

Rostlinné heteropolysacharidy

Výrazný rys – bobtnání (až 98% vody), tvorba solů a gelů.

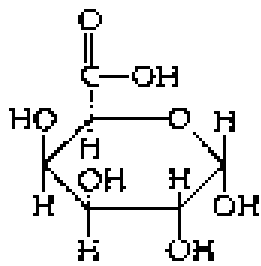
Pektiny

Terminologie není zcela jednotná.

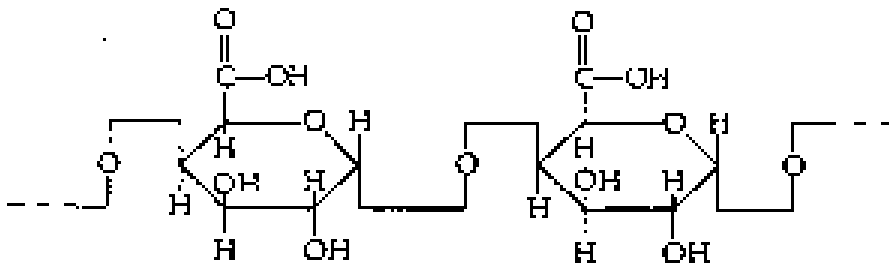
Polymer (50-100 kDa, agregáty až 1 MDa)

Složky:

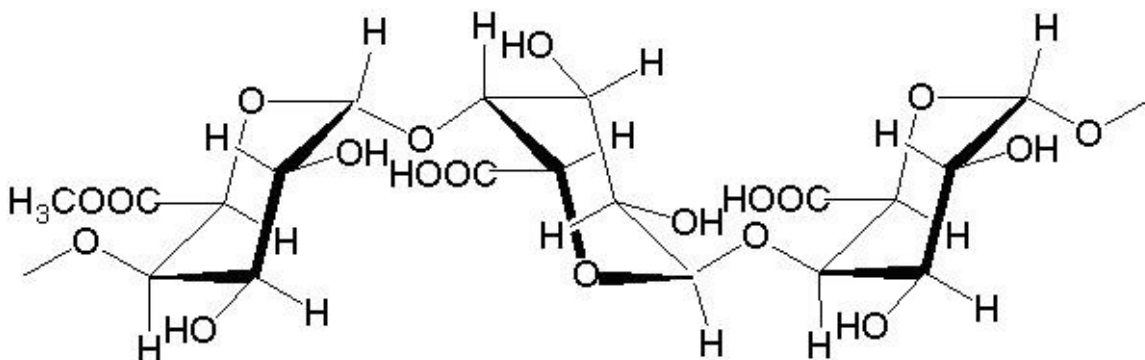
- kys. pektinová – polygalakturonová + metylesterifikovaná
- kys. pektová – žádná nebo zanedbatelná metylesterifikace

