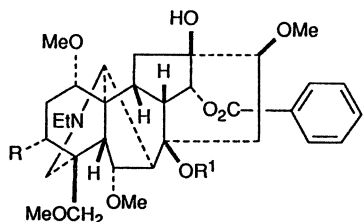


### 3.2.3.11 *Aconitum franchetii*

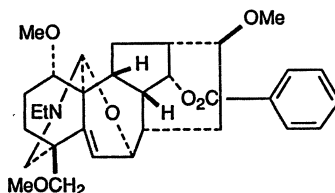
Six alkaloids, indaconitine (3-57), chasmaconitine (3-58), chasmanine, talatisamine, ludaconitine (3-59) [45], and franchetine (3-60) [46], were isolated from *A. franchetii* and their structures elucidated. Ludaconitine and franchetine are two new alkaloids. Franchetine was the first example of a C<sub>19</sub> diterpene alkaloid with a dihydropyran ring.



Indaconitine (3-57): R = OH, R<sup>1</sup> = Ac

Chasmaconitine (3-58): R = H, R<sup>1</sup> = Ac

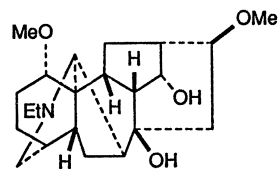
Ludaconitine (3-59): R = OH, R<sup>1</sup> = H



Franchetine (3-60)

### 3.2.3.12 *Aconitum stapfianum* var. *pubipes*

Two alkaloids were isolated from *A. stapfianum* var. *pubipes*. They were identified by spectral analyses as aconosine (3-61) and its 14-acetyl derivative, dolaconine [46, 47].



Aconosine (3-61)

### 3.2.3.13 *Aconitum kongboense*

The diterpene alkaloid vilmorrianine A was isolated from *A. kongboense* [48].

### 3.2.3.14 *Aconitum episcopale*

Five new alkaloids, episcopalisine (3-62), episcopalisine (3-63), episcopalitine (3-64), episcopalidine (3-65) [49, 50], and scopaline (3-66) [25], were isolated from *A. episcopale* and their structures were elucidated by spectral methods. Episcopolidine is an alkaloid of the hetisan type, whereas the other four are C<sub>18</sub> diterpene alkaloids of the aconitine type, lacking the substituent at position C-4. On consideration of structural features it appeared justified to classify the C<sub>18</sub> diterpene alkaloids as a separate group and not as a 4-nor subgroup of the C<sub>19</sub> diterpene alkaloids. In these C<sub>18</sub> alkaloids the C-3 and, in most cases, the C-6 positions are not oxygenated.