

The Effects of the Growth Stages and Harvest Periods on the Yield and Active Ingredient Content of *Salvia miltiorrhiza*¹

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Abstract

The purpose of this research was to study the effects on the yield, quality and active ingredient content at different growth stages and different harvest periods of *Salvia miltiorrhiza*. In comparison on the agronomic traits of the roots at different growth days, eleven months had the highest value in plant height, root weight and root width. The roots with the growth days of twelve months had the highest salvianolic acid content, while roots of nine months had the highest tanshione IIA content. In addition, roots of twelve months had the highest anti-oxidant capacity. Compared the effect annual and biennial in yield and active ingredient content test results, annual and biennial plants had little difference in yield and active ingredient content, but the roots of the appearance with better quality in annual plant. Therefore, the eleven to twelve months stage is the suitable time for the root harvest, so it can be the reference of field cultivation and harvest in *S. miltiorrhiza* for the farmers.

Key words: *Salvia miltiorrhiza*, yield, quality, active ingredient.

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