

[P-7]**Characterization of antihypertensive effect of *I. sinclairii* and its Genotoxic evaluation in 3 sets of mutagenicity tests**

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The present study examined the effect of alcohol extract of *Isaria sinclairii* on blood pressure in spontaneously hypertensive rats (SHR). The blood pressure and heart rate were measured after treatment of alcohol extract of *Isaria sinclairii* by indirect tail cuff method and direct *in vivo* model. Male SHR were treated with extracts for 2 or 4 weeks starting at 12 weeks of age. We found that oral treatment of *I. sinclairii* (30mg/kg/day) remarkably decreased from 200 to 112 mmHg (systolic blood pressure)/from 114 to 88 mmHg (diastolic blood pressure) respectively in compared with untreated control SHR. The mutagenic potential of *I. sinclairii* was evaluated using the short-term genotoxicity tests including Ames, chromosome aberration and micronuclei tests. In *S. typhimurium* assay, *I. sinclairii* did not show any mutagenic response in the absence or presence of S9 mix with TA98, TA100, TA1535 and TA1537. In chromosome aberration test, *I. sinclairii* did not show any significant effect on CHO cells compared with control. In mouse micronucleus test, no significant increase in occurrence of MNPE was observed in ICR male mice intraperitoneally administered with *I. sinclairii* at a doses of 15, 150, 1500 mg/kg. These results indicate that *I. sinclairii* has no mutagenic potential in these *in vitro* and *in vivo* systems.