

REFERENCES

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- Abdel - Malek, S.S. and Ishak, M.M. (1979): Some ecological aspects of lake Quarun, Fayoum, Egypt. Part II-production of plankton and benthic organisms. Problems of Ichthyology, 3;201-208.
- Abel, H.; Becker, K.; Meske, C. and Friedrich, W. (1984): Possibilities of using heart-Treated full-fat soybeans in carp feeding. Aquaculture, 42 : 97-108.
- Abo Hegab, S. (1985a): The influence of osmotic adaptation on activities of aminotransferases in liver and muscle of carps, *Cyprinus carpio*. Proc. Zool. Soc. A.R. Egypt, 8 :1-9.
- Abo Hegab, S. (1985b): The influence of osmotic adaptation on carbohydrate metabolism in carps, *Cyprinus carpio*. Proc. Zool. Soc. A.R. Egypt, 9 : 1-9.
- Abo Hegab, S. and Hanke, W. (1984): The significance of cortisol for osmoregulation in carp (*Cyprinus carpio*) and tilapia (*Sarotherodon mossambicus*). Gen. Comp. Endocrinol., 54: 409-417.

- Albaugh, D. (1969):** Sources of growth variation among individual black bullheads, *Ictalurus melas* and channel catfish, *Ictalurus punctatus*. Trans. Amer. Fish. Soc., 98 : 35-44.
- Alexis, M.N.; Theochari, V. and Papoutsoglou, E. (1986) :** Effect of diet composition and protein level on growth, body composition, haematological characteristics and cost of production of rainbow trout (*Salmo gairdneri*). Aquaculture, 58 : 75-85.
- Al-Kholy, A.A. and Abdel - Malek, S.A. (1972):** Food and feeding habits of some Egyptian fishes in lake Quarun. I-*Tilapia zillii* (Grev.). A-according to different localities. Bull. Inst. Ocean. and Fish., 2 : 187 - 201.
- Al- Zahaby, A.S. (1973):** Studies on the feeding habits of freshwater sodak fish (*Luciopera luciopera*) inhabiting Kakhovske Resevior, USSR. Repene khaziestra, 17, Keiv, USSR.
- Al-Zahaby, A.S.; El-Agamy, A.E.; El-Serafy, S.S. and Badawy, E.A. (1987):** Preliminary observations on the relative growth and production of tilapia species cultured in cages at three stocking densities. Qatar Univ. Sci. Bull., 7 : 343 - 361.

- Anderson, J.; Jackson, A.J.; Matty, A.J. and Capper, B.S. (1984):**
Effects of dietary carbohydrate and fibre on the tilapia,
Oreochromis niloticus (Linn). Aquaculture, 37 : 303 - 314.
- Arroyo, J. (1973):** Cultivo artificial de trachas en jaulas de redes. Fish
Farming Int., 1 : 99 - 104 .
- Atack, T.H.; Jauncey, K. and Matty, A.J. (1979):** The utilization of
some single cell proteins by fingerling mirror carp (*Cyprinus
carpio*). Aquaculture, 18 : 337 - 348.
- Austreng, E. and Refsties, Y. (1979):** Effect of varying dietary
protein in different families of rainbow trout. Aquaculture, 18
: 145 - 156.
- Babiker, M.M.; Rankin, J.C. and Eido, G. (1979):** Renal clearance
tissue distribution and binding by plasma proteins of
chromium - 51 EDTA in *Tilapia nilotica*. Comp . Biochem.
Physiol., 63 : 71 - 74 .
- Badawi, H.K. (1968):** A haematological study of healthy and diseased
rainbow trout (*Salmo gairdneri*). Ph. D. Thesis. Fac. of
Agricult. Tokyo Univ., Japan, 286 pp.

- Badawi, H.K. and Said, M.M. (1971):** A comparative study of blood of four tilapia species (Pisces). Mar. Biol., 8 : 202 - 204.
- Balarin, J.D. and Haller, R.D. (1982):** The intensive culture of tilapia in tanks, raceways and cages. Croom Helm Ltd., London, pp : 265 - 356.
- Bardach, J.E.; Ryther, J.H. and Maclarney, W.O. (1972):** The farming and husbandry of freshwater and marine organisms. Wiley Interscience, New York, 868 pp.
- Barnhart, R.A. (1969):** Effects of certain variables on haematological characteristics of rainbow trout. Trans. Amer. Fish. Soc., 98 : 411 - 418.
- Bell , G.R. and Margolis, L. (1976):** The fish health program and the occurrence of fish diseases in the Pacific Region of Canada. Fish Pathol., 10 : 115 - 122 .
- Bergot, F. (1979):** Carbohydrate in rainbow trout diet : effects of the level and source of carbohydrate and the number of meals on growth and body composition. Aquaculture, 18 : 157 - 167 .
- Beveridge, C.M. (1987):** Cage aquaculture. Fishing News Books. Ltd England, 351 pp.

- Bromely, P.J. (1980): Effect of dietary protein, lipid and energy content on the growth of turbot (*Scophthalmus maximus* L.). Aquaculture, 19 : 359 - 369 .
- Brown, M.E. (1957): Experimental studies on growth. In : M.E. Brown (Editor), The physiology of fishes. New York, 1 : 361 - 400 .
- Buck, H.; Baur, R.J. and Rose, C.R. (1978): Polyculture of chinese carps in ponds with swine wastes. Fish Culture Section; Amer. Fish Soc., Sympo. On cult. of exotic fishes, pp : 144 - 155.
- Carlos, M.H. (1988): Growth and survival of bighead carp (*Aristichthys nobilis*) fry fed at different intake levels and feeding frequencies. Aquaculture, 68 : 267 - 276.
- Carr, B. A. and Aldrich, D.V. (1982): Population density effects on the behaviour and feeding of young striped mullet (*Mugil cephalus*) in 37.8 liter aquaria. J. World maricult. Soc., 13 : 254 - 260.
- Chakrabarty, R.D.; Murty, D.S.; Sen, P.R.; Nandy, A.C. and Chakrabarty, D.P. (1972a) : Periodic harvesting to enhance production composite culture of Indian and exotic carps. In:

Silver Jubilee Sympo., Aquaculture as an Industry, Centr. Inland Fish. Res. Inst. Barrackpore, pp : 27.

Chakrabarty, R.D.; Murty, D.S.; Sen, P.R.; Nandy, A.C. and Chakrabarty, D.P. (1972b) : Short term on rearing of Indian and exotic carps. In : Silver Jubilee Sympo, Aquaculture as Industry, Centr. Inland Fish. Res. Inst. Barrackpore, pp : 25.

Chaudhuri, H. and Chakrabarty, R.D. (1974): Intensive fish farming and development of technique of composite culture of Indian and exotic fishes. Lecture, Summer Inst. Inland Aquaculture, Cuttak, organised by Centr. Inland Fish. Res. Inst. Barrackpore, pp : 10.

