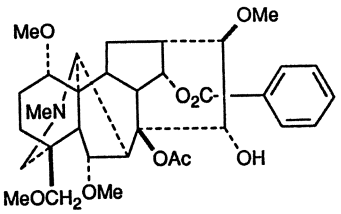
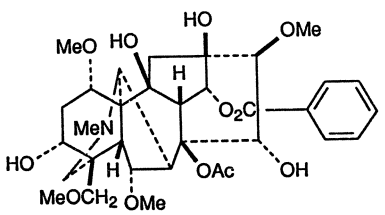
The known alkaloid isodelphinine (*3-23*) [10] and the lipoalkaloids lipoaconitine, lipohypaconitine, lipomesaconitine, and lipodeoxyaconitine, in which the acetyl functions attached to the C-8 hydroxyl group of the corresponding parent alkaloids are replaced by fatty acid residues, were found in the processed roots of *A. carmichaeli* [11–13].



Isodelphinine (*3-23*)

3.2.2 Diterpene alkaloids of *Aconitum kusnezoffii*

From the second officially listed aconite plant, *A. kusnezoffii*, five alkaloids were isolated. Four of them were identified as 3-deoxyaconitine [1], hypaconitine, aconitine, and mesaconitine on the basis of their physical and chemical properties. The fifth alkaloid was a novel compound with the same skeleton as mesaconitine but with one more hydroxyl group at position C-10. It was named beiwutine (*3-24*) [14]. Beiwutine was later also detected in the lateral root of *A. carmichaeli* [15].



Beiwutine (*3-24*)

The amounts of the main alkaloids aconitine, mesaconitine, and hypaconitine in roots of *A. kusnezoffii* obtained from various sources were determined by high performance liquid chromatography. The roots contained about 0.03%–0.06% aconitine, 0.1%–0.6% mesaconitine and 0.02%–0.2% hypaconitine, depending on the source [16].

3.2.3 Diterpene Alkaloids of Unofficial *Aconitum* Species Used in Chinese Folk Medicine

More recently, a number of unofficial *Aconitum* species used in Chinese folk medicine were studied chemically and pharmacologically. A series of novel alkaloids were isolated and characterized.

3.2.3.1 *Aconitum hemsleyanum*

Yunaconitine (*3-25*), an aconine diester with a *p*-anisoyl group at position 14, was isolated from *A. hemsleyanum*. The structure was elucidated on the basis of spectral