J. M and Timiras, P. S (1976). Developmental patterns of follicle stimulating, luteinizing and thyroid stimulating hormones in the hypothyroid female rat. *Ann. Biol. Anim. Bioch. Biophys.* **16:** 385-394.

Voitkevich, A. A. (1966). The feather and plumage of birds. October house, New York. As cited by Ricklefs, 1983.

Wentworth, B. C; and Ringer, R. K. (1986). Thyroids. *In: Avian Physiology. 4th ed. P. D. Sturkie, ed. Springer- Verlag, Berlin, Germany.* 452-465.

Whetham, E.O. (1933). Factors modifying egg production with special reference to seasonal changes. *J. Agri. Sci.* **23:** 283-418.

Williams, G. R, (1994). Perspectives of thyroid hormone action. In: thyroid regulation of gene expression. Molecular Biology Intelligence Unite. R. G. landes Co, Austin, TX. **Pages** 1-9.

Wingfield , J.C; Follet, B.K; Matt, K.S and Farner, D.S. (1980). Effect of daylength on plasma FSH and LH in the castrated and intect white-crowned sparrow. *Gen and comp. Endocrinol.* **42(4):** 464-470.

Winchester, C. I. and davis, G. K. (1952). Influence of thyroxine on growth of chicks. *Poultry. Sci.* **31:** 31-34.

Zukerman, A. I and W. J. Kunenzel, W. J, (1984). Chemical inhibition of the thyroid gland and subsequent precocity of the gonads in developing leghorn chicks. *Poultry A.Sci. 63: (Suppl. 1):* 212. (Abstr)