Chaudhuri, H.; Chakrabarty, R.D.; Sen, P.R.; Rao, N.G. and Jena, S. (1975): A new high in fish production in Indian with yields by composite fish culture in freshwater ponds. Aquaculture, 6 : 343 - 355.

Chen, T.P. (1976): Aquaculture practices in Taiwan. Fishing News Books Limited, Surrey, England, pp : 161.

- Chervinski, J.; Hephher, B. and Tagari, H. (1968):** Studies on carp nutrition. II. Effect of protein - rich diet on fish yield in farm ponds. Bamidgeh, 1 : 6 -15.
- Cho, C.Y.; Slinger, S.J. and Bailey, H.S. (1976):** Influence of level and type of dietary protein and level of feeding on feed utilization by rainbow trout. J. Nutr., 106 : 1547 - 1556 .
- Chua, T.E. and Teng, S.K. (1982):** Effects of food ration on growth, condition factor, food conversion efficiency and net yield of esturary grouper (*Epinephelus salmoides*, Max.) cultured in floating net cages. Aquaculture, 27 : 373 - 283.
- Clark, S.; Whitmore, D.H. and Mc Mahan, R.F. (1979):** Consideration of blood parameters of largemouth bass (*Nicropterus salmoides*). J. Fish Biol., 14 : 147 -158 .
- Coche, A.G. (1976):** A general review of cage culture and its application in Africa. Japan, Fire AQ. Conf., pp : 76.
- Cowy, C.B. and Sargent, J.R. (1972):** Fish nutrition. Mar. Biol., 10 : 383 - 492.

- Cremer, M.C. and Smitherman, R.O. (1980): Food habits and growth of silver carp and bighead carp in cages and ponds. *Aquaculture*, 20 : 57 - 64.
- Crisp, D.T.; Mann, R.H. and Mc Cormack, T.C. (1978): The effects of impoundment and regulation upon the stomach contents of fish at Cow Green, Upper Teesdale. *J. Fish Biol.*, 12 - 287 - 301.
- Dabrowska, H.; Burgdorff, K. and Gunther, K. (1989): Interaction between dietary protein magnesium level in tilapia (*Oreochromis niloticus*). *Aquaculture*, 76 : 277 - 291.
- Dabrowski, K. (1984): Influence of initial weight during the change from live to compound feed on the survival and growth of four Cyprinids. *Aquaculture*, 40 : 27 - 40.
- Dabrowski, K. and Kozak, B. (1979): The use of fish meal and soybean meal as a protein source in the diet of grass carp fry. *Aquaculture*, 18 : 107 - 114.
- Dabrowski, K.; Dabrowska, H. and Grudniewski, C. (1978) :
A study of the feeding of common carp larvae with artificial food. *Aquaculture*, 13 : 257 - 264.

- Dadzie, S. (1982): Species compination in tilapia culture. *Aquaculture*, 27 : 295 - 299.
- Dadzie, S. and Wangila, B.C. (1980): Reproductive biology, Length - weight relationship and relative condition of pond raised *Tilapia zillii*, Grev. *J. Fish Biol.*, 17 : 243 - 253.
- Das, B.C.(1972): Effect of density on survival of Indian freshwater carp during the first two weeks of life. *Aquaculture*, 1 : 199 - 212.
- Dawson, A.S. and Grimm, A.S. (1980): Quantitative seasonal changes in the protein ,lipid and energy content of the carcass, ovaries and liver of adult female plaice, *Pleuronectes platessa* L.J. *Fish Biol.*, 16 : 493 - 504 .
- Degani, D. (1988): Body composition of African catfish (*Clarias gariepinus*) at different ages. *Bamidgeh*, 40 : 118 - 121.
- Degani, D. ; Ben - Zvi, Y. and Levanon, D. (1988) :
The effect of different dietary protein sources and temperature on growth and feed utilization of African catfish, *Clarias gariepinus* (Burc.). *Bamidgeh*, 40 : 113-117.

- Degani, D.; Ben - Zvi, Y. and Levanon, D. (1989): The effect of different protein level and temperature on feed utilization, growth and body composition of *Clarias gariepinus* (Burc.). Aquaculture, 76 : 293 - 301.
- Degani, D.; Hahamu, H. and Levanon, D. (1986): The relation of eel, *Auguilla anguilla* L. body, lipid, protein, glucose, ash, moisture composition and enzyme activity. Comp. Biochem. Physiol., 84 : 739 - 745.
- Delahunty, G. and Valming, V.L. (1980): Seasonal relationships of ovary weight, liver weight and fat stores with body weight in the goldfish (*Carassius auratus* L.). J. Fish Biol., 16 : 5 - 13 .
- Denton, J.E. and Yousef, M.K. (1976): Body composition and organ weights of rainbow trout (*Salmo gairdenri*). J. Fish Biol., 8 : 489 - 499.
- De Silva, S.S. and Perera, M.K. (1985): Effects of dietary protein levels on growth, food conversion and protein use in young *Tilapia nilotica* at four salinities. Trans. Amer. Fish. Soc., 114 : 584 - 589.
- Dimitrov, M. (1984): Intensive polyculture of common carp (*Cyprinus carpio* L.) silver carp (*Hypophthalmichthys*

molitrix Val.) and grass carp (*Ctenopharyngodon idella* Val.). Aquaculture, 38 : 241- 253.

Dimitrov, M. (1987): Intensive polyculture of common carp (*Cyprinus carpio* L.) silver carp (*Hypophthalmichthys molitrix* Val.) and black buffalo (*Ictiobus niger* Raf.). J. Fish Biol., 19 : 509 - 517.

Dixon, D. G. and Hilton, J. W. (1981) : Influence of available dietary carbohydrate content on tolerance of waterborne copper by rainbow trout (*Salmo gairdeni* Rich.). J. Fish Biol., 19 : 509-517.

Eckhardt, O.; Becker, K.; Gunther, K. and Meske, C. (1982): Zum protein und energiebedarf wachsender Spiegkarpfen (*Cyprinus carpio* L.). II - Einfluss von Fettzulagen bei unterschiedlichen protein und kolenhydratgehalten der Ration of wachstum und korperzusammensetzung. Z. Tierphysiol., Tierenahr. Futtermittelkd., 74 : 168 - 196.

Eisler, R. (1965): Erythrocyte counts and haemoglobin content in nine species of marine teleosts. Chesapeake Sci., 6 : 119 - 120.

Eissawy, A.M.; Ishak, M.M. and Hamza, A. (1974): Experimental rearing of two mullet species, *Mugil cephalus* and *Mugil*

capito in Egyptian fish farms. Bull. Inst. Ocean. and Fish., 4:59 - 95.

El - Agamy, A.E.; Labib, W.D. El-Serafy, S.S. and El-Kashif, M.A. (1992): Observations on the growth of *Clarias lazera* reared in cages at three stocking rates. Egypt. J. Appl. Sci., 7 : 484-491.

El - Bolock, A.R. and Labib, W.D. (1968): Carp culture in the U.A. R., FAO. World symposium warmwater pond fish culture, pp : 18-25.

