The crystal and molecular structures of secoiridoid glucosides decentapicrin A (I) and gentiopicroside (II) with fungitoxic properties, isolated from plant Centaurea decentapica L. (Asteraceae), will be described.

The structure of decentapicrin A reveals a non-planar a-lactone ring: nearly planar[mean value of torsion angle -178.9°] and puckered envelope type with C(6) and C(9) as the flaps. The S-D-glucose moiety appears in the chair, $C_2$ conformation. Molecular packing is realized through intermolecular hydrogen bonds between the water molecules and both sugar residues, sugar-sugar, and the sugar-secoiridoid moieties (involving only conformer with non-planar 6-lactone ring). The molecules connected by hydrogen bonds form waved layers in the (ab) plane which are separated by ethenyl residues.

Gentiopicroside hemihydrate there are two conformers which have different conformations of the $\beta$-D-glucose moiety and pyran rings exhibiting skew-boat conformation. The S-D-glucose moiety is in the chair, $C_1$, conformation. The molecular packing is realized through intermolecular hydrogen bonds forming spiral chains in the c direction. These perpendicular spirals are connected by hydrogen bonds enclosing hydrophobic and hydrophilic areas.

The structure of the classical neuromuscular blocking agent gallamine has been determined by direct methods and difference Fourier synthesis. The crystals are triclinic space group P1, a = 14.416(1), b = 14.081(1), c = 20.895(2) Å, $\alpha = 104.9^\circ$, $\beta = 92.6^\circ$, $\gamma = 94.5^\circ$ with 4 independent gallamine molecules per unit cell. Extensive disorder is observed amongst the bromide counterions which are distributed in 17 sites in both water and ethanol solvent molecules have been located. The gallamine molecules were refined by constrained least squares and occupancy factors were refined for the disordered bromide structure.