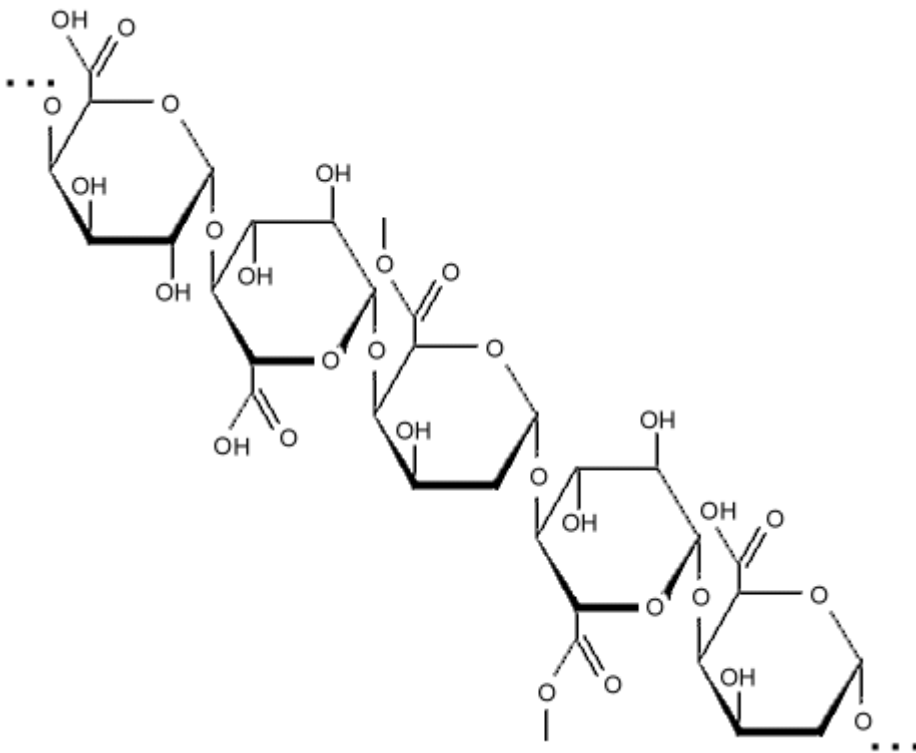


(R) GALACTURONIC ACID



(B) PECTIC ACID



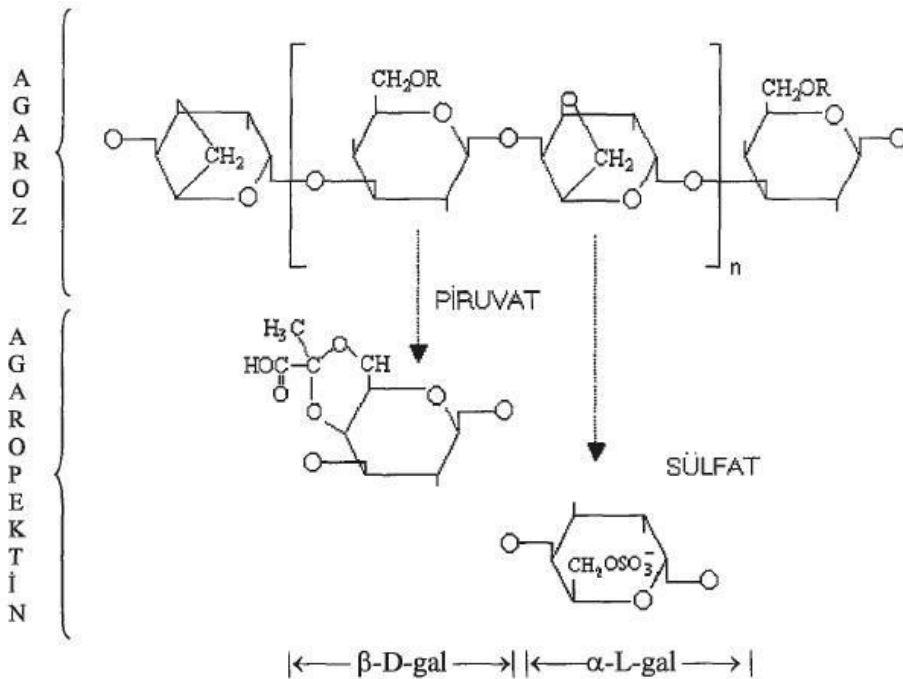
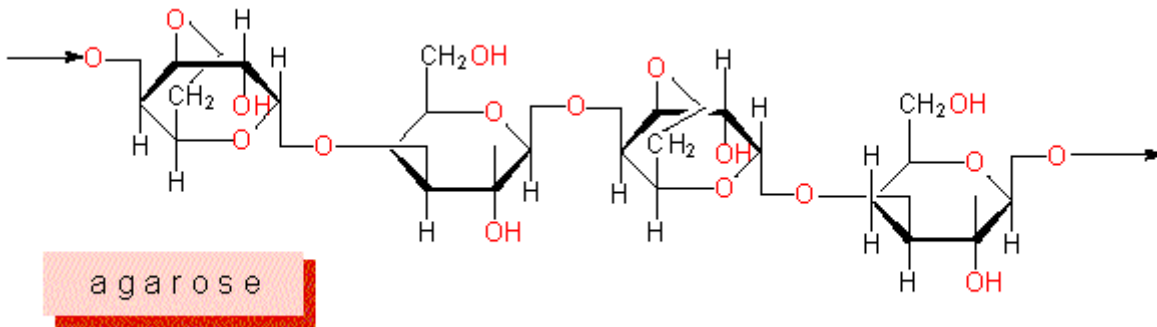
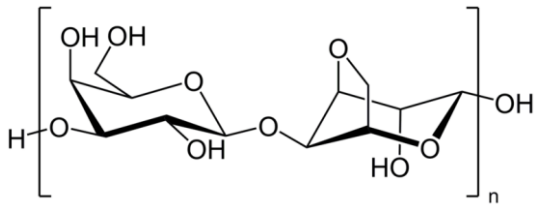