El-Elaimy, I.A.; Boulos, R. and Abdel- Aziz, M.B. (1988): Pesticide poisoning to freshwater teleost; IV- Effect of three organo-phosphates on transaminase and phosphatase enzymes in fish tissues . Bull. Fac. Scie. Cairo. Univ., 56 : 145 - 161.

Elliott, J.M. (1976): Body composition of brown trout (*Salmo trutta*) in relation to temperature and ration size. J. Anim. Ecol., 42 : 273 - 289.

El-Serafy, S.S. (1981): Studies on some biological aspects of *Clarias batrachus*. Ph. D. Thesis, Calcutta, Univ., India, 299 pp.

- El-Serafy, S.S. and Sweilum, M.A. (1986): On the biology of *Mugil capito* (Cuv.) in lake Quarun. Bull. Fac., Zagazig Univ., 8: 329 - 340.
- Ezzat, A.E. and El-Serafy, S.S. (1977): Food of *Anguilla anguilla* in lake Manzalah, Egypt. J. Mar. Biol., 41 : 287 - 291.
- Farkas, T.; Casengeri, I.; Majoros, F. and Olah, J. (1978): Metabolism of fatty acids in fish. II-Biosynthesis of fatty acids in relation to diet in the carp (*Cyprinus carpio* Linn.). Aquaculture, 14 : 57 - 65.
- Fenderson, O.C. and Carpenter, R.M. (1971) Effects of crowding on the behaviour of juvenile hatchery and wild landlocked Atlantic salmon(*Salmo salar* L.). Anim. Behav., 19 : 439 - 447.
- Fenderson, O.C.; Everhart, W.H. and Moth, K.N.(1968): Comparative agonistic and feeding behaviour of hatchery-reared and wild salmon in aquaria. J. Fish. Res. Bd. Canada, 25 : 1- 14.
- Ferrari, I. and Chierigato, A.R. (1981): Feeding habits of juvenile stages of *Sparus auratus* L., *Dicentrarchus labrax* L. and

Mugilidae in a brackish embayment of the Po River Delta.
Aquaculture, 25 : 243 - 257.

Fitzmayer, K.M.; Broach, J.I. and Estes, R.D. (1986): Effects of supplementary feeding on growth, production and feeding habits of striped bass in ponds. Prog. Fish Culturist, 48 : 18-24.

Gajerskaja, N.S. (1958) Le role des groupes principaux de la flore aquatique dans les cycles trophiques des differents bassins d'eau douce. Mitt. int. Ver. Limnol., Stuttgart, 13 : 350 - 362.

Gallagher, M.L.; Kane, E. and Beringer, R. (1984): Effect of size on composition of the American eel (*Anguilla rostrata*). Comp. Biochem. Physiol., 78 : 533 - 536.

Geiger, J.G.; Turner, C.J.; Fitzmayer, K. and Nichols, W.C. (1985): Feeding habits of larval and fingerling striped bass and zooplankton dynamics in fertilized rearing pond. Prog. Fish Culturist, 47 : 213 - 223.

George, T.T. (1982): The chinese grass carp (*Ctenopharyngodon idella*), Its biology, introduction, control of aquatic

macrophytes and breeding in the Sudan. *Aquaculture*, 27 : 317 - 327.

Gerking, S.D. (1950): A carp removal experiment at Oliver lake Indians. *Invest. Indian lakes streams*, 3 : 375 - 388.

Ghosh, S. K.; Mandal, B.K. and Borthakur, D.N. (1984): Effects of feeding rates on production of common carp and water quality in paddy-cum-fish culture. *Aquaculture*, 40 : 97 - 101.

Gluth, G. and Hanke, W. (1984): A comparison of physiological changes in carp (*Cyprinus carpio*) induced by several pollutants of sublethal concentrations. II-The dependency of the temperature. *Comp. Biochem. Physiol*, 79 : 39 - 45.

Gluth, G. and Hanke, W. (1985): A comparison of physiological changes in carp (*Cyprinus carpio*) induced by several pollutants of sublethal concentration. I. The dependency on exposure time. *Exotodxical. Environm. Safety*, 7 : 179 - 188.

Goolish, E.M. and Adelman, I.R. (1984): Effects of ration size and temperature on the growth of juvenile common carp (*Cyprinus carpio*). *Aquaculture*, 36 : 27 - 35.

- Gornall, A.C.; Bardawill, C.J. and David, M.M. (1949):
Determination of serum protein by Biuret reagent. J. Biol.
Chem. 177 : 751 pp.
- Graham, M. (1923): The annual cycle in the life of the mature cod in
the north sea. Min. Agri. Fish. Inst. Ser., 2 : 1- 77.
- Green, B. W. and Smitherman, R.O. (1984): Relative growth,
survival and harvestability of bighead carp, silver carp and
their reciprocal hybrids. Aquaculture, 37 : 87 - 95.
- Gribanov, L. V.; Korneev, A.N. and Korneeva, L.A. (1968): Use of
thermal waters for commercial and production of carps in
floats in the U.S.S.R. FAO Fish, 5 : 218 - 266.
- Grygierek, E. (1978): The influence of silver carp (*Hypophthalmichthys molitrix*) on eutrophication of the environment
of carp ponds. Part IV - Zooplankton. Roczn. Nauk. Roln., 2 :
81 - 92.
- Guerrero, R.D. and Guerrero, L.A. (1975): Monosex culture of male
and female *Tilapia mossambica* in ponds at three stocking
rates. J.Biol., 4 : 129 - 134.

- Gupta, O.P. and Hanke, W. (1982a):** The effect of osmotic stressors on the stenohaline carp (*Cyprinus carpio*). Comp. Biochem. Physiol., 71 : 165 - 173.
- Gupta, O.P. and Hanke, W. (1982b):** The effects of osmotic stressors on the euryhaline tilapia (*Sarotherodon mossambicus*). Comp. Biochem. Physiol., 73 : 405 - 411.
- Haggag, G.; Khalil, M.; El-Husseini, M. and Abdel-Aaty, F.(1977):** Seasonal changes of the blood biology of the fish *Clarias lazera*, Proc. Zool. Soc.A.R.E. 5 : 15 - 21.
- Handel, E.V. (1965):** Estimation of glycogen in small amount of tissue. Ana. Biochem., 11 : 256 - 265.
- Haskell, D.C. (1955):** Weight of fish per cubic foot of water in hatchery troughs and ponds. Prog. Fish Culturist, 3 : 117 - 118.
- Haskell, D. and Griffiths, R. (1956):** Growth in relation to sex among brook trout.N.Y. Fish Game J., 3 : 93 - 107.
- Haskell, D.; Davies, R. and Rechahn, J. (1960):** Effects of sorting brown trout on sex ratio and growth. N.Y. Fish Game J., 7 : 39 - 45.

