

16.1 Introduction

Anemone raddeana Regel (Ranunculaceae) is a herbal plant native to China, the rhizome of which is used in folk medicine for treatment of rheumatism and phlebitis. It is included in the appendix of the Chinese Pharmacopoeia.

16.2 Chemical Constituents

A number of saponins, raddeanins A [1–4], B [1, 2, 5], C [1, 2, 6], D [1, 2, 7], E, and F [8, 9], were isolated from the rhizome of *A. raddeana* and structurally determined. All have oleanolic acid (2-1) as a sapogenin. Thus, raddeanin A (16-1) is oleanolic acid 3-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranoside; raddeanin B is oleanolic acid 3-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 4)- α -L-arabinopyranoside and is identical with eleutheroside I (1-13); raddeanin C (16-2) is oleanolic acid 3-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 4)- α -L-arabinopyranoside 28-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosylester; raddeanin D (16-3) is oleanolic acid 3-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranoside 28-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosylester; raddeanin E (16-4) is oleanolic acid 3-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)- α -L-rhamnopyranosyl-(1 \rightarrow 4)- α -L-arabinopyranoside; and raddeanin F (16-5) is oleanolic acid 3-*O*- β -D-glucopyranosyl-(1 \rightarrow 2)- α -L-arabinopyranoside 28-*O*- α -L-rhamnopyranosyl-(1 \rightarrow 4)- β -D-glucopyranosylester.