

## REFERENCES

- Abbasi, I., King, C.H., Muchiri, E.M. and Hamburger, J. 2010. Detection of *Schistosoma mansoni* and *Schistosoma haematobium* DNA by loop-mediated isothermal amplification: identification of infected snails from early prepatency. *The American Journal of Tropical Medicine and Hygiene*. 83(2): 427–432.
- Abdussalam, M., Käferstein, F.K. and Mott, K.E. 1995. Food safety measures for the control of food borne trematode infections. *Food Control*. 6:71–79.
- Ai, L., Li, C., Elsheikha, H.M., Hong, S.J., Chen, J.X., Chen, S.H., Li, X., Cai, X.Q., Chene, M.X. and Zhu, X.Q. 2010. Rapid identification and differentiation of *Fasciola hepatica* and *F. gigantica* by a loop-mediated isothermal amplification (LAMP) assay. *Veterinary Parasitology*. 174: 228–233.
- Alhassan, A., Govind, Y., Tam, N.T., Thekiso, O.M.M., Yokoyama, N., Inoue, N. and Igarashi, I. 2007. Comparative evaluation of the sensitivity of LAMP, PCR and in vitro culture methods for the diagnosis of equine piroplasmiasis. *Parasitology Research*. 100: 1165-1168.
- Anderson, J.W. and Fried, B. 1987. Experimental infection of *Physa heterostrophica*, *Helisoma trivolvis* and *Biomphalaria glabrata* (Gastropoda) with *Echinostoma revolutum* (Trematoda) cercariae. *Journal of Parasitology*. 73: 49-54.
- Anonymous. 1995. Foodborne trematode infections. *Bulletin of WHO*. 73:397-399.
- Arimatsu, Y., Kaewkes, S., Laha, T., Hong, S.J. and Banchob, Sripa. 2012. Rapid detection of *Opisthorchis viverrini* copro-DNA using loop-mediated isothermal amplification (LAMP). *Parasitology International*. 61: 178–182.
- Ataev, G., Fournier, A. and Coustau, C. 1998. Comparison of *Echinostoma caproni* mother sporocyst development in vivo and in vitro using *Biomphalaria glabrata* and *B. glabrata* embryonic cell line. *Journal of Parasitology*. 84: 227–235.

- Bandyopadhyay, A. K. and Nandy, A. 1986. A preliminary observation on the prevalence of echinostomes in a tribal community near Calcutta. *Annals of Tropical Medicine and Parasitology*. 80:373-375.
- Beaver, P.C. 1937. Experimental studies on *Echinostoma revolutum* (Froelich) a fluke from birds and mammals. In Buchholz, J.T, Tanner, F.W and Zeleny, C. (Eds), *Illinois Biological Monographs*. University of Illinois; 15(1): 1-96.
- Behrens, A.C. and Nollen, P.M. 1992. Responses of *Echinostoma caproni* miracidia to gravity, light, and chemicals. *Internarional Journal for Parasitology*. 22(5): 673-675.
- Belden, L.K., Widder, P.D., Fischer, L.R., Carter, A.B. and Wojdak, J.M. 2009. Hatching of *Echinostoma trivolvis* miracidia in response to snail host and non-host chemical cues. *Parasitology Research*. 105: 883-885.
- Bhaibulaya, M., Charoenlarb, P. and Harinasuta, C. 1964. Report of cases of *Echinostoma malayanum* and *Hypoderaeum conoideum* in Thailand. *Journal of Medical Association of Thailand*. 47(12):720-731.
- Bindseil, E. and Christensen, N.O. 1984. Thymus-independent crypt hyperplasia and villous atrophy in the small intestine of mice infected with the trematode *Echinostoma revolutum*. *Parasitology*. 88: 431-438.
- Bowles, J. and McManus, D.P. 1993. Rapid discrimination of *Echinococcus* species and strains using a polymerase chain reaction-based RFLP method. *Molecular and Biochemistry Parasitology*. 57(2): 231-239.
- Brandt, A.M. 1974. The non-marine aquatic mollusca of Thailand. *Arch Moll*. 345 pp.
- Bundy, D.A., Chandiwana, S.K., Homeida, M.M., Yoon, S. and Mott, K.E. 1991. The epidemiological implications of a multiple-infection approach to the control of human helminth infections. *Transaction of the Royal Society of Tropical Medicine and Hygiene*. 85:274–276.
- Bush, A.O., Fernandez, J.C., Esch, G.W. and Seed, J.R. 2001. *Parasitism: The diversity and ecology of animal parasites*. Cambridge University Press, Cambridge, U.K., 566 p.
- Cai, X.Q., Xu, M.J., Wang, Y.H., Qiu, D.Y., Liu, G.X., Lin, A., Tang, J.D., Zhang, R.L. and Zhu, X.Q. 2010. Sensitive and rapid detection of *Clonorchis sinensis*

