

Effect of Yak-Kong (*Rhynchosia nolubilis*) on Oxidative Parameters in DBA/1J Mice

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Soybean is an increasingly important human food source and animal feed, mainly due to its high protein and oil contents. Especially, Black soybeans (*Phaseolus vulgaris*), a soybean cultivar with a black seed coat, has been used for hundreds of years as a detoxifier and blood nutrient in traditional Chinese medicine. Also, black soybeans, which have been widely utilized as foodstuff and Oriental medicinal materials, contain anthocyanins in seed coat. In the present study, we orally administered dexamethasone (0.25 mg/kg) and Yak-Kong (*Rhynchosia nolubilis*) extract (100 and 200 mg/kg), once a day for 49 days, for DBA/1J mice with the type II collagen-induced arthritis. Then we measured the productions of oxidant, which are NO (nitric oxide), MDA (malon dialdehyde), PCO (protein carbonyls), AGE (advanced glycation end products) and AOPP (advanced oxidation protein products), in serum of Yak-Kong treated mouse compared with those of control group. Treatment with Yak-Kong extract significantly reduced the productions of oxidant, which are NO, MDA, PCO, AGE and AOPP, in serum of Yak-Kong treated mouse compared with those of control group. These results show the activities of anti-oxidant and anti-aging of Yak-Kong ethanolic extract.

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