

# Alkaloidy

Rostlinné produkty, typické pro jednotlivé rody i druhy.

Většinou dusíkaté heterocykly (ne vždy), zásadité povahy (odtud název).

Význam ne zcela jasný

Rozdělení a klasifikace z různých hledisek, z chemického hlediska dle struktury.

Jinak dle výskytu (biologické).

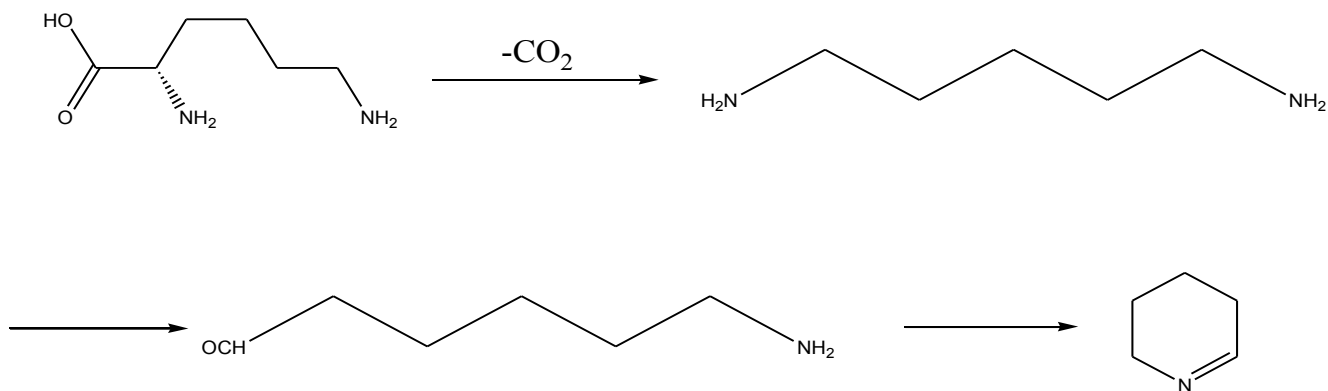
## Biochemické základy metabolismu alkaloidů.

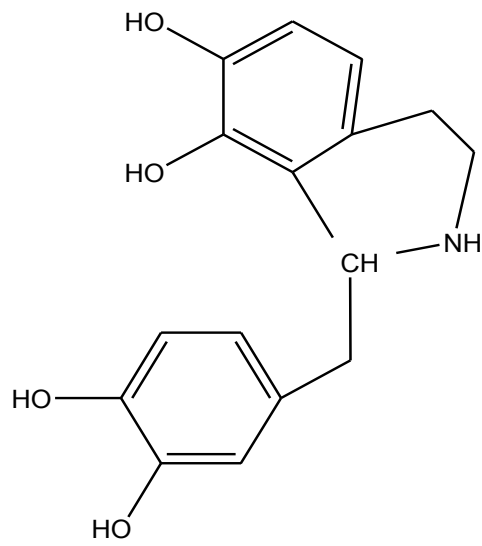
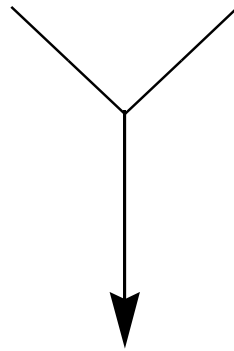
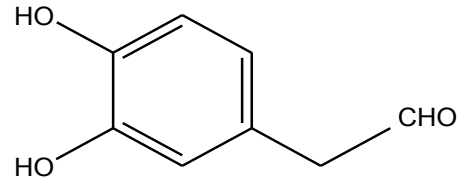
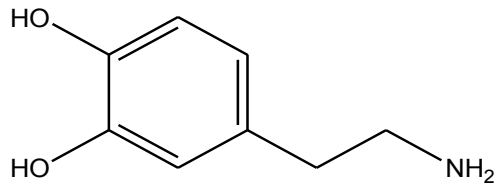
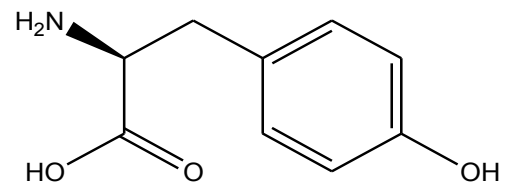
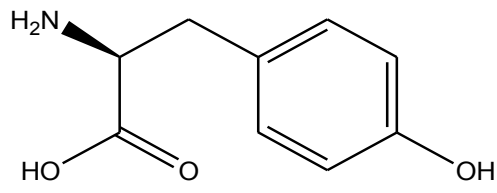
Vznikají metabolismem aminokyselin, zvl. Lys, Orn, Phe(Tyr), odvozeně i Pro, možná i Try.

