

[P-76]**Determination of pesticides in Pal-dang reservoir and estimation of estrogenic activity by E-screen assay**

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To date, within the field of endocrine disruption, much focus has been placed on chemicals that mimic estrogen, and the number of such chemicals apparently detected in our environment such as drinking water.

In order to investigate the presence of such chemicals, we performed to determine the level of pesticides in Pal-dang reservoir by simultaneous determination method of 300 chemicals and performed E-screen assay to detect estrogenic activity. In this E-screen assay, we used human breast cancer cell, MCF-7 BUS cells. We treated the various pesticides such as Isoprothiolane, Fenitrothion, Diazinon, Fenobucarb and Parathion in MCF-7 BUS cells. Also, we compared the estrogenic effect of carbaryl, which is known to be one of endocrine disruptors, and 17 β -estradiol. In this study, we were able to monitor several chemicals showed the effect of cell proliferation using MCF-7 BUS cells.

Keyword : E-screen assay, pesticides, MCF-7, simultaneous determination