- infection in fish by loop-mediated isothermal amplification (LAMP). *Parasitology Research*. 106: 1379-1383.
- Carney, W.P. 1991. Echinostomiasis: a snail-borne intestinal trematode zoonosis. *Southeast Asian J Trop Med Public Health*. 22:206-221.
- Chantima, K., Chai, J.Y. and Wongsawad, C. 2013. *Echinostoma revolutum*: Freshwater Snails as the Second Intermediate Hosts in Chiang Mai, Thailand. *Korean Journal of Parasitology*. 51(2): 183-189.
- Chai, J.Y., Hong, S.T., Lee, S.H., Lee, G.C. and Young, I.M. 1994. A case of echinostomiasis with ulcerative lesions in the duodenum. *Korean Journal of Parasitology*. 32: 201-204.
- Chai, J.Y., Kang, Y.J., Choi, S.Y., Guk, S.M., Yu, J.R. and Lee S.H. 1998. Surface ultrastructure of *Metagonimus miyatai* metacercariae and adults. *Korean Journal of Parasitology*. 22: 70-75.
- Chai, J.Y., Guk, S.M. and Han, E.T. 2000. Surface ultrastructure of *Metagonimus takahashii* metacercariae and adults. *Korean Journal of Parasitology*. 38: 9-15.
- Chai, J.Y. and Lee, S.H. 2002. Food-borne intestinal trematode infections in the Republic of Korea. *Parasitology International*. 51: 129-154.
- Chai, J.Y. 2009. Echinostomes in humans. In: Fried, B. and Toledo, R. (Eds.). *The Biology of Echinostomes*, Chap. 7, Springer, New York, pp. 147-183.
- Chai, J.Y., Sohn, W.M., Na, B.K. and De, N.V. 2011. *Echinostoma revolutum*: Metacercariae in *Filopaludina* Snails from Nam Dinh Province, Vietnam, and Adults from Experimental Hamsters. *Korean Journal of Parasitology*. 49(4): 449-455.
- Chang, Y.D., Sohn, W.M., Ryu, J.W., Kang, S.Y. and Hong, S.J. 2005. A human infection of *Echinostoma hortense* in duodenal bulb diagnosed by endoscopy. *Korean Journal of Parasitology*. 43: 57-60.
- Chen, M.X., Ai, L., Zhan, R.L., Xia, J.J., Wang, K., Chen, S.H., Zhang, Y.N., Xu, M.J., Li, X., Zhu, X.Q. and Chen, J.X. 2011. Sensitive and rapid detection of *Paragonimus westermani* infection in humans and animals by loop-mediated isothermal amplification (LAMP). *Parasitology Research*. 108: 1193-1198.
- Cho, C.M., Tak, Y.W., Kweon, Y.O., Kim, S.K., Cho, Y.H., Kong, H.H. and Chung, D.I. 2003. A human case of *Echinostoma hortense* (Trematoda:

- Echinostomatidae) infection diagnosed by gastroduodenal endoscopy in Korea. *Korean Journal of Parasitology*. 41: 117-120.
- Christensen, N.O., Frandsen, F. and Roushdy, M.Z. 1980. The Influence of environmental conditions and parasite-intermediate host-related factors on the transmission of *Echinostoma liei*. *Parasitology Research*. 63: 47-63.
- Christensen, N.O., Simonsen, P.E., Odaibo ,A.B. and Mahler, H. 1990. Establishment, survival, and fecundity in *Echinostoma caproni* (Trematoda) infections in hamsters and jirds. *Journal of Helminthology Society of Washington*. 57(2): 104-107.
- Chung, P.R., Jung, Y., Park, Y.K., Hwang, M.G. and Soh, C.T. 2001a. *Corbicula fluminea* (Bivalvia: Corbiculidae): a possible second molluscan intermediate host of *Echinostoma cinetorchis* (Trematoda: Echinostomatidae) in Korea. *Korean Journal of Parasitology*. 39(4): 329-332.
- Chung, P.R., Jung, Y., and Park ,Y.K., 2001b. *Segmentina hemisphaerula*: A new molluscan intermediate host for *Echinostoma cinetorchisin* Korea. *Journal of Parasitology*. 87(5): 1169-117.
- Chung, P.R., Jung, Y., Park, Y.K. and Hwang, M.K. 2001c. *Austropeplea ollula* (Pulmonata: Lymnaeidae): A new molluscan intermediate host of a human intestinal fluke, *Echinostoma cinetorchis* (Trematoda: Echinostomatidae) in Korea. *The Korean Journal of Parasitology*. 39(3): 247-253.
- Coustau, C., Gourbal, B., Mitta, G. and Adema, C. Echinostomes and Snails: Exploring Complex Interactions. In: Fried, B. and Toledo, R. (Eds). *The Biology of Echinostomes*. Springer, New York, 2009; 35-59.
- Cross, J.H. and Basaca, S.V. 1986. Studies on *Echinostoma ilocanum* in the Philippines. *Southeast Asian Journal of Tropical Medicine Public Health*. 17:23–27.
- Davis, N.E. 2005. Storage and incubation of *Echinostoma revolutum* eggs recovered from wild *Branta canadensis*, and their infectivity to *Lymnaea tomentosa* snails. *Journal of Helminthology*. 79: 321-326.
- Dechruksa, W., Krailas, D., Ukong, S., Inkapatanakul, W. and Koonchornboon, T. 2007. Trematode infections of the freshwater snail family Thiaridae in the Khek river, Thailand. *Southeast Asian Journal of Tropical Medicine and Public Health*. 38(sup 6): 1016-1028.

- DeGaffé, D. and Loker, E.S. 1998. Susceptibility of *Biomphalaria glabrata* to Infection with *Echinostoma paraensei*: Correlation with the effect of parasite secretory-excretory products on host hemocyte spreading. *Journal of Invertebrate Pathology*.71: 64-72.
- Ditrich, O., Giboda, M., Scholz, T. and Beer, S.A. 1992. Comparative morphology of eggs of the Haplorchiinae (Trematoda: Heterophyidae) and some other medically important heterophyid and opisthorchiid flukes. *Folia Parasitology*. 39: 123-132.
- Dixon, B.R. and Flohr, R.B. 1997. Fish and shellfish-borne trematode infections in Canada. *Southeast Asian Journal of Tropical Medicine and Public Health*. 28:58–64.
- Elkins, D.B., Sithithaworn, P., Haswell-Elkins, M.S., Kaewkes, S., Awacharagan, P. and Wongratanacheewin, S. 1991. *Opisthorchis viverrini*: relationships between egg counts, worms recovered and antibody levels within an endemic community in northeast Thailand. *Parasitology*. 102: 283-288.
- Enosawa, M., Kageyama, S., Sawai, K., Watanabe, K., Notomi, T., Onoe, S., Mori, Y. and Yokomizo, Y. 2003. Use of loop-mediated isothermal amplification of the IS900 sequence for rapid detection of cultured *Mycobacterium avium* sub sp. *paratuberculosis*. *Journal of Clinical Microbiology*. 41 (9): 4359–4365.
- Esteban, J.G., Toledo, R., Sánchez, L. and Antoli, C.M. 1997. Life-cycle of *Euparyphium albuferensis* n. sp. (Trematoda: Echinostomatidae) from rats in Spain. *Systematics Parasitology*. 38:211–219.
- Esteban, J.G. and Antoli, C.M. 2009. Echinostomes: Systematics and life cycles. In: Fried, B. and Toledo, R. (Eds.). *The Biology of Echinostomes*, Chap. 1, Springer, New York, pp. 1-34.
- Evans, N.E. 1985. The influence of environmental temperature upon transmission of the cercariae of *Echinostoma liei* (Digenea:Echinostomatidae). *Parasitology*. 90: 269-275.
- Franco, J., Huffman, J.E. and Fried, B. 1986. Infectivity, growth and development of *Echinostoma revolutum* (Digenea: Echinostomatidae) in the golden hamster, *Mesocricetus auratus*. *Journal of Parasitology*. 72: 142-147.

