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BREEDING SEASON OF THE BRACKISH WATER BIVALVE, CORBICULA JAPONICA IN LAKE SHINJI, JAPAN.

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Histological observations of the gonads were made to determine the breeding season of Corbicula japonica in Lake Shinji.

The materials were collected from Lake Shi-nji, at five days interval from April 1987 to March 1988, and have been studies by par-affin section using hematoxylin eosin stainig methods. The size of samples used for histological study was the shell length range of 25 to 30 mm.

In both ovary and testis, the begining of maturing stage was observed in late May. The end of spawning stage was in early October. Spent specimens appeared im mid October.

These results of histological observations suggested that the breeding season of Corbicula japonica in Lake Shinji is from late May to early October.

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ROTIFERA FROM KOYAMA-IKE, IN TOTTORI. THE LARGEST COASTAL POND OF JAPAN.

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In the late 1930's when Hada('37,'39) surveyed this pond the most common rotifers were B.plicatilis hepatotomus, B.angularis, K.cruciformis eichwaldi (salinity: 4.0-4.7‰). The channel connecting Koyama-ike with the Sea of Japan was recently moved and linked with the downstream of Sendai-gawa. While, the pond itself has been contaminated by human activities. The purpose of this approach is to make clear a shift of rotifer composition based on the samples collected from the site near the University on 4/IV, 6/IX, 6/X, 8/XI(1987), 8/IV, 16/V, 17/VIII('89). The Rotifera found this time: B.angularis bidens(D♀ in XI), B.c.calyciflorus(D♀ in IV), B.c.dorcus(VIII), B.u.urceolaris(IV), K.c.cochlearis(IV, V, XI), K.q quadrata(D♀ in IV), K.v.tropica(D♀ in IX, XI), N.acuminata(IV), N.labis ssp(IV), L.acuminata(IV), L.flexibilis(IV), M.stenroosi(IV), P.t.dolichoptera(IV), P.t.vulgaris(D♀ in XI), Synchaeta sp.1(XI), S.sp.2(IV), C.ovalis(IX), Cephalodella sp(VIII), D.dixon-nuttali(VIII), T.pusilla(VIII), Dicranophorus sp(III), A.priodonta(IX), A.intermedia(IX), A.sieboldi(IX), F.l.longiseta(VIII, X, IX), F.l.passa(D♀, ♂♀ in IV), H.mira(IX, X), P.sulcata(VIII), C.coenobasis(IV, V, VIII, IX), Conochilus sp(IV). Cl^- =174-177mg/l(30/VII, 1987). As a result, we may consider that water quality has been changed from oligohaline into limnetic (Venice system) at the site investigated.

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STUDY ON THE ENDOPARASITE OF ANURA
2. PREVALENCE OF HELMINTH IN THE LUNG OF RANA BREVIPODA POROSA AND RANA JAPONICA.

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The endoparasites of the frog were studied from July 1987 to July 1989. The frog hosts (Rana brevipoda porosa and Rana japonica) were captured at Inzai, Chiba Prefecture. Five hundred and twenty four R.b.p. were collected and three hundred and twenty seven R.j. were collected. The sex ratios of the frogs were approximatly equal. Parasites in the lung from each frog was observed at this time. It was observed that, the nematoda, Rhabdias nipponica and the trematoda, Haematoloechus ranae were detected in R.b.p., and only R.nipponica was detected in R.j.. Prevalence of R.nipponica and H.ranae in the lung of R.b.p. was generally low throughout the year for both endoparasites. The intensity of infection, it was noted, was small. In contrast there was a high prevalence all the year round of R.nipponica in R.j.. The observed occurrence was not much different between males and females. Only R. nipponica females, and also parasite spawn were observed in the lung. This worms is known to show the heterogony. It is interesting to note that R. nipponica males and females are observed in the free-living exterior environment.

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THE LIFE AND THE REPRODUCTIVE PHENOMENON IN BIPALIUM(PLATYHELMINTHES.TURBELLARIAN. TRICLADIDA) OF THE FISSION TYPE WORM.

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Materials are 2 species of Genus.Bipalium of the asexual type, these are Bipalium nobile and B.kewense, and were reared in 18° C laboratory in 3 ~ 5 years.

When B.nobile was collected(June, 1984), the worm was about body weight, 7g. and body length, 100cm. under copulation. The worm oviposited a cocoon after 2 weeks. The worm fissioned 6 small pieces from September to December. The larvae took 1.5 years to grow up to 2 ~ 3g. So, perhaps, the collected worm was 3~ 4 years old. The worm do not fission since January in 1985. The worm declined little by little in 1988 and separated in to 2 pieces (anterior-posterior parts). The posterior part never regenerated and then denaturated in September. Thus, it seems 8 ~ 9 years about the longevity. B.kewense of another species is the cosmopolitan one. In June, 1986, the worm was collected at Campus of Tokyo Medical College. The worm fissioned 16 times in 9 months from July to next March, usually 1 piece of most posterior part, and then, after half a year, the worm denaturated the posterior part of the body. After recovery, the worm fissioned 19 times in 19 months from November to August, 1989. That is, the worm in younger period showed vigorously fissionable stage. Why does the worm fission? How does the worm fission? The question is the next theme.