Hassanen, G.D., (1986): Studies on some appropriate rations for reared fishes in Egyptian fish farms. Ph. D. Thesis. Fac. of Agricult. Monoufia Univ., 1977 pp.

Hassanen, G.D. (1987): Feeding experiments on the Nile catfish (*Clarias lazera*) reared in cages. Proc. Zool. Soc. A.R. Egypt, 14 : 155 - 168.

Hassanen, G.D. (1988): Influence of cottonseed oil on growth of *Tilapia nilotica* reared in cages. Proc. Zool. Soc. A.R. Egypt, 16:239 - 248.

Henderson, S. (1978): An evaluation of the filter feeding fishes, silver carp and bighead carp for water quality improvement. Fish Cult. Sec. Ame. Fish. Soc., pp : 121 - 136.

Hendricks, L.J.(1952): Erythrocyte counts and haemoglobin determinations for two species of suckers, genus *Coastomus* from Colorado. Copeia, 4 : 265 - 266.

Henken, A.M.; Machiels, M.A.; Dekker, W. and Hogendoorn, H. (1986): The effects of dietary protein and energy content on growth rate and feed utilization of the African catfish (*Clarias gariepinus*). Aquaculture, 58 : 55 - 74.

- Hepher, B. and Chervinski, J. (1965): Studies on carp nutrition. The influence of protein - rich diet on growth. *Bamidgeh*, 2 : 31 - 46.
- Hepher, B. and Pruginin, Y. (1981): Commercial fish farming, with special reference to fish culture in Israel. Inc., U.S.A., 129pp.
- Hepher, B.; Chervinski, J. and Tagri, H. (1971): Studies on carp nutrition. III- Experiments on the effect on fish yield of dietary protein source and concentration. *Bamidgeh*, 1 : 11- 37.
- Hepher, B.; Liao, I.C.; Cheng, S.H. and Hsieh, C.S. (1983): Food utilization by red tilapia effects of diet composition, feeding level and temperature on utilization efficiencies for maintenance and growth. *Aquaculture*, 32 : 255 - 275.
- Hertz, Y.; Madar, Z.; Hepher, B. and Gertler, A. (1989): Glucose metabolism in the common carp (*Cyprinus carpio* L.). The effects of cobalt and chromium. *Aquaculture*, 76 : 255 - 267.
- Hesser, E.F. (1960): Methods for routine fish haematology. *Prog. Fish Culturist*, 22 : 164 - 171.

- Hickey, C.R. (1976): Fish hæmatology, its use and significance. N. Y. Fish Game, J., 23 : 170 - 175.
- Hickling, C.F. (1962): Fish culture, Faber and Faber; London, 153 pp.
- Hidalgo, F. and Alliot, E. (1988): Influence of water temperature on protein requirement and protein utilization in juvenile sea bass (*Dicentrarchus labrax*). Aquaculture, 72 : 115 - 129.
- Hilmy, A.M.; El-Domiaty, N.A.; Mousa, F.I. and Abu-Samra, W.E. (1987): Variation in the blood of juvenile *Clarias lazera* subsequent to acute and subacute copper exposure. Bull. Inst. Ocean. and Fish., 13 : 65 - 77.
- Hilton, J. W. and Slinger, S.J. (1983): Effect of wheat bran replacement of wheat middlings in extrusion processed (floating) diets on the growth of juvenile rainbow trout (*Salmo gairdneri*). Aquaculture, 35 : 201 - 210.
- Hogendoorn, H. and Koops, W.J. (1983): Growth and production of the African catfish (*Clarias lazera*). I-Effects of stocking density and mixed culture with tilapia (*Sarotherodon niloticus* L.) under extensive field conditions. Aquaculture, 34 : 253 - 263.

- Hora, S.L. and Pillay, T.V.V. (1962):** Handbook on fish culture in the Indo-Pacific Region. FAO Fish. Biol., 14 : 203 pp.
- Hubbard, D.M.; Robinson, E.H.; Brown, P.B. and Daniels, W. H. (1986):** Optimum ratio of dietary protein to energy for red crayfish (*Procambarus clarkii*). Prog. Fish Culturist, 48 : 233-237.
- Huisman, E.A. (1976):** Food conversion efficiencies at maintenance and production levels for carp (*Cyprinus carpio*) and rainbow trout (*Salmo gairdneri*). Aquaculture, 9 : 259 - 273.
- Huisman, E.A. and Valentijn, P. (1981):** Conversion efficiencies in grass carp (*Ctenopharyngodon idella* Val.) using a feed for commercial production. Aquaculture, 22 : 279 - 288.
- Hussein, M.K.; Hilmy, A.H.; Badawi, H.K. and El-Bishry, A. (1974):** A haematological study of healthy *Anguila vulgaris* and *Mugil cephalus*. Bull. Inst. Ocean. and Fish., 4 : 245 - 366.
- Hyslop, E.J. (1980):** Stomach contents analysis- a review of method and their application . J. Fish Biol., 17 : 411 - 429.

- Ishak, M.M. (1985):** Fish culture in Egypt, especially Mugilidae. Kuwait. Bull. of Mar. Scie., 6 : 83 - 93.
- Ishak, M.M.; Sayes, A. and Tallaat, K. (1985):** Tilapia fisheries in lake Borollus (Egypt). Kuwait. Bull. of Mar. Scie., 6 : 225 - 242.
- Issa, M.M. and Gabr, S.A. (1989):** The effect of repeated increasing sublethal doses of diazinon on the liver of *Tilapia nilotica*, light and electron microscopical study. Bull. Fac. Scie. Assuit Univ., 18 : 23 - 47.
- Ivlev, V.S. (1961):** Experimental ecology of the feeding of fishes. New Haven. Yale Unive., 302 pp.
- Jackson, A.J.; Capper, B.S. and Matty, A.J. (1982):** Evaluation of some plant proteins in complete diets for the tilapia (*Sarotherodon mossambicus*). Aquaculture, 27 : 97 - 109.
- Jauncey, K. (1982):** The effects of varying dietary protein level on the growth, food conversion, protein utilization and body composition of juvenile tilapia (*Sarotherodon mossambicus*). Aquaculture, 27 : 43 - 54.

- Jauncey, K. and Ross, B. (1982): A guide to tilapia feeds and feeding
Published at the University of Stirling, Scotland, U.K., 9 : 4
pp.
- Jirasek, J.; Hampl, A. and Sirote, K. D. (1981): Growth morphology
of the filtering apparatus of silver carp (*Hypophthalmichthys molitrix*). I- Gross anatomy state. Aquaculture,
26 : 41 - 48.
- Kainz, E. and Gollmann, H.P. (1980): Versuche zure Anfueterung der
Brut von karpfen (*Cyprinus carpio* L.) and Grass karpfen
(*Ctenopharyngodon idella* Val.) mit Trockenfutter. Osterr.
Fisch., 33 : 65 - 73.
- Kainz, E. and Gollmann, H.P. (1981) Weitere orientierende
Anfueterungsversuche bei Repfen (*Aspius aspius* L.)
Silberkarpfen (*Hypophthalmichthys molitrix* Val.), Marmor
karpfen (*Aristichthys nobilis* Rish.) and and grosswuchsigen
Coregonen (*Coregonus lavaretus* L.) mit trockenfutter.
Osterr. Fisch., 34 : 138 - 196.
- Kalleberg, H. (1958): Observations in a stream tank of territoriality
and competition in juvenile slamon and trout (*Salmo salar* L.
and *Salmo trutta* L.) . Rep. Inst. Freshwater Res.
Drottningholm, 39 : 55 - 98.