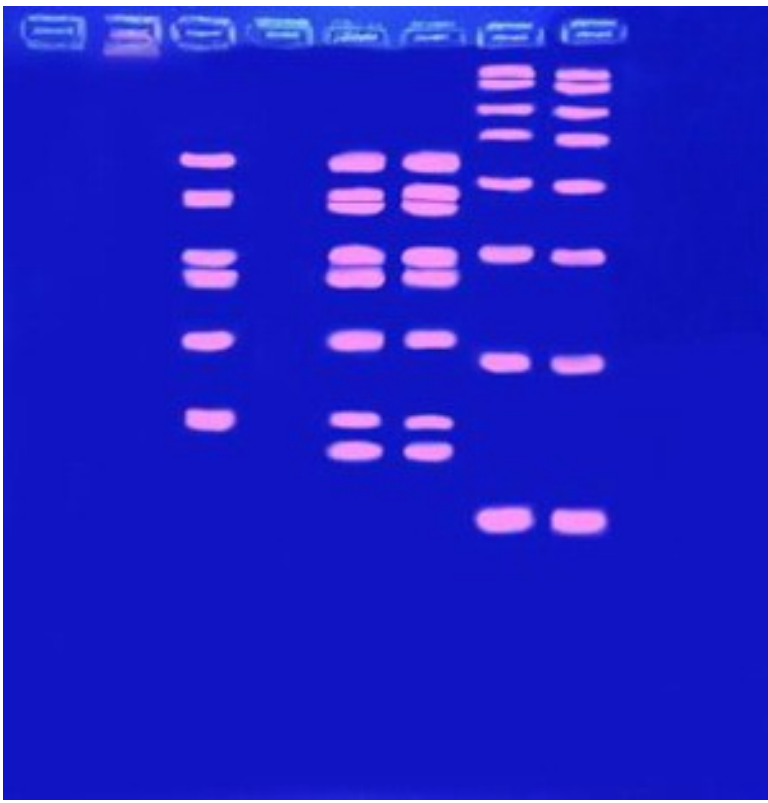
Funkce – pojivo rostlinných buněk (hydrolýza enzymy hub a plísní způsobí měknutí pletiva)

Užití – gelotvorná látka – potravinářství (stabilizace gelů a pěn, mléko smetana, důležité jakonestravitelné vlákniny), technologie (imobilizace buněk a enzymů)