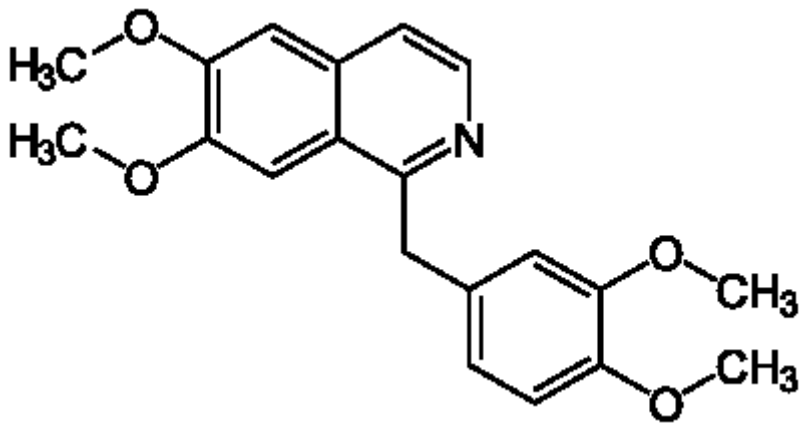
Typické reakce:

- dekarboxylace – vznik (di)aminů
- oxidační deaminace – vznik aldehydů
- kondenzační reakce – Schiffova, Mannichova, aldolová kondensace
- radikálová dehydrogenace a kondensace fenolů

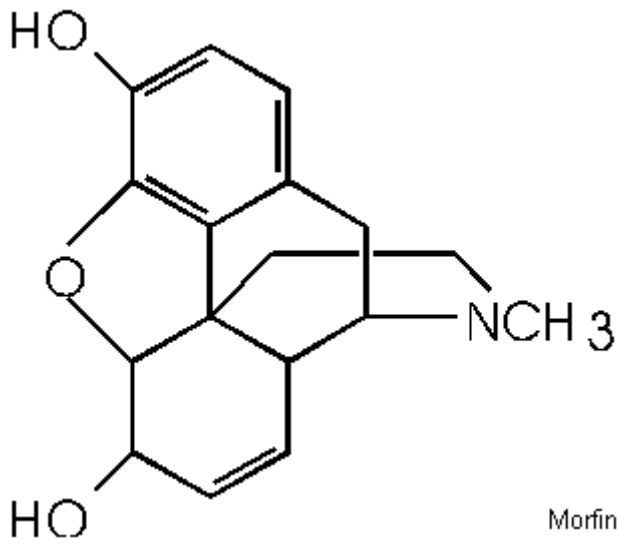
Vznik heterocyklů intra- a intermolekulárními reakcemi.





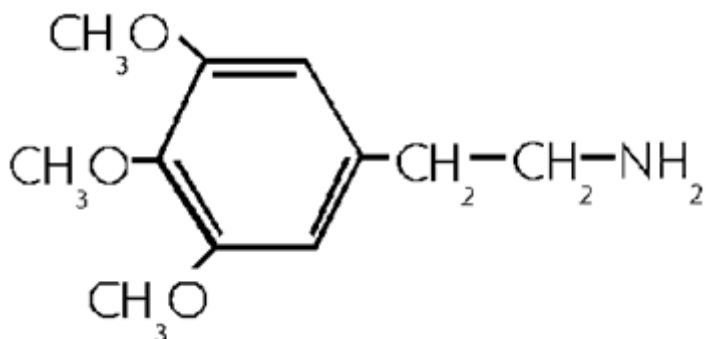


Papaverin

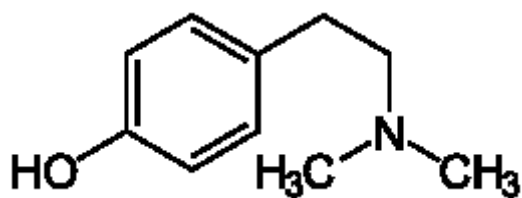


Morfin

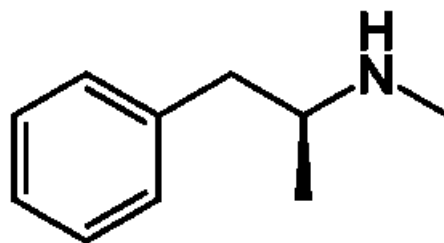
Nemusí obsahovat heterocyklus - arylaminy



Mezkalin

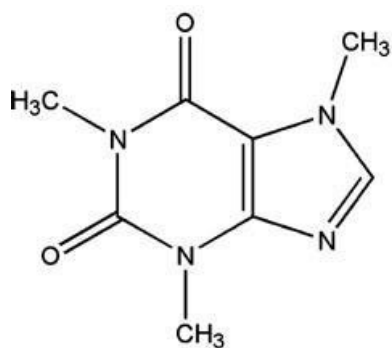


Hordenin

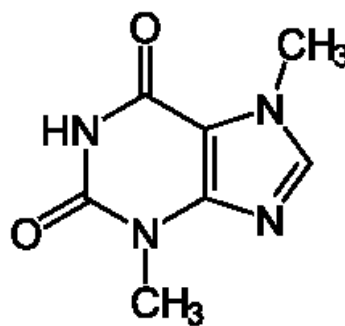


Metamfetamin

**Užívání x zneužívání – drogy tolerované a kriminalizované**



Kofein



Teobromin

**Hordenine:** The main benefit of hordenine is its potential to assist in the release of fat from fat cells for energy, and the result is an overall reduction of body fat. Another benefit of Hordenine is that it also slows down the food digestion process, that means that energy is being released slower which mean that you get the "fuller" feeding for longer, this helps to create longer breaks between meals and by so eat less - thus helping you to lower your overall calorie intake.