- Kandil, A. E. (1987): Physiological studies on the grass carp (*Ctenopharyngodon idella* Val.), under different environmental pollutants. Ph. D. Thesis. Cairo Univ. 186 pp.
- Katz, M. (1949) The haematological of silver salmon (*Oncorhynchus kisutch*) whalbawn. Ph. D. Thesis. Washnigton Univ., 261pp.
- Keenlyside, M.H. and Yamamoto, F. T. (1962): Territorial behaviour of juvenile Atlantic salmon (*Salmo salar* L.). Behaviour, 19 : 139 - 169.
- Kennedy, M. and Fitzmaurice, P. (1972): Some aspects of the biology of gudgeon (*Gobio gobio* L.) in Irish waters. J. Fish Biol., 4 : 425 - 440.
- Kepshire, B.M.; Tinsley, I.J. and Lowry, R.R. (1983): Effect of temperature on the chemical composition of pink salmon (*Oncorhynchus gorbuscha*) muscle. Aquaculture, 32 295 - 301.
- Khalaf, A.N. and Donald, L.J. (1975): Physico-chemical conditions in temporary ponds in the new forst. Hydrobiologia, 47 : 301- 318.

- Khalil, M. T. (1987) :** Ecological and biological studies on zooplankton of lake Quarun in Fayoum with special reference to crustacea, M. Sc. Thesis. Ain-Shams Univ., 149 pp.
- Kilambi, R. V.; Adams, J. C.; Brown, A. V. and Wickizer, W. A. (1977) :** Effects of stocking density and cage size on growth, feed conversion and production of rainbow trout and channal catfish. Prog. Fish Culturist, 2 : 62-66.
- Koundinya, P.R. and Ramamurthy, R. (1979):** Comparative study of inhibition of acetylcholinesterase activity in freshwater teleost (*Sarotherodon mossmbicus*) by sevin (carbamate) and sumithion (organsophosphate). Curr. Sci., 48 : 832 - 833.
- Lagler, D.F.F.; Bardach, I.E. and Miller, R.R. (1962):** Ichthyology New Yrok and London: John Wiley and Sons, Inc., 545 pp.
- Lakshmanan, M.A.; Sukumaran, K.K.; Murty, D.S.; Chakrabarty, D.P. and Philipose, M.T. (1971):** Preliminary observations on intensive fish farming in freshwater ponds by the composite culture of Indian and exotic species. J. Inland Fish. Soc. India, 3 : 1 - 21.

- Lam, S.W. and Shephard, K.L. (1988):** Some effects of natural food levels and high- protein supplement on the growth of carp. *Aquaculture*, 72 : 131 - 138.
- Larssen, L.O. (1976):** Blood glucose levels in intact and hypophysectomised river lampreys (*Lamperta fluviatilis* L.) treated with insulin, "Stress", or glucose, before and during the period of sexual maturation. *Gen. Comp. Endocrinol.*, 29: 1 - 13.
- Lee, D.J. and Putman, G.B. (1972):** The response of rainbow trout to varying protein / energy ratios in a test diet. *J. Nut.*, 103: 916- 922.
- Li, S.F.; Cai, Z. W.; Lu, W.M.; He, X. and Zhao, P.R. (1984):** On the growth of silver carp from different sources of Changjiang River and Zujang River. *J. of Fish. in China*, 3 : 211 - 218.
- Lieder, U. and Helms, C. (1981):** Erfahrungen beim vorstrecken von Brut pflanzenfressender Cypriniden. *Z. Binnenfisch. DDR*, 28 : 3-8.
- Ling, S.W. (1967):** Food and feeding of warmwater fishes in ponds in Asia and the Far East. *FAO Fish. rep.*, 3 : 291 - 309.

- Lone, K.P. and Matty, A. J. (1983): The effect of ethylestrenol on the growth, food conversion and tissue chemistry of the carp (*Cyprinus carpio*). Aquaculture, 32 : 39 - 55.
- Love, R. M. (1970): The chemical biology of fishes. Academic press, Inc. Ltd. London, 547 pp.
- Lyknovich, V.P. and Leonenko, Y.N. (1971): Age related change in some of the characteristics of the blood of silver carp (*Hypophthalmichthys molitrix*), The grass carp (*Ctenopharyngodon idella*) and the common carp (*Cyprinus carpio*). J. Ichth., 11 : 743 - 750.
- Machiels, M.A. and Henken, A.M. (1985): Growth rate, food utilization and energy metabolism of the African catfish (*Clarias gariepinus* Burch.) as affected by dietary protein and energy content. Aquaculture, 44 : 271 - 284.
- Macintosh, D.J. and De Silva, S.S. (1984): The influence of stocking density and food ration on fry survival and growth in *Oreochromis mossambicus* and *O.niloticus* femal x *O.aureus* male hybrids reard in a closed criculated system. Aquaculture, 41 : 345 - 358.

- Maddox, J.J.; Beharands, L.L.; Modewall, E.E. and Pile, R.S. (1978): Algae- Swine manure system for production of silver carp, bighead carp and tilapia. Fish Culture Section, American Fisheries Society, pp : 109 - 120.
- Marek, M. (1975): Review of supplementary feeding tables for fish ponds. *Bamidgeh*, 27 : 57 - 64.
- Mazhar, F. M.; Ashry, M.A. and Kadry, S.M. (1987): Effects of environmental pollution by mercury on blood parameters of the Nile catfish (*Clarias lazera*). *Proc. Zool. Soc. A.R. Egypt*, 13 : 247 - 256.
- Mazid, M.A.; Tanaka, Y.; Katayama, T.; Rahman, M.A.; Simpson, K. L. and Chichester, C.O. (1979): Growth response of *Tilapia zillii* fingerlings fed isocaloric diets with variable protein levels. *Aquaculture*, 18 : 115 - 122.
- Mc Carthy, D.H.; Stevenson, T.P. and Roberts, M.S. (1973): Some blood parameters of the rainbow trout (*Salmo gairdneri*). *J. Fish. Biol.*, 51 : 1-8.
- Merola, M. and De Souza, J.H. (1988): Preliminary studies on the culture of the pacu (*Colossoma mitrei*) in floating cages :

effect of stocking density and feeding rate on growth performance. *Aquaculture*, 68 : 243 - 284.

Magbenka, B.O. and Lovell, R.T. (1986): Intensive feeding of grass carp in ponds. *Prog. Fish Culturist*, 48 : 238 - 241.

