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EFFECT OF 17β-ESTRADIOL ON MATING BEHAVIOR AND REPRODUCTIVITY OF MALE MEDAKA (*ORYZIAS LATIPES*)

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Mating behavior and reproductivity of male fish were studied as an in vivo screening method of endocrine disruptors. Male medaka (*Oryzias latipes*) were exposed to 17β-estradiol at nominal concentrations of 2 and 20 μg/L for 14 days. After exposure of the chemical, mating behavior between male medaka and normal female which were injected with prostaglandin F2α just before the test, was analysed by using video camera for one hour. Normal control male showed courtship dancing such as following, guarding, dancing and crossing while 17β-estradiol treated male did not show any type of courtship dancing. Furthermore, fecundity and fertility were significantly decreased in the treated group. It was suggested that analysis of mating behavior could be a useful endpoint for the screening of the endocrine disruptors.