- Franco, J., Huffman, J.E. and Fried, B. 1988. The effects of crowding on adults of *Echinostoma revolutum* (Digenea: Echinostomatidae) in experimentally infected golden hamsters, *Mesocricetus auratus*. *Journal of Parasitology*. 74: 240-243.
- Fried, B. and Nelson, P.D. 1978. Host-parasite relationships of *Zygodontia steineri* (Trematoda) in the domestic chick. *Parasitology*. 77: 49-55.
- Fried, B. and Alenick, D.S. 1981. Localization, length and reproduction in single-and multiple worm infections of *Echinostoma revolutum* (Trematoda) in the chick. *Parasitology*. 82: 49-53.
- Fried, B. 1984. Infectivity, growth and development of *Echinostoma revolutum* (Trematoda) in the domestic chick. *Journal of Helminthology*. 58: 241-244.
- Fried, B. and Freeborne, N. C. 1984. Effects of *Echinostoma revolutum* (Trematoda) adults on various dimensions of the chicken intestine, and observations on worm crowding. *Proceedings of the Helminthological Society of Washington*. 51: 297-300.
- Fried, B. and Fujino, T. 1984. Scanning electron microscopy of *Echinostoma revolutum* (Trematoda) during development in the chick embryo and the domestic chick. *International Journal for Parasitology*. 14:75-85.
- Fried, B., Huffman, J.E. and Franco, J. 1988a. Single-and five-worm infections of *Echinostoma revolutum* (Trematoda) in the golden hamster. *International Journal for Parasitology*. 18: 179-181.
- Fried, B., Donovan, R.A. and Emili S. 1988b. Infectivity, growth and development of *Echinostoma liei* (Trematoda) in the domestic chick. *International Journal for Parasitology*. 18(3): 413-414.
- Fried, B., Mueller, T.J. and Frazer, B.A. 1997. Observations on *Echinostoma revolutum* and *Echinostoma trivolvis* in single and concurrent infections in domestic chicks. *International Journal of Parasitology*. 27(11): 1319-1322.
- Fried, B. and Graczyk, T.K. 2004. Recent advances in the biology of *Echinostoma* species in the “*revolutum*” group. In: Baker, J.R., Muller, R. and Rollinson, D. (Eds.), *Advances in Parasitology*. 58: 140-195.
- Fried, B., Graczyk, T.K. and Tamang, L. 2004. Food-borne intestinal trematodiasis in humans. *Parasitology Research*. 93: 159-170.

- Fried, B. and Peoples, R.C. 2007. Effects of a 300-metacercarial cyst inoculum on worm recovery and crowding of *Echinostoma caproni* in Balb/C mice. *Parasitology Research*. 101: 1701-1702.
- Fujino, T., Fried, B. and Hosier, D.W. 1995. The expulsion of *Echinostoma trivolvis* (Trematoda) from ICR mice: extension/retraction mechanisms and ultrastructure of the collar spines. *Parasitology Research*. 80: 581-587.
- Fujino, T., Takahashi, Y. and Fried, B. 1995. A comparison of *Echinostoma trivolvis* and *E. caproni* using random amplified polymorphic DNA analysis. *Journal of Helminthology*. 69:263–267.
- Fujino, T., Zhiliang, W., Nagano I., Takahashi, Y. and Fried, B. 1997. Specific primers for the detection of genomic DNA of *Echinostoma trivolvis* and *E. caproni* (Trematoda: Echinostomatidae). *Molecular and Cellular Probes*. 11:77–80.
- Fujino, T., Nakano, .T, Washioka, H., Tonosaki, A., Ichikawa, H. and Fried B. 2000. Comparative ultrastructure of eggs in *Echinostoma paraensei*, *E. caproni*, and *E. trivolvis* (Trematoda: Echinostomatidae). *Parasitology Research*. 86: 427-430.
- Gavet, M.F. and Fried, B. 1994. Infectivity, growth, distribution and acetabular attachment of a one-hundred metacercarial cyst inoculum of *Echinostoma trivolvis* in ICR mice. *Journal of Helminthology*. 68: 131-134.
- Goto, M., Honda ,E., Ogura, A., Nomoto, A. and Hanaki, K. 2009. Colorimetric detection of loop-mediated isothermal amplification reaction by using hydroxy naphthol blue. *Short Technical Reports*. 46(3): 167-172.
- Han, E.T., Watanabe, R., Sattabongkot, J., Khuntirat, B, Sirichaisinthop, J., Iriko, H, Jin, L., Takeo, S. and Tsuboi, T. 2007. Detection of four *Plasmodium* species by genus and species-specific loop-mediated isothermal amplification for clinical diagnosis. *Journal of Clinical Microbiology*. 45(8): 2521–2528.
- Haseb, M.A. and Eveland, L.K. 2000. Human echinostomiasis: Mechanisms of pathogenesis and host resistance. In: Fried, B. and Graczyk, T.K. (Eds), *Echinostomes as Experimental Models for Biological Research*. Chapter 4. Kluwer Academic Publishers, Dordrecht.

