

Efficient preparation of loganin from *Cornus officinalis* fruits was investigated. First, effect of extraction conditions on loganin yield was measured. The loganin content in *C. officinalis* extract was greatly affected by ethanol concentration and extraction time whereas extraction temperature exerted relatively little effect. Response surface methodology with Box–Behnken design suggested optimized extraction condition for maximum loganin yield as ethanol concentration, 32.0%; temperature 46.2 °C and extraction time, 46.7 min, which yielded 10.4 µg loganin/mg dried fruit. Next, the effect of maturation stage of *C. officinalis* fruits on loganin content was investigated. The loganin content in the extract of *C. officinalis* fruits was decreased as the maturation process. The loganin content in the unripe fruits was 18.0 µg/mg extract whereas reduced to 13.3 µg/mg extract for ripe fruits. Taken together, our present study suggested the importance of extraction condition and maturation stages for efficient preparation of loganin from *C. officinalis* fruits.

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