Local migration pattern in some waders passing the Korea peninsula; Trematode, a new tracer for studying waders' migration pattern

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In order of name, Mankyung river estuary, Namyang bay and Kangwha Island which are main stop-over sites for waders sparsely line up from south to north along the west sea in Korea peninsula. However, the migration pattern of waders on their way north among the 3 sites had not been known exactly. To solve the problem, we designed an experiment in which we investigated 10 species of waders to see the existence of *Acanthoparyphium tyosenense*, avian intestinal trematode. First of all, we collected and surveyed 3 species of bivalve as an intermediate host of trematode to confirm endemic area of *A. tyosenense* in the 3 sites. Second, we've examined if waders were infected with *A. tyosenense* every spring for 3 years in each site. As a result, we found out the infected waders were restricted only in Mankyung river estuary and 100 percent of infection with metacercariae of *A. tyosenense* was shown in 2 species of bivalves. On the other hand, we couldn't find *A. tyosenense* in the waders and bivalves of Namyang bay and Kangwha Island and Namyang bay hadn't soptted off in Mangkyung river estuary located in more southern part of the west coast than the others on migration north. Even the waders which had reached Mangkyung river estuary had a tendency to fly straight away to boreal breeding site without any stop. Conclusively, we could infer that waders don't use all the 3 stopover sites as stepping stone, but only one site on the way to breeding site. The data on development stage of parasite also enables us to estimate the period of stopover in one site, 14 days.