- Hong, S.J., Chai, J.Y. and Lee, S.H. 1991. Surface ultrastructure of the development stage of *Heterophyopsis continua* (Trematoda: Heterophyidae). *Journal of Parasitology*. 77: 613-620.
- Huffman, J.E., Michos, C. and Fried, B. 1986. Clinical and pathological effects of *Echinostoma revolutum* (Digenea: Echinostomatidae) in the golden hamster, *Mesocricetus auratus*. *Parasitology*. 93: 505-515.
- Huffman, J.E., Iclesias, D. and Fried, B. 1988. *Echinostoma revolutum*: Pathology of extra intestinal infection in the golden hamster. *International Journal for Parasitology*. 18(6): 873-874.
- Huffman, J.E. and Fried, B. 1990. *Echinostoma* and Echinostomiasis. In: Baker, J.R. and Muller, R. (Eds.), *Advances in Parasitology*, 29. Chap. 4, Academic Press, London, pp. 215-270.
- Humphries, J.E., Reddy, A. and Fried, B. 1997. Infectivity and growth of *Echinostoma revolutum* (Froelich, 1802) in the domestic Chick. *International Journal for Parasitology*. 21(1): 129-130.
- Hussein, A.A, Hassan, I.M. and Khalifa, R.M.A. 2010. Development and hatching mechanism of *Fasciola* eggs, light and scanning electron microscopic studies. *Saudi Arabia Journal of Biological Science*. 17: 247-251.
- Idris, N. and Fried, B. 1996. Development, hatching, and infectivity of *Echinostoma caproni* (Trematoda) eggs, and histologic and histochemical observations on the miracidia. *Parasitology Research*. 82: 136-142.
- Izadi, A., Moslemi, E. and Shahhosseiny, M.H. 2012. Comparison of SYBR Green and turbidimetry methods for loop mediated isothermal amplification (LAMP) product detection in diagnosis of hepatitis B virus (HBV). *African Journal of Microbiology Research*. 6(42): 7003-7007.
- Jeyarasasingam, U., Heyneman, D., Lim, H.K. and Mansour, N. 1972. Life cycle of a new echinostome from Egypt, *Echinostoma liei* sp. nov. (Trematoda; Echinostomatidae). *Parasitology*. 65: 203-222.
- Johnson, J.C. 1920. The life cycle of *Echinostoma revolutum* (Froelich). University of California. *Publication in Zoology*. 19:335-388



- Kalvatchev, Z., Tsekov, I. and Kalvatchev, N. 2010. Loop-mediated amplification for sensitive and specific detection of viruses. *Biotechnology and Biotechnology*. 24(1): 1559-1561.
- Kanev, I. 1994. Life-cycle, delimitation and redescription of *Echinostoma revolutum* (Froelich, 1802) (Trematoda: Echinostomatidae). *Systematics Parasitology*. 28: 125-144.
- Kanev, I., McCarthy, A., Radev, V. and Dimitrov, V. 1994. Dimorphism and abnormality in the male reproductive system of our digenean parasite species (Trematoda). *Acta Parasitologica Polonica*. 39: 107-109.
- Kanev, I., Dimitrov, V., Radev, V. and Fried, B. 1995a. Redescription of *Echinostoma jurini* (Skvortzov, 1924) with a discussion of its identity and characteristics. *Annalen des Naturhistorischen Museums in Wien*; 97B: pp. 37-53.
- Kanev, I., Fried B., Dimitrov, V. and Radev, V. 1995b. Redescription of *Echinostoma trivolvis* (Cort, 1914) (Trematoda; Echinostomatidae) with a discussion of its identity. *Systematic Parasitology*. 32: 61-70.
- Kanev, I., Radev, V., Sterner, M. and Fried, B. 2000. An overview of the biology of echinostomes. In *Echinostomes as experimental models for biological research*, Fried, B. and Graczyk, T.K. (Eds.), pp. 1-29. Dordrecht: Kluwer.
- Kostadinova, A. 1995. *Echinostoma echinatum* (Zeder 1803) sensu Kanev (Digenea: Echinostomatidae): a note of caution. *Systematics Parasitology*. 32: 23-26.
- Kostadinova, A. 1999. Cercarial chaetotaxy of *Echinostoma miyagawai* Ishii, 1932 (Digenea: Echinostomatidae), with a review of the sensory patterns in the 'revolutum' group. *Systematics Parasitology*. 44: 201-209.
- Kostadinova, A. and Gibson, D.I. 2000. The systematic of the echinostomes. In: Fried, Graczyk, (Eds.), *Echinostomes as Experimental Models for Biological Research*, Kluwer Academic Publishers, Dordrecht, Netherlands, pp. 31-57.
- Kostadinova, A., Gibson, D.I., Biserkov, V. and Chipev, N. 2000. Re-validation of *Echinostoma miyagawai* Ishii, 1932 (Digenea: Echinostomatidae) on the basis of the experimental completion of its life-cycle. *Systematic Parasitology*. 45: 81-108.
- Kostadinova, A., Herniou, E.A., Barrett, J. and Littlewood, D.T.J. 2003. Phylogenetic relationships of *Echinostoma Rudolphi*, 1809 (Digenea: Echinostomatidae) and

