

A REVIEW OF RESEARCH PROGRESS ON EFFECTIVE CHEMICAL COMPOUNDS OF *RADIX ACONITI KUSNEZOFFII*

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ABSTRACT

Aconitum species have been used in China as an essential drug in Traditional Chinese Medicine (TCM). Reviewing the effective compounds of *Radix aconiti kusnezoffii*, toxicity, Stability and Quality control methods based upon a wide range of literature investigations serve as a case study to explore the implications of botanicals used in TCM. The toxicity of *Aconitum* mainly derives from the diester diterpene alkaloids (DDAs) including aconitine, mesaconitine and hypaconitine. They can be decomposed into less or non-toxic derivatives through Chinese traditional processing methods. Therefore, a stipulation for a maximum level of DDA content of *Aconitum* is highly desirable in order to guarantee the clinical safety and its low toxicity in decoctions. Newly developed HPLC methods have made the accurate and simultaneous determination and quantification of DDA content interesting.

Keywords: *aconitum*, chemical composition, aconitine alkaloids, toxicity.