Mills, B.J. and Mc Cloud, P.I. (1983): Effect of stocking and feeding rates on experimental pond production of the crayfish (*Cherax destructor*). *Aquaculture*, 34 : 51 - 52.

Milne, P. H. (1972): Fish and shelfish farming in coastal waters. Fishing news (books)Ltd., pp : 308.

Mousaad, M.N. (1981): Morphological and haematological studies on the mirror carp (*Cyprinus carpio*). M.Sc. Thesis. Cario Univ., 135 pp.

Mulcahy, M.F. (1970): Blood values in the pike (*Esox lucius* L.). *J. Fish Biol.*, 2 : 203 - 209.

Murachi, S. (1959): Haemoglobin content, erythrocyte sedimentation rate and haematocrit value of the blood in the young of the carp (*Cyprinus carpio*). *J. Fac. Fish. Anim. Hiroshima Univ.*, 2 : 241 - 247.

- Murty, D.S.; Sey, R.K. and Reddy, P.V. (1978):** Experiments on rearing exotic carp fingerlings in composite fish culture in India. *Aquaculture*, 13 : 331 - 337.
- Natarajan, M. (1985):** Recycling of poultry droppings through tilapia fish culture. Effect of monosex and mixed - sex culture on production. India. *Aquaculture Wastes*, 1 : 29 - 36.
- National Research Council ,NRC. (1981):** Nutrient requirements of coldwater fishes, No. 16. Nutrient requirement of domestic animals. National Academy Press, Washington, DC, 63 pp.
- Nikolski, G.V. (1963) :** The ecology of fish. Academic Press, London, New York, N.Y. 352 pp.
- Ofojekwu, P.C. and Ejike, C. (1984):** Growth response and feed utilization in the troical Cichlid (*Oreochromis niloticus* Linn.) fed on cottonseed based artificial diets. *Aquaculture*, 42 : 27 - 36.
- Onodera, K. (1962):** Carrying capacity in a trout stream. *Bull. Freshwater Fish. Res. Lab*, 12 : 1 - 41.
- Opuszynski, K. (1968):** Carp polyculture with plant-feeding fish: grass carp (*Ctenophargodon idella*) and silver carp

(Hypophthalmichthys molitrix). Bull. Acad Poll. Sci. Biol.,
16 : 677 0 681.

Opuszynski, K. (1981): Comparison of the usefulness of the silver carp and the bighead carp as additional fish carp ponds. Aquaculture, 25 : 223 - 233.

Panigrahi, S. (1978): A note on certain observation on blood cells of three species of Indian major carps. India. Sci. Cult., 44 ; 514 - 516.

Papoutsoglou, S.E.; Papaparaskeva, P.E. and Alexis, M. (1980): Rainbow trout growth and production in relation to water volume unite. Thalassographica, 3 : 43 - 52.

Papoutsoglou, S.E.; Papaparaskeva, P.E. and Alexis, M. (1987): Effect of density on growth rate and production of rainbow trout (*Salmo gairdneri*) over a full rearing period. Aquaculture, 66 : 9 - 17 .

Papoutsoglou, S.E.; Papaparaskeva, P.E. and Dendrinos, P.K. (1979): Studies on the effect of density on body composition, growth rate and survival of rainbow trout fry in semiclosed system. Thalassographica, 1 : 43 - 56.

- Papukchieva, T. and Kovacheva, N. (1984):** Enriched feed for carp production. Ribno Stopanstvo, 30 : 19 - 20.
- Parmley, D.; Alvarado, G. and Cortez, M., (1986):** Food habits of small hatchery-reared Florida largemouth bass. Prog. Fish Culturist, 48 : 264 - 267.
- Patil, H.S.; Dodakundi, G.B. and Rodgi, S.S. (1975):** Succession in zooplankton and phytoplankton in a sewage stabilization pond. Hydrobiologia, 47 : 253 - 264.
- Pearson, S. (1976):** The chemical analysis of foods. General methods. Churchill, Livingstone, Edinburgh, London and New York, 2: 7 - 26.
- Pferffer, E. and Maske, C. (1978):** Untersuchungen uber casein und krillmehl als eingzige proteinquelle im Alleinfutter fur Karpfen. Z. Tierphysiol., Tierenahr. Futtermittelkd, 40 : 74 - 91.
- Phillips, A. M. (1972):** Caloric and energy requirement . In : Fish Nutrition, pp : 2 - 29 .
- Pilarczyk, A. (1978):** Haematological and histological changes in carp with necrotic gill disease. Acta. Hydrobiologia, 19 : 9 - 22.

- Piper, R.G. and Stephens, R.F. (1962):** A comparative study of blood of wild and hatchery - reared lake trout . Prog. Fish Culturist, 24 : 81 - 84.
- Putnam, R.W. and Freel, R.W. (1978):** Haematological parameters of five species of marine fishes. Comp. Biochem. Physiol., 61 : 585 - 588.
- Radhaiah, V. and Roa, K. J. (1990):** Toxicity of the pythyroid insecticide fenvalerate to a freshwater fish *Tilapia mossambica* peters changes in glycogen metabolism of muscle. Ecotoxicol. Environm. Safty , 19 : 1116 - 121.
- Rao, V.S. (1975):** An ecological study of three freshwater ponds of Hyderabad- India. III-The phytoplankton. Hydrobiologia, 47 : 319 - 337.
- Refstie, T. (1977):** Effect of density on growth and survival of rainbow trout. Aquaculture, 11 : 329 - 334.
- Refstie, T. and Kittelsen, A., 1976 :** Effect of density on growth and survival of artificially reared Atlantic salmon. Aquaculture, 8 : 319-326.

- Reinitz, G. L. (1983):** Relative effect of age, diet and feeding rate on the body composition of young rainbow trout (*Salmo gairdneri*). *Aquaculture*, 35 : 19 - 27.
- Reinitz, G.L. and Hitzel, F.N. (1980):** Formulation of partical diets for rainbow trout based on desired performance and body composition. *Aquaculture*, 19 : 243 - 252.
- Reinitz, G.L. Orme, L.E. and Hitzel, F.N. (1979):** Variations of body composition and growth among strains of rainbow trout. *Trans. Amer. Fish. Soc.*, 108 : 204 - 207.
- Reinitz, G.L.; Orme, Lemm, C.A. and Hitzel, F.N. (1978):** Influence of varing lipid concentrations with two protein concentrations in diets for rainbow trout (*Salmo gairdneri*). *Trans. Amer. Fish. Soc.*, 107 : 751 - 754.
- Romanenko, V.D. (1984):** Metabolic aspects of warmwater culture of the carp (*Cyprinus carpio* L.). *Aquaculture*, 38 : 307 - 314.
- Saadi, A.W. (1985):** Ernährung nd Wachstum des karpfens in ersten Lebensijuhr. *Hydrobiologia*, 61 : 1 - 62.

