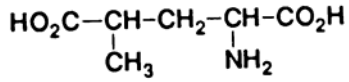
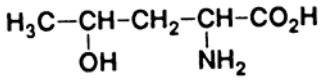
1.3 Aminokyseliny

1.3.1 Neproteinové aminokyseliny

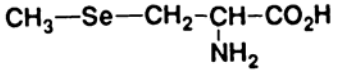
nalezeno cca 280 neproteinových aminokyselin, významné množství patří do řádu Fabales



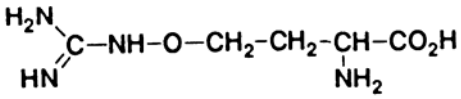
4-Methyl-glutaric acid



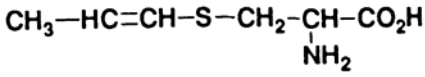
4-Hydroxy-norvaline



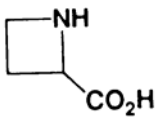
Se-Methylselenocysteine



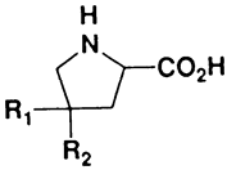
Canavanine



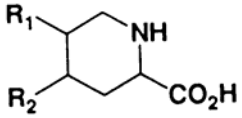
S-(1-Propenyl)-cysteine



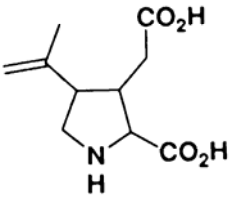
Azetidine-2 carboxylic acid



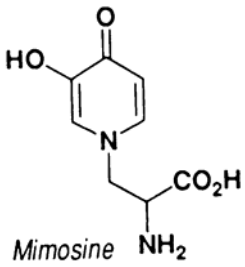
Proline and derivatives



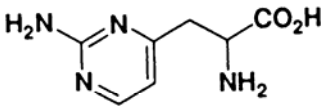
Pipecolic acid and derivatives



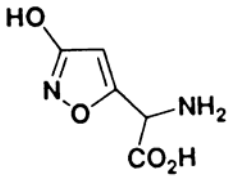
Kainic acid



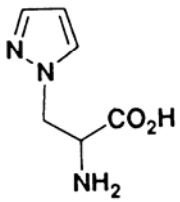
Mimosine



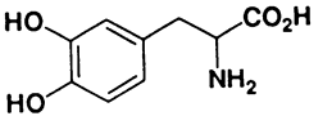
Lathyrine



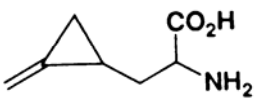
Ibotenic acid



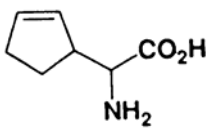
Pyrazolylalanine



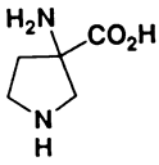
3,4-Dihydroxy-phenylalanine



Hypoglycine-A

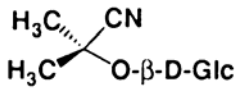


Cyclopentenylglycine

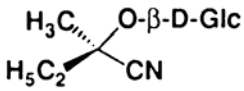


Cucurbitine

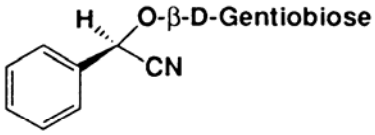
1.3.2 Deriváty aminokyselin: kyanogenní glykosidy