- related genera re-assessed via DNA and morphological analyses. *Systematic Parasitology*. 54:159–176.
- Kostadinova, A. 2005. Family Echinostomatidae Looss, 1899. In: Jones, A., Bray, R.A. and Gibson, D.I. (Eds). *Keys to the Trematoda Volume 2*. CABI Publishing and The Natural History Museum, London pp. 9-64.
- Krejci, K.G. and Fried, B. 1994. Light and scanning electron microscopic observations of the eggs, daughter rediae, cercariae, and encysted metacercariae of *Echinostoma trivolvis* and *E. caproni*. *Parasitology Research*. 80: 42-47.
- Kruse, D.M., Hosier, D.W. and Fried, B. 1992. The expulsion of *Echinostoma trivolvis* (Trematoda) from ICR mice: scanning electron microscopy of the worms. *Parasitology Research* .78: 74-77.
- Kuboki, N., Inoue, N., Sakurai, T., Di Cello, F., Grab, D.J., Suzuki, H., Sugimoto, C. and Igarashi, I. 2003. Loop-mediated isothermal amplification for detection of African trypanosomes. *Journal of Clinical Microbiology*. 41: 5517-5524.
- Laohasinnarong, D., Thekisoe, O.M.M., Malele, I., Namangala, B., Ishii, A., Goto, Y., Kawazu, S., Sugimoto, C. and Inoue, N. 2011. Prevalence of *Trypanosoma* sp. in cattle from Tanzania estimated by conventional PCR and loop-mediated isothermal amplification (LAMP). *Parasitology Research*. 109: 1735-1739.
- Le, T.H., Nguyen, N.T.B., Truong, N.H. and De, N.V. 2012. Development of Mitochondrial Loop-Mediated Isothermal Amplification for Detection of the Small Liver Fluke *Opisthorchis viverrini* (Opisthorchiidae; Trematoda; Platyhelminthes). *Journal of Clinical Microbiology*. 50(4): 1178-1184.
- Lee, S.H., Hong, S.J., Chai, J.Y. and Seo, B.S. 1985. Studies on intestinal trematodes in Korea. XV. Tegumental ultrastructures of *Fibricola seoulensis* according to development stages. *Seoul Journal of Medical*. 26: 52-63.
- Lee, S.H., Hong, S.J, Chai, J.Y., Hong, S.T. and Seo, B.S. 1986. Tegumental ultrastructure of *Echinostoma hortense* observed by scanning electron microscopy. *Korean Journal of Parasitology*. 24: 63-70.
- Lee, S.H., Hwang, S.W., Sohn, W.M., Kho, W.G., Hong, S.T. and Chai, J.Y. 1991. Experimental life history of *Echinostoma hortense*. *Korean Journal of Parasitology*. 29(2):161-172.

- Lee, S.H., Jun, S.H., Sohn, W.M. and Chai, J.Y. 1992. Tegumental ultrastructure of juvenile and adult *Echinostoma cinetorchis*. Korean Journal of Parasitology. 30: 65-74.
- Lee, J.J., Jung, B.K., Lim, H., Lee, M.Y., Choi, S.Y., Shin, E.H. and Chai, J.Y. 2012. Comparative morphology of minute intestinal fluke eggs that can occur in human stools in the Republic of Korea. Korean Journal of Parasitology. 50(3): 207-213.
- Li, X. 1991. Food-borne parasitic zoonoses in The Peoples' Republic of China. Southeast Asian Journal of Tropical Medicine and Public Health. 22:31-35.
- Liang, S.Y., Chan, Y.H., Hsia, K.T., Lee, J.L., Kuo, M.C., Hwa, K.Y., Chan, C.W., Chiang, T.Y., Chen, J.S., Wu, F.T. and Ji, D.D. 2009. Development of loop-mediated isothermal amplification assay for detection of *Entamoeba histolytica*. Journal of Clinical Microbiology. 47(6): 1892-1895.
- Lie, K.J. and Basch, P.F. 1966. Life history of *Echinostoma barbosai* sp. n. (Trematoda: Echinostomatidae). The Journal of Parasitology; 52: 1052-1057.
- Lie, K.J. and Kanev, I. 1983. Identification and distribution of *Echinostoma lindoense*, *E. audyi* and *E. revolutum* (Trematoda; Echinostomatidae). Parasitology Research. 69: 223-227.
- Lima dos Santos, C.A. 1995. Prevention and control of food borne trematodes in cultured fish. INFOFISH International. 2:57-62.
- Lo, C.T. and Cross, J.H. 1975. Observations on the host-parasite relations between *Echinostoma revolutum* and lymnaeid snails. Chinese Journal of Microbiology. 8: 241-252.
- Lo, C.T. 1995. *Echinostoma macrorchis*: life history, population dynamics of intramolluscan stages, and the first and second intermediate hosts. Journal of Parasitology. 8: 569-576.
- Mabus, J., Huffman, J.E. and Fried, B. 1988. Humoral and cellular response to infection with *Echinostoma revolutum* in the golden hamster, *Mesocricetus auratus*. Journal of Helminthology. 62: 127-132.
- Maldonado, A.Jr., Vieira, G.O. and Lanfredi, R.M. 2003. *Echinostoma luisreyi* n. sp. (Platyhelminthes: Digenea) by light and scanning electron microscopy. Journal of Parasitology. 89(4): pp. 800-808.