- Salah El-Deen, M.A. (1986):** Studies on the osmotic and ionic regulation in the grass carp (*Ctenopharyngodon idella* Val.). M.Sc.Thesis, Cairo Univ., 214 pp.
- Sampath, K. (1984):** Preliminary report on the effects of feeding frequency in *Channa striatus*. Aquaculture, 40 : 301 - 306.
- Santiago, C.B.; Aldaba, M.B. and Laron, M.A. (1982):** Dietary crude protein requirement of *Tilapia nilotica* fry. Kalikasam, Philipp. J.Biol., 11 : 60 - 71.
- Santiago, C.B.; Aldaba, M.B. and Reyes, O.S. (1987):** Influence of feeding rate and diet form on growth and survival of Nile tilapia (*Oreochromis niloticus*) fry. Aquaculture, 64 : 277 - 282.
- Seguin, W.M. (1970):** Rearing trout in floating cages. Ame. Fish. Farmer, 4 : 19 pp.
- Seifter, S.; Dayton, S. and Novic, N. (1950):** The estimation of glycogen with the anthrone reagent. Arch. Biochem. Biophys., 25 : 191 - 201.

- Sen, P. R.; Rao, N.G.; Gosh, S.R. and Routt, M. (1978):** Observations on the protein and carbohydrate requirements of carps. *Aquaculture*, 13 : 245 - 255.
- Seymour, E.A. (1980):** The effects and control of algal blooms in fish ponds. *Aquaculture*, 19 : 55 - 74.
- Shaw, A.F. (1930) :** A direct method for counting the leucocytes, thrombocytes and erythrocytes of birds blood. *J. Path and Bact.*, 33 : 833 - 835.
- Siddiqui, A. Q.; Howlader, M.S. and Adam, A.A. (1988):** Effects of dietary protein levels on growth, feed conversion and protein utilization in fry and young Nile tilapia (*Oreochromis niloticus*). *Aquaculture*, 70 : 63 - 73.
- Sigeler, W.F. (1958):** The ecology and use of carp in Utah, U.S.A. Utah Univ. Agricult. Expe. Station, Bull., 405 : 62 pp.
- Singh, S.B.; Sukumaran, K.K.; Chakrabarti, P.C. and Bagchi, M.M. (1972):** Observations on composite culture of exotic carps. *J. Inland Fish. Soc. India*, 4 : 38 - 50.

- Sinha, V.R.; Gupta, V.M.; Banergee, M.K. and Kumar, D. (1973):**
Composite fish culture in Kalyani (India). J. Inland Fish.
Soc. India, 5 : 201 - 207.
- Sivalingam, S. (1975):** The biology of cultivable brackish water and
marine fishes in Africa FAO/CIFA., 15 : 283 pp.
- Smith, J.C. (1977):** Body weight and the haematology of the American
placie (*Hippoglossoides platessoides*). J. Exp. Biol., 67 : 17-
28.
- Smith, D.W. and Piedrahita, R.H. (1988):** The relation between
phytoplankton and dissolved oxygen in fish ponds.
Aquaculture, 68 : 249 - 265.
- Spataru, P. (1976):** The feeding habits of *Tilapia galilaea* (Aetedi) in
lake Kinneret (Israel). Aquaculture, 9 : 47. 59.
- Spataru, P. (1978):** Food and feeding habits of *Tilapia zillii* (Gerv.) in
lake Kinneret (Israel). Aquaculture, 14 : 327 - 338.
- Spataru, P. and Zorn, M. (1978):** Food and feeding habits of *Tilapia*
aurea (Stein) in lake Kinneret (Israel). Ibid., 13 : 67 - 79.

- Spataru, P.; Hephher, B. and Halvery, A. (1980):** The effect of the method of supplementary feed application on the feeding habits of carp (*Cyprinus carpio*) with regard to natural food in ponds. *Hydrobiologia*, 72 : 171 - 178.
- Spataru, P.; Wohlfarth, G.W. and Hulata, G. (1983):** Studies on the natural food of different fish species in intensively manured polyculture ponds. *Aquaculture*, 35 : 283 - 298.
- Steel, R. G. and Torrie, J. H. (1980) :** Principles and procedures of statistics. Biometrical approach. Mc Graw Hill, New York, 633 pp.
- Steffens, W. (1981) :** Protein utilization by rainbow trout (*Salmo gairdneri*) and carp (*Cyprinus carpio*). *Aquaculture*, 23 : 337 - 345.
- Steffens, W. and Albrecht, M. L. (1984) :** The use of fat in dry mixed feed for carp (*Cyprinus carpio*). *Arch. Tierernaehr*, 34 : 579 - 85.
- Stegman, K. (1965) :** Variability of weight gains in carp in the first two years of life. *Zootechnika*, 5 : 67 - 92.

- Stickney, R. R.; Hesby, J. H.; McGeachin, R. B. and Isbell, W. A. (1979) : Growth of *Tilapia nilotica* in ponds with differing histories of organic fertilization. *Aquaculture*, 17 : 189 - 194.
- Summerfelt, R. C.; Lewis, W. M. and Geneurich, M. (1967) : Measurement of some haematological characteristics of the glod fish. *Ibid.*, 29 : 3 - 12.
- Suzuki, M.; Tsujita, T. and Okuda, H. (1981) : Studies on lipoprotein lipase Ec-3.1.1.34 activity in post heparin plasma of fish, *Tilapia nilotica*. *Bull. Jpn. Soc. Fish.*, 47 : 1515 - 1520.
- Suzuki, M.; Yamaguchi, M. and Ishikawa, K. (1977) : Differences in growth rate in two races of the common carp at various water temperature. *Bull. Freshwater Fish. Res. Lab.*, 27 : 21-26.
- Sweilum, M. A. (1989) : Studies on some biological aspects of *Mugil capito* (Cuv.) in lake Quarun, Egypt. M. Sc. Thesis. Zagazig Univ., 138 pp.
- Symons, P. E. (1970) : The possible role of social and territorial behaviour of Atlantic salmon parr in the production of smolts. *Tech. Rep. Fish. Res. Bd. Canada.*, 206 : 1 - 25.