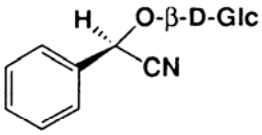
Linamarin



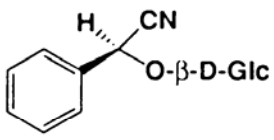
(R)-Lotaustralin



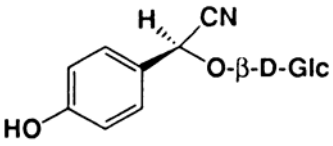
(R)-Amygdalin



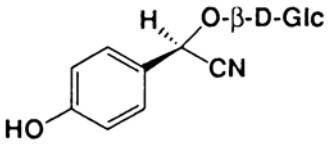
(R)-Prunasin



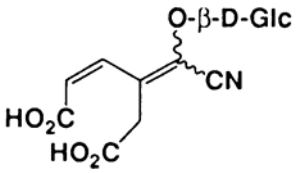
(S)-Sambunigrin



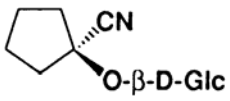
(S)-dhurrin



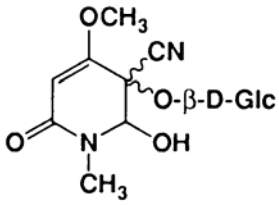
(R)-Taxiphyllin



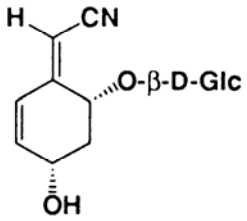
Triglochinin



Tetraphyllin



Acalyphin



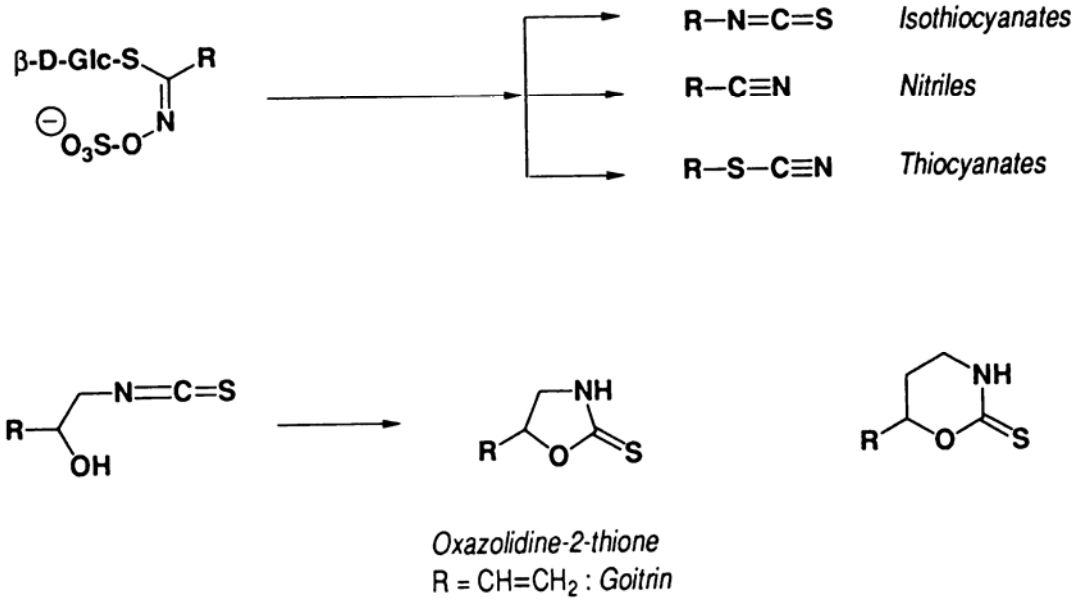
Menisdaurin

Structure of cyanogenic glycosides

- Rosaceae - *Prunus laurocerasus*, *Cotoneaster* sp., *Pyracantha* sp.
- Malaceae - *Sorbus aucuparia*
- Amygdalaceae - *Prunus dulcis*
- Euphorbiaceae - *Manihot esculenta*

1.3.3 Deriváty aminokyselin: glukosinoláty (thioglukosidy)

Anionické glukosidy odpovědné za silné a charakteristické aroma zástupců např. čeledi Brassicaceae.