Agary

Směs agarozy a agaropektinu

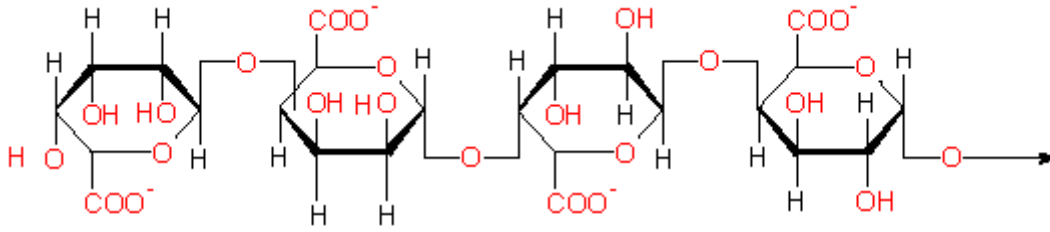




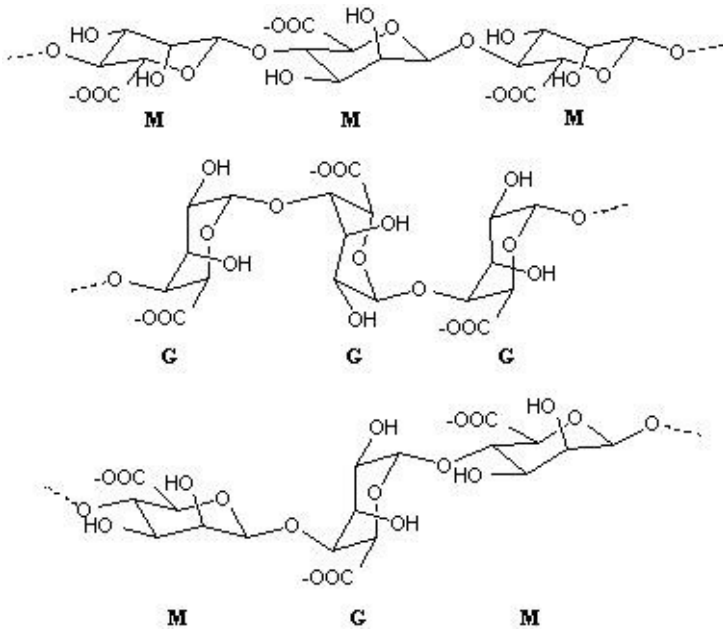


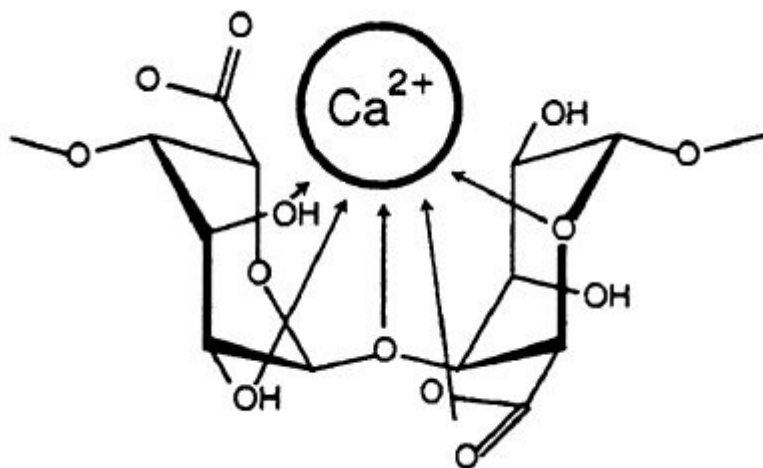
Algináty

Složeny z bloků tvořených β -D-mannuronátem (M-bloky) a jeho C-5 epimerem α -L-guluronátem (G-bloky) vázaných 1-4 vazbami. Bloky se spojují v různých sekvencích.

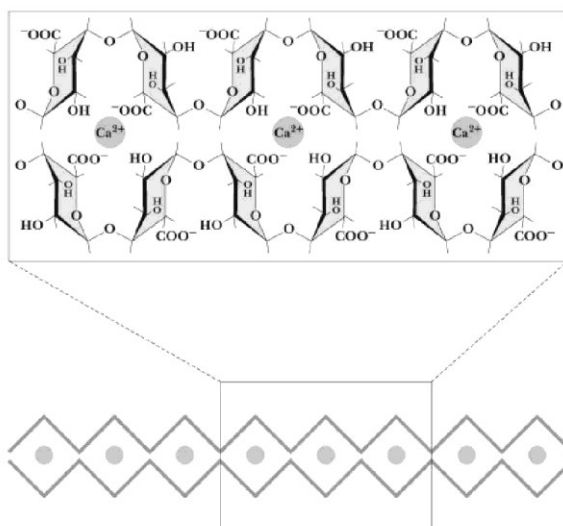


alginic acid

