The Inhibitory Effects of Houttuynia cordata THUNB against Cadmium induced Cytotoxicity (II)

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ABSTRACT—This study was conducted to investigate the antitoxic component in aqueous extract of Houttuynia cordata THUNB. The results were as follows: Generally, detoxification effects by Houttuynia cordata THUNB extract increased in proportion to the extract concentrations in rats. When 40 mg/kg dosage of Houttuynia cordata THUNB extract was administrated, Houttuynia cordata THUNB extract showed the highest antitoxic effects in metallothionein induction. After the extract treatment, body weights increased in proportion to the extract concentrations. However, after 3 weeks, the body weight decreased insignificantly. From the above results, Houttuynia cordata THUNB extract increased metallothionein concentration and decreased the toxicity of cadmium in rats. In vitro the antitoxic activity of agueous extract of Houttuynia cordata THUNB on NIH 3T3 fibroblasts was evaluated by the MTT (3-(4,5-dimethylthiazol-2-yl)-2,5- diphenyl-2H-tetrazoliumbromide) and SRB (sulforhodamine B protein) assays. The light microscopic study was carried out to observe morphological changes of the treated cells. These results were obtained as follows: The concentration of 10-2 mg/ml of Houttuynia cordata THUNB extract was shown significant antitoxic activity. The number of NIH 3T3 fibroblasts were increased and tend to regenerate. These results suggest that Houttuynia cordata THUNB extract retains a potential antitoxic activity.

[PA4-8] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

The Inhibitory Effects of Trichosanthes kirilowii against Cadmium induced cytotoxicity (III)

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Abseract- This study was conducted to investigate the antitoxic agents in aqueous extrat of Trichosanthes kirilowii. The results were as follows: Generally, dotoxification effects by Trichosanthes kirilowii extract increased in proportion to the extract concentration in rats. When 40 mg/kg dosage of Trichosanthes kirilowii extract was administrated, Trichosanthes kirilowii extract showed the highest antitoxic effects in metallothionein induction. After the extract treatment, body weights increased in proportion to the extract concentrations. From the above results, Trichosanthes kirilowii extract increased methallothionein concentration and decreased the toxicity of cadmium in rats. In vitro the antitoxic activity of aqueous extract of Trichosanthes kirilowii on NIH 3T3 fibroblasts was evaluated by the MTT (3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl- 2H-tetrazolium bromide) and SRB (sulforhodamine B protein)assays. The light microscopic study was carried out to observe morphological changes of the treated cells. These results were obtained as follows: The concentration of 10-2 mg/ml of Trichosanthes kirilowii extract was shown sighificant antitoxic activity. The number of NIH 3T3 fibroblasts were increased and tend to regenerate. These results suggest that Trichosanthes kirilowii extract retains a potential antitoxic activity.

[PA4-9] [10/19/2000 (Thr) 10:00 - 11:00 / [Hall B]]

Protective Effects of Butanol Fraction of Carthamus tinctorius L. Semen on