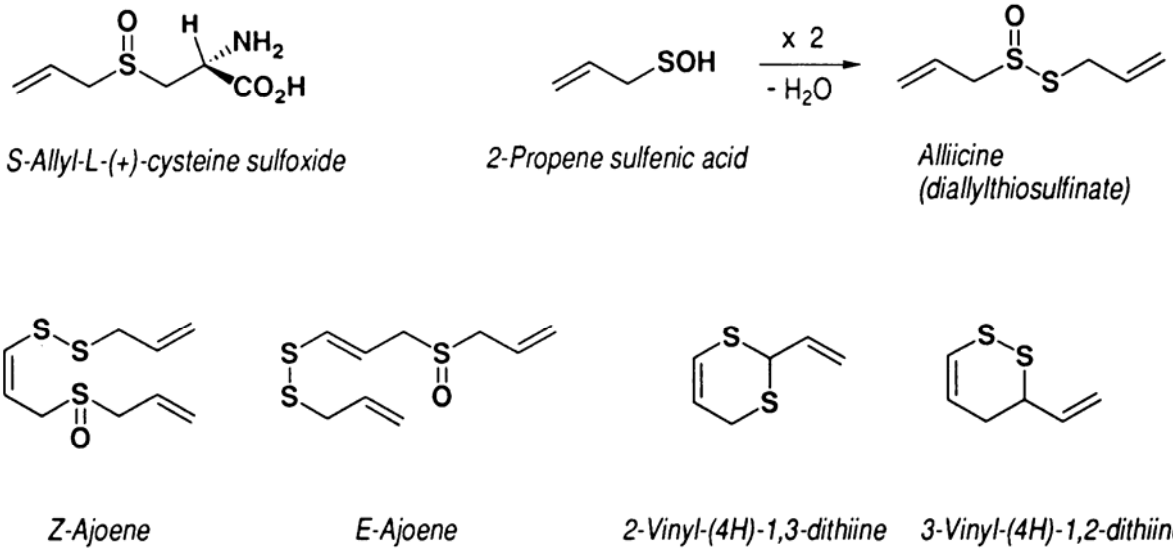


🗁 Brassicaceae - *Brassica juncea, Brassica nigra, Raphanus sativus, Erysimum officinale, Trapaeolum majus, Armoracia rusticana*

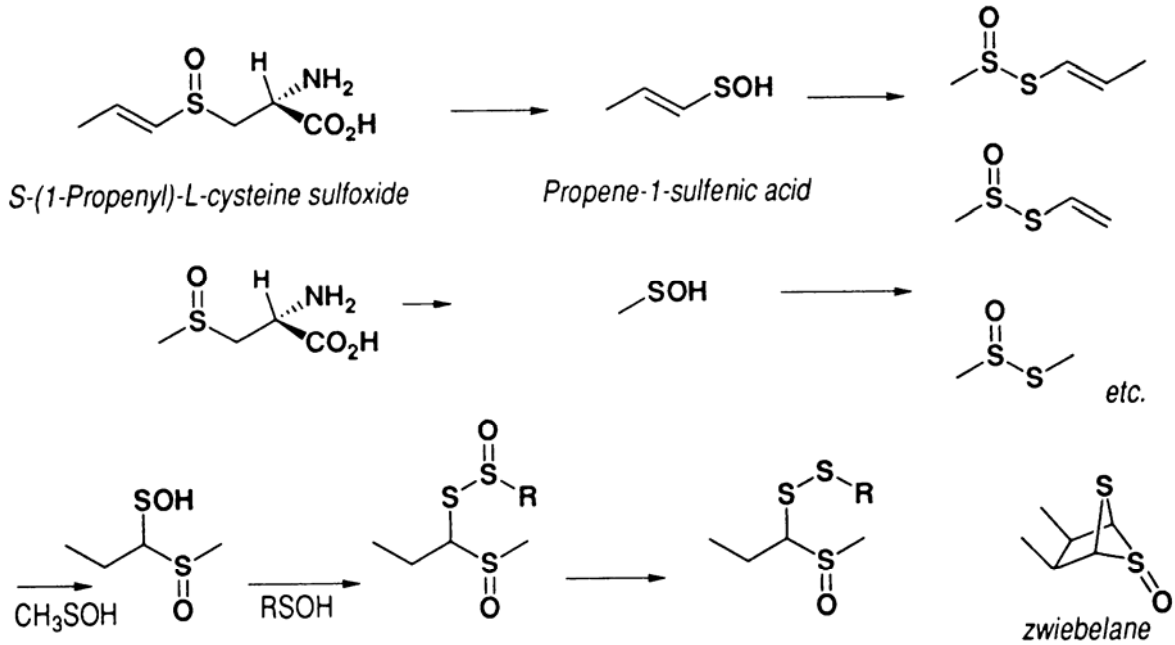
1.3.4 Deriváty aminokyselin: ostatní sirné sloučeniny

