Concerning the activity distribution of these two isozymes in subcellular fractions of porcine liver, the acidic adenylate kinase were localized mainly in the mitochondrial and cytosol fractions, whereas the basic adenylate kinase existed only in the cytosol fraction.

STUDIES ON DIPHYLLOBOTHRIID CESTODES IN HOKKAIDO

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The author investigated diphyllobothriid cestodes in Hokkaido, Japan; 6 species belonging to 2 genera were found: *Diphyllobothrium latum* (LINNAEUS, 1758) from the dog, man and polar bear, *Thalarctos maritimus* (PHIPPS); *Diphyllobothrium* sp. No. 1 from the brown bear, *Ursus arctos yesoensis* LYDEKKER; *Diphyllobothrium* spp. Nos. 2 & 3 from the dog; *D. erinaceieuropaei* (RUDOLPHI, 1819) from the dog, cat, and red fox, *Vulpes vulpes schrencki* KISHIDA, and *Diplogonoporus* sp. from the Steller sea lion, *Eumetopias jubatus* SCHREBER. *Diphyllobothrium* spp. Nos. 1–3 and *Diplogonoporus* sp. differ from other valid diphyllobothriid species; moreover, *Diphyllobothrium* spp. Nos. 2 & 3 were regarded as species of marine mammals. *D. latum* varied with its hosts in some morphological characteristics, especially in the distribution of genital papillae, the morphology of uterine loops, and the size of the eggs. The common scientific name *D. erinacei* or *D. mansoni* should be changed to RUDOLPHI's original name *D. erinaceieuropaei*, in accordance with the International Code of Zoological Nomenclature.

For the study of plerocercoids of *D. latum*, freshwater salmonoid fishes, *Oncorhynchus masou* (BREVOORT), *Salvelinus leucomaenis* (PALLAS) and *S. malma* (WALBAUM) from 13 rivers were examined. Plerocercoids were obtained only from anadromous *O. masou* in the Mena River; the infection rate of plerocercoids was 4.5% in 1976 and 27.9% in 1977. The author, however, suspects that *D. latum* infection from copepods to salmons rarely occurred in the middle and upper waters of the Mena River because of a negative record of plerocercoid from *O. masou* in the young freshwater stage in 1976 and 1977, and also because of the ecological relationship among copepod, *O. masou* and *D. latum*.