- Maldonado, A.Jr. and Lanfredi, R.M. 2009. Echinostomes in the wild. In: Fried, B. and Toledo, R. (Eds). *The Biology of Echinostomes: From the molecule to the community*. New York, USA. Springer Science+Business Media, LLC. p 129-145.
- Manger, Jr P.M. and Fried, B. 1993. Infectivity, growth and distribution of preovigerous adults of *Echinostoma caproni* in ICR mice. *Journal of Helminthology*. 67: 158-160.
- Marcilla, A. 2009. Echinostomes: Genomics and proteomics. In: Fried, B. and Toledo, R. (Eds.). *The Biology of Echinostomes*, Chap. 9, Springer, New York, pp. 207-228.
- Maruyama, F., Kenzaka, T., Yamaguchi, N., Tani, K. and Nasu, M. 2003. Detection of bacteria carrying the *stx2* gene by in situ loop-mediated isothermal amplification. *Applied and Environmental Microbiology*. 69(8): 5023–5028.
- Mohandas, A. and Nadakal, A.M. 1978. *In vivo* Development of *Echinostoma malayanum* Leiper, 1911 with notes on effects of population density, chemical composition and pathogenicity and *in vitro* excystment of the Metaeercaria (Trematoda: Echinostomatidae). *Zeitschrift für Parasitenkunde*. 55: 139-151.
- Morgan, J.A.T. and Blair, D. 1995. Nuclear rDNA ITS sequence variation in the trematode genus *Echinostoma*: an aid to establishing relationships within the 37 collar-spine group. *Parasitology*. 111:609-615.
- Morgan, J.A.T. and Blair, D. 1997a. Mitochondrial ND1 gene sequences used to identify echinostome isolates from Australia and New Zealand. *International Journal of Parasitology*. 28, 493-502.
- Morgan, J.A.T. and Blair, D. 1997b. Relative merits of nuclear ribosomal internal transcribed spacers and mitochondrial CO1 and ND1 genes for distinguishing among *Echinostoma* species (Trematoda). *Parasitology*. 116, 289-297.
- Mori, Y. and Notomi, T. 2009. Loop-mediated isothermal amplification (LAMP): a rapid, accurate, and cost-effective diagnostic method for infectious diseases. *Journal of Infectious Chemotherapy*. 15(2): 62-69.
- Muñoz-Antoli, C., Trelis, M., Toledo, R. and Esteban, J.G. 2006. Infectivity of *Echinostoma friedi* miracidia to different snail species under experimental conditions. *Journal of Helminthology*. 80: 323-325.

- Nagamine, K., Hase, T., Notomi T. 2002. Accelerated reaction by loop-mediated isothermal amplification using loop primers. *Molecular Cell Probes*. 16: 223-229.
- Nassi, H and Dupouy, J. 1988. Experimental study of the life history of *Echinostoma parvocirrus* n. sp. (Trematoda: Echinostomatidae), a larval parasite of *Biomphalaria glabrata* in Guadeloupe. *Annales de Parasitologie Humaine et Comparee*; 63: 103-118 (in French).
- Nithikathkul, A., Saichua, P., Pannangrong, W., Chaiprapathong, S. and Nithikethkul, C. 2008. Echinostomiasis : Biology and clinical manifestations. *Chulalongkorn Medical Journal*. 52(2):129-137 (in Thai).
- Nollen, P.M. 1994. The hatching behavior of *Echinostoma trivolvis* miracidia and their responses to gravity, light and chemicals. *International Journal of Parasitology*. 24: 581-587.
- Notomi, T., Okayama, H., Masubuchi, H., Yonekawa, T., Watanabe, K., Amino, N. and Hase, T. 2000. Loop-mediated isothermal amplification of DNA. *Nucleic Acids Research*. 28: E63.
- Odaibo, A.B., Christensen, N.O. and Ukoli, F.M.A. 1988. Establishment, survival, and fecundity in *Echinostoma caproni* (Trematoda) infections in NMRI Mice. *Proceeding of Helminthology Society of Washington*. 55: 265-269.
- Parida, M., Sannarangaiah, S., Dash, P.K., Rao, P. V. L. and Morita, K. 2008. Loop mediated isothermal amplification (LAMP): a new generation of innovative gene amplification technique; perspectives in clinical diagnosis of infectious diseases. *Reviews in Medical Virology*. 18(6): 407-421.
- Park ,Y.K., Soh, C.T., Park, G.M., Hwang, M.K. and Chung, P.R. 2006a. Host specificity of *Pisidium coreanum* (Bivalvia: Sphaeriidae) to larval infection with a human intestinal fluke *Echinostoma cinetorchis* (Trematoda: Echinostomatidae) in Korea. *The Journal of Parasitology*. 92(5): 1118-1120.
- Park, Y.K., Hwang, M.K. and Chung, P.R. 2006b. Encystment and metacercariae development of *Echinostoma cinetorchis* cercariae in an *in vitro* culture system. *Journal of Parasitology*. 92(5): 1010-1013.

- Petney, T., Sithithaworn, P., Andrews, R., Kiatsopit, N., Tesana, S., Grundy-Warr, C. and Ziegler, A. 2012. The ecology of the *Bithynia* first intermediate hosts of *Opisthorchis viverrini*. *Parasitology International*. 61: 38-45.
- Petrie, J.F., Burg, E.F. and Cain, G.D. 1996. Molecular characterization of *Echinostoma caproni* and *E. paraensei* by random amplification of polymorphic DNA (RAPD) analysis. *Journal of Parasitology*. 82:360–362.
- Pinheiro, J., Júnior, A.M., Attias, M. and Lanfredi, R.M. 2004. Morphology of the rediae of *Echinostoma paraensei* (Trematoda: Echinostomatidae) from its intermediate host *Lymnaea columella* (Mollusca, Gastropoda). *Parasitology Research*. 93: 171–177.
- Poon, L.L., Wong, B.W., Ma, E.H., Chan, K.H., Chow, L.M., Abeyewick-reme, W., Tangpukdee, N., Yuen, K.Y., Guan, Y., Looareesuwan, S., and Peiris, J.S. 2006. Sensitive and inexpensive molecular test for falciparum malaria: detecting *Plasmodium falciparum* DNA directly from heat-treated blood by loop-mediated isothermal amplification. *Clinical Chemistry*. 52:303-306.
- Radomyos, P., Bunnag, D. and Harinasuta, T. 1982. *Echinostoma ilocanum* (Garrison, 1908) Odhner, 1911, infection in man in Thailand. *Southeast Asian Journal of Tropical Medicine and Public Health*. 13(2):265-269.
- Radomyos, P., Bunnag, D. and Harinasuta, T. 1985. Report of *Episthmium caninum* (Verma, 1935) Yamaguti, 1958 (Digenea: Echinostomatidae) in man. *Southeast Asian Journal of Tropical Medicine and Public Health*. 16(3):508-511.
- Radomyos, P., Radomyos, B. and Tungtrongchitr, A. 1994. Multi-infection with helminths in adults from northeast Thailand as determined by posttreatment fecal examination of adult worms. *Tropical Medicine and Parasitology*. 45(2):133-135.
- Richard, J. and Brygoo, E.R. 1978. Life cycle of the trematode *Echinostoma caproni* Richard, 1964 (Echinostomatoidea). *Annales de Parasitologie Humaine et Comparee*. 53(3): 265-75.
- Roberts, L.S. 2000. The crowding effect revisited. *Journal of Parasitology*. 86: 209-211.
- Ryang, Y.S. 1990. Studies on *Echinostoma* spp. in the Chungju Reservoir and upper streams of the Namhan River. *Korean Journal of Parasitology*. 28:221–223.

