
92.1 Introduction

Zhujieshen, Rhizoma Panacis japonici, the dry rootstocks of *Panax japonicus* C.A. Mey. (Araliaceae), and Zhuzishen, Rhizoma Panacis majoris, the dry rootstocks of *P. japonicus* C.A. Mey. var. *major* (Burk.) C.Y. Wu et K.M. Feng or *P. japonicus* C.A. Mey. var. *bipinnatifidus* (Seem.) C.Y. Wu et K.M. Feng, are further *Panax* species officially listed in the Chinese Pharmacopoeia. They can be collected in the fall and are used as tonic and hemostatic drugs.

92.2 Chemical Constituents

The major constituents contained in the rootstock of *P. japonicus* and its variant are also saponins. The sapogenins in the saponins of *P. japonicus* are protopanaxadiol, protopanaxatriol, and oleanolic acid, like those in the saponins of *P. ginseng*. The main saponins of *P. japonicus* are oleanolic acid-type saponins. Hydrolysis yields oleanolic acid, panaxadiol, and panaxatriol. The saponins of *P. japonicus* isolated and identified to date are listed in Table 92.1.