- Symons, P. E. (1971) : Behavioural adjustment of population density to available food by juvenile Atlantic salmon. *J. Anim. Ecol.*, 40 : 569 - 587.
- Tang, Y. A. (1970) : Evaluation of balance between fishes and available fish foods in multispecies fish culture ponds in Taiwan. *Trans. Amer. Fish. Soc.*, 4 : 708 - 718.
- Tapiador, D. D.; Henderson, H. F.; Delmendo, M. N. and Tsutsui, H. (1977) : Freshwater fisheries and aquaculture in China. *FAO Fish. Tech.*, 84 pp.
- Teng, S. K. and Chua, T. E. (1978) : Effect of stocking density on the growth of estuary grouper (*Epinephelus salmoides*, Maxwell), cultured in floating net - cages. *Aquaculture*, 15 : 273 - 287.
- Teshima, S.; Kanazawa, A. and Kawamura, G. (1984) : Effects of several factors on growth of milkfish (*Chanos chanos*) fingerlings reared with artificial diets in aquaria. *Aquaculture*, 37 : 39 - 50.
- Thia-Eng, C. and Seng - Keh, T. (1978) : Effects of feeding frequency on the growth of young estuary grouper

- Viola, S.; Mokady, S. and Arieli, Y. (1983) : Effects of soybean processing methods on the growth of carp (*Cyprinus carpio*). Aquaculture, 32 : 27 - 38.
- Viola, S.; Mokady, S.; Rappaport, U. and Arieli, Y. (1982) : Partial and complete replacement of fish meal by soybean meal in feeds for intensive culture of carp. Aquaculture, 26 : 223 - 236.
- Viola, S.; Rappaport, U.; Arieli, Y.; Amidan, G. and Mokady, S. (1981) : The effects of oil - coated pellets on carp (*Cyprinus carpio*) in intensive culture. Aquaculture, 26 : 49 - 65.
- Walburg, C. H. and Nelson, W. R. (1966) : Carp, river carpsucker, smallmouth buffalo and bigmouth in lowis and Clark lake. Biologists Research Report, 69 : 1 - 30.
- Wang, K. W.; Takeuchi, T. and Watanabe, T. (1985a) : Effects of dietary protein levels on growth of *Tilapia nilotica*. Bull. Jpn. Soc. Sci. Fish., 51 : 133 - 140.
- Wang, K. W.; Takeuchi, T. and Watanabe, T. (1985b) : Optimum protein and digestible energy levels in diets for *Tilapia nilotica*, Bull. Jpn. Soc. Sci. Fish., 51 : 141 - 146.

- Watanabe, T. (1977) :** Sparing action of lipids on dietary protein in fish low - protein diet with high calorie content. *Technocart*, 10 : 34 - 39.
- Wells, R. M.; Ashby, M. D.; Duncan, S. J. and Macdonald, J. A. (1980) :** Comparative study of the erythrocytes and haemoglobins of nototheniid fishes from Antractia. *J. Fish Biol.*, 17 : 517 - 527.
- Wilamowski, A. (1972) :** Structure of the gill apparatus and the suprabranchial organ of *Hypophthalmichthys molitrix*, Val. (silver carp). *Bamidgeh*, 24 : 87 - 98.
- Winfrey, R. A. and Stickney, R. R. (1981) :** Effects of dietary protein and energy on growth, food conversion efficiency and body composition of *Tilapia aurea*. *J. Nutri*, 111 : 1001 - 1012.
- Winfrey, R. A. and Stickney, R. R. (1984) :** Stater diets for channel catfish : Effects of dietary protein on growth and carcass composition. *Prog. fish Culturist*, 46 : 79 - 86.
- Wohlfarth, G. (1972) :** The regression of weight gain on initial weight in carp. *Aquaculture*, 1 : 7 - 28.

- Viola, S.; Mokady, S. and Arieli, Y. (1983)** : Effects of soybean processing methods on the growth of carp (*Cyprinus carpio*). *Aquaculture*, 32 : 27 - 38.
- Viola, S.; Mokady, S.; Rappaport, U. and Arieli, Y. (1982)** : Partial and complete replacement of fish meal by soybean meal in feeds for intensive culture of carp. *Aquaculture*, 26 : 223 - 236.
- Viola, S.; Rappaport, U.; Arieli, Y.; Amidan, G. and Mokady, S. (1981)** : The effects of oil - coated pellets on carp (*Cyprinus carpio*) in intensive culture. *Aquaculture*, 26 : 49 - 65.
- Walburg, C. H. and Nelson, W. R. (1966)** : Carp, river carpsucker, smallmouth buffalo and bigmouth in lowis and Clark lake. *Biologists Research Report*, 69 : 1 - 30.
- Wang, K. W.; Takeuchi, T. and Watanabe, T. (1985a)** : Effects of dietary protein levels on growth of *Tilapia nilotica*. *Bull. Jpn. Soc. Sci. Fish.*, 51 : 133 - 140.
- Wang, K. W.; Takeuchi, T. and Watanabe, T. (1985b)** : Optimum protein and digestible energy levels in diets for *Tilapia nilotica*, *Bull. Jpn. Soc. Sci. Fish.*, 51 : 141 - 146.

- Watanabe, T. (1977) :** Sparing action of lipids on dietary protein in fish low - protein diet with high calorie content. *Technocart*, 10 : 34 - 39.
- Wells, R. M.; Ashby, M. D.; Duncan, S. J. and Macdonald, J. A. (1980) :** Comparative study of the erythrocytes and haemoglobins of nototheniid fishes from Antractia. *J. Fish Biol.*, 17 : 517 - 527.
- Wilamowski, A. (1972) :** Structure of the gill apparatus and the suprabranchial organ of *Hypophthalmichthys molitrix*, Val. (silver carp). *Bamidgeh*, 24 : 87 - 98.
- Winfree, R. A. and Stickney, R. R. (1981) :** Effects of dietary protein and energy on growth, food conversion efficiency and body composition of *Tilapia aurea*. *J. Nutri*, 111 : 1001 - 1012.
- Winfree, R. A. and Stickney, R. R. (1984) :** Stater diets for channel catfish : Effects of dietary protein on growth and carcass composition. *Prog. fish Culturist*, 46 : 79 - 86.
- Wohlfarth, G. (1972) :** The regression of weight gain on initial weight in carp. *Aquaculture*, 1 : 7 - 28.

Wohlfarth, G.; Sharoder, G.; Hulatu, G.; Lahmi, H.; Moav, R.; Abramson, Z. and Brody, T. (1976) : Summary of the polyculture, feeding, intensive fertilizing by manure and genetic improvement. J. Fish. Breed, Isr., 2 : 11 - 13.

Yashouv, A. (1971) : Interaction between the common carp (*Cyprinus carpio*) and the silver carp (*Hypophthalmichthys molitrix*) in fish ponds. Bamidgeh, 23 : 85 - 92.

Zeitler, M. H.; Kirchgessner, M. and Schwarz, F. J. (1984) : Effect of different protein and energy supplies on carcass composition of carp (*Cyprinus carpio*). Aquaculture, 36 : 37-38.

Zelnik, P. R. and Goldspink, G. (1981) : The effect of exercise on plasma cortisol and blood sugar levels in the rainbow trout (*Salmo gairdneri* Rich.). J. Fish Biol., 19 : 37 - 43.

Zernecki, S. (1964) : Das problem der vorwuchser in den karpfenteichen. Z. Fisch. deren Hilfswiss, 12 : 685 - 707.

Zollner, N. and Kirsch, K. (1962) : Über die quantitative Bestimmung von lipoiden (Mikromethod) mittles der vielen natürlichen lipoiden (allen bekannten plasma lipoiden) gemeinsamen sulfophosphovanillin - reaktion. Z. ges. exp. Med., 135 : 545-561.