- Saijuntha, W., Tapdara, S. and Tantrawatpan, C. 2010. Multilocus enzyme electrophoresis analysis of *Echinostoma revolutum* and *Echinostoma malayanum* (Trematoda: Echinostomatidae) isolated from Khon Kaen Province, Thailand. *Asian Pacific Journal of Tropical Medicine*. 3(8):633-636.
- Saijuntha, W., Tantrawatpan, C., Sithithaworn, P., Andrews, R.H. and Petney, T.N. 2011a. Genetic characterization of *Echinostoma revolutum* and *Echinoparyphium recurvatum* (Trematoda: Echinostomatidae) in Thailand and phylogenetic relationships with other isolates inferred by ITS1 sequence. *Parasitology Research*. 108: 751-755.
- Saijuntha, W., Sithithaworn, P., Duengngai, K., Kiatsopit, N., Andrews, R.H. and Petney, T.N. 2011b. Genetic variation and relationships of four species of medically important echinostomes (Trematoda: Echinostomatidae) in South-East Asia. *Infection, Genetics and Evolution*. 11: 375-381.
- Sandground, JH and Bonne, C.1940. *Echinostoma lindoensis* n. sp., a new parasite of man in the Celebes with an account of its life history and epidemiology. *American Journal of Tropical Medicine and Hygiene*; 20: 511-536.
- Sanchaisuriya, P., Pongpaew, P., Saowakontha, S., Supawan, V., Migasena, P. and Schelp ,F.P. 1993. Nutritional health and parasitic infection of rural Thai women of the child bearing age. *Journal of Medical Association of Thailand*. 76:138–145.
- Sapp, K.K., Meyer, K.A. and Loker, E.S. 1998. Intramolluscan development of the digenean *Echinostoma paraensei*: rapid production of a unique mother redia that adversely affects development of conspecific parasites. *Invertebrate Biology*. 117: 20-28.
- Schmidt, K.A. and Fried, B. 1996. Experimental infection of *Helisoma trivolvis* (Colorado Strain) Snails with Cercariae of *Echinostoma trivolvis*. *International Journal for Parasitology*. 26(3): 287-289.
- Schmidt, J. 1998. Glycan vesicle formation in vitellocytes and hatching vacuoles in eggs of *Echinostoma caproni* and *Fasciola hepatica* (Digenea). *Tissue and Cell*. 30(4): 416-426.
- Senger, C.M. 1954. Notes on the growth, development and survival of two echinostome trematodes. *Experimental Parasitology*. 3: 491-496.

- Smales, L.R. and Blankespoor, H.D. 1984. *Echinostoma revolutum* (Froelich, 1802) Loos, 1899 and (Schrank, 1788) Luhe, 1909 (Echinostomatidae, Digenea): scanning electron microscopy of the tegumental surfaces. *Journal of Helminthology*. 58: 187-195.
- Sohn, W.M. 1998. Life history of *Echinoparyphium recurvatum* (Trematoda: Echinostomatidae) in Korea. *Korean Journal of Parasitol*. 36(2): 91-98.
- Sorensen, R.E., Curtis, J. and Minchella, D.J. 1998. Intraspecific variation in the rDNA ITS loci of 37-collar-spined echino-stomes from North America: Implications for sequence-based diagnoses and phylogenetics. *Journal of Parasitology*. 84: 992 – 997.
- Sri-aroon, P., Chusongsang, P., Chusongsang, Y., Surinthewong, P., Butraporn, P. and Lohachit ,C. 2010. Snails and trematode infection after Indian Ocean tsunami in Phang-Nga province, Southern Thailand. *Southeast Asian Journal of Tropical Medicine and Public Health*. 41(suppl): 48-60.
- Srisawangwong, T., Chantaluk, S., Sithithaworn, P. and Charoensiri, D.J. 2004. Infectivity, growth and fecundity of *Echinostoma malayanum* in mice. *The Southeast Asian Journal of Tropical Medicine and Public Health*. 35(suppl 1): 302-305.
- Stillson, L.L. and Platt, T.R. 2007. The crowding effect and morphometric variability in *Echinostoma caproni* (Digenea: Echinostomatidae) from ICR mice. *Journal of Parasitology*. 93(2): 242-246.
- Tamura, K., Stecher, G., Peterson, D., Filipski, A. and Kumar, S. 2013. MEGA6: Molecular Evolutionary Genetics Analysis Version 6.0. *Molecular Biology and Evolution*. 30(12): 2725–2729.
- Tantrawatpan, C., Saijuntha, W., Sithithaworn, P., Andrews, R.H. and Petney ,T.N. 2012. Genetic differentiation of *Artyfechinostomum malayanum* and *A. sufrartyfex* (Trematoda: Echinostomatidae) based on internal transcribed spacer sequences. *Parasitology Research*. 112(1): 437-441.
- Thekiso, O.M.M., Inoue, N., Kuboki, N., Tuntasuvan, D., Bunnoy, W., Borisutsuwan, S., Igarashi, I. and Sugimoto, C. 2005. Evaluation of loop-mediated isothermal amplification (LAMP), PCR and parasitological tests for detection of