Alkenylsulfoxidy a degradační (kondenzační produkty)

🗁 Alliaceae - *Allium sativum*



🗁 Alliaceae - *Allium cepa*

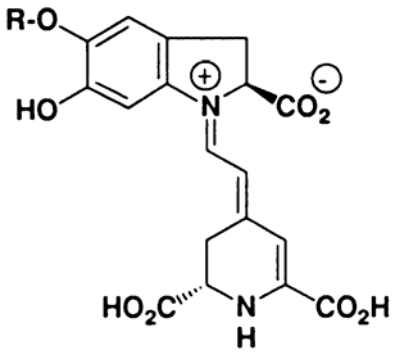


Onion : formation of disulfides (for example: R = C_3H_7 *:3-ethyl-2,4,5-trithiaoctane 2-S-oxide)*

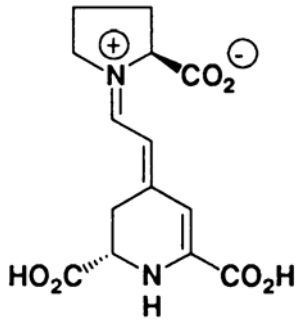
1.3.5 Deriváty aminokyselin: betalainy

Betacyaniny a betaxanthiny – červenofialové pigmenty (betaxanthin žlutý), vyskytují se jako ve vodě rozpustné glykosidy: jsou charakteristické pro houby (odd. Eumycota) a některé čeledi vyšších rostlin:

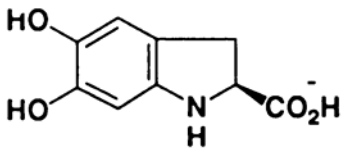
- Cactaceae
- Chenopodiaceae - *Beta vulgaris* var. *rubra*



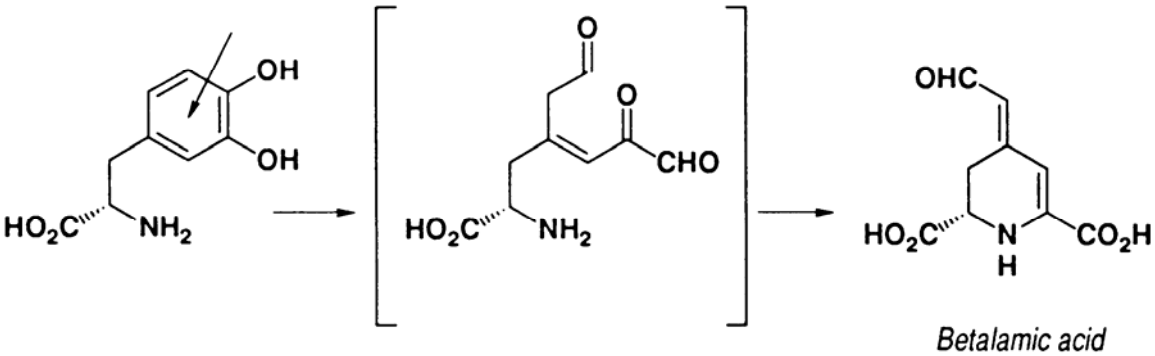
R = H : Betanidin
R = glc : Betanin



Indicaxanthin



Cyclodopa



Betalamic acid