- Trypanosoma evansi* experimentally infected pigs. *Veterinary Parasitology*. 130: 327-330.
- Toledo, R., Antoli, C.M., Sánchez, L., Dufour, Ch.B. and Esteban, J.G. 1998. Cercarial chaetotaxy of *Euparyphium albuferensis* Esteban *et al.*, 1997 (Trematoda: Echinostomatidae), with a review of some genera of the Echinostomatinae. *Systematics Parasitology*. 39:35–44.
- Toledo, R., Antoli, C.M. and Esteban, J. G. 2000. The life-cycle of *Echinostoma friedi* n. sp. (Trematoda: Echinostomatidae) in Spain and a discussion on the relationships within the ‘*revolutum*’ group based on cercarial chaetotaxy. *Systematics of Parasitology*. 45:199-217.
- Toledo, R., Muñoz-Antoli, C. and Esteban, J.G. 2000. The life cycle of *Echinostoma friedi* n. sp. (Trematoda: Echinostomatidae) in Spain and a discussion on the relationships within the ‘*revolutum*’ group based on cercarial chaetotaxy. *Systematic Parasitology*. 45: 199-217.
- Toledo, R., Espert, A., Carpena, I., Muñoz-Antoli, C., Fried, B. and Esteban, J.G. 2004. The comparative development of *Echinostoma caproni* (Trematoda: Echinostomatidae) adults in experimentally infected hamsters and rats. *Parasitology Research*. 93: 439-444.
- Toledo, R. and Fried, B. 2005. Echinostomes as experimental models for interactions between adult parasites and vertebrate hosts. *Trends in Parasitology*. 21(6): 251-254.
- Toledo, R., Carpena, I., Espert, A., Sotillo, J., Muñoz-Antoli, C. and Esteban, J.G. 2006. A Quantitative approach to the experimental transmission success of *Echinostoma friedi* (Trematoda: Echinostomatidae) in rats. *Journal of Parasitology*. 92(1): 16-20.
- Toledo, R., Esteban, J.G., and Fried, B. 2006. Immunology and pathology of intestinal trematodes in their definitive hosts. *Advances in Parasitology*. 63: 285-365.
- Toledo, R. 2009. Echinostomes in the definitive host: A model for the study of host-parasite relationships. In: Fried, B. and Toledo, R. (Eds). *The Biology of Echinostomes*. Springer, New York, 2009; 89-109.

- Toledo, R., Esteban, J.G. and Fried, B. 2009. Recent advances in the biology of echinostomes. In: Rollinson, Hay, (Eds.), *Advances in Parasitology*. 69:147-204.
- Toledo, R. and Fried, B. 2013. Echinostomes. In: Lui, D. (Eds). *Molecular detection of human parasitic pathogens*. Chapter 30. CRC Press, London.
- Torii, M., Tsuboi, T., Hirai, K. and Nishida, H. 1989. Ultrastructure of sensory receptors of adult *Echinostoma hortense* (Trematoda: Echinostomatidae). *Japan Journal of Parasitology*. 38 353-360.
- Ursone, R.L. and Fried, B. 1995. Light and scanning electron microscopy of *Echinostoma caproni* (Trematoda) during maturation in ICR mice. *Parasitology Research*. 81: 45-51.
- Woodruff, D.S. and Upatham, E.S. 1992. Snail-transmitted diseases of medical and veterinary importance in Thailand and the Mekong valley. *Journal of Medical and Applied Malacology*. 4:1-12.
- Xiao, X., Wang, T., Zheng, X., Shen, G. and Tian, Z. 2005. *In vivo* and *in vitro* encystment of *Echinochasmus liliputanus* cercariae and biological activity of the metacercariae. *Journal of Parasitology*. 91:492-498.
- Xu, J., Rong, R., Zhang, H.Q., Shi, C.J., Zhu, X.Q. and Xia, C.M. 2010. Sensitive and rapid detection of *Schistosoma japonicum* DNA by loop-mediated isothermal amplification (LAMP). *International Journal for Parasitology*. 40: 327-331.
- Yamaguti, S. 1958. *Systema Helminthum*, Vol I. Part I. The digenetic trematodes of vertebrate. New York: Interscience.
- Yao, G., Huffman, J.E. and Fried, B. 1991. The effects of crowding on adults of *Echinostoma caproni* in experimentally infected golden hamsters. *Journal of Helminthology*. 65:248-254.
- Yu, S. and Mott, K. 1994. Epidemiology and morbidity of food-borne intestinal trematode infections. *Tropical Disease Bulletin*. 91:125-152.

## LIST OF PUBLICATIONS

- 1) **Chantima K** and Wongsawad C. 2012. Collar Spines of *Echinostoma revolutum* (Froelich, 1802) Looss, 1899: Light and Scanning Electron Microscopic Studies. *Journal of the Microscopy Society of Thailand*. 5(1-2): 14-18.
- 2) **Chantima K**, Chai JY and Wongsawad C. 2013. *Echinostoma revolutum*: Freshwater Snails as the Second Intermediate Hosts in Chiang Mai, Thailand. *Korean Journal of Parasitology*. 51(2): 183-189.
- 3) **Chantima K.**, Rojanapaibul A., Anuntalabhochai S., Chai J.Y. and Wongsawad C. *Echinostoma revolutum*: Recovery and Fecundity in Experimental Chick and Notes on their Egg Development. *Tropical Biomedicine (Submitted)*.
- 4) **Chantima K.**, Jung B.K., Chai J.Y., Anuntalabhochai S. and Wongsawad C. Evaluation of Loop-Mediated Isothermal Amplification (LAMP) for Detection of *Echinostoma revolutum* (Trematoda: Echinostomatidae). *Experimental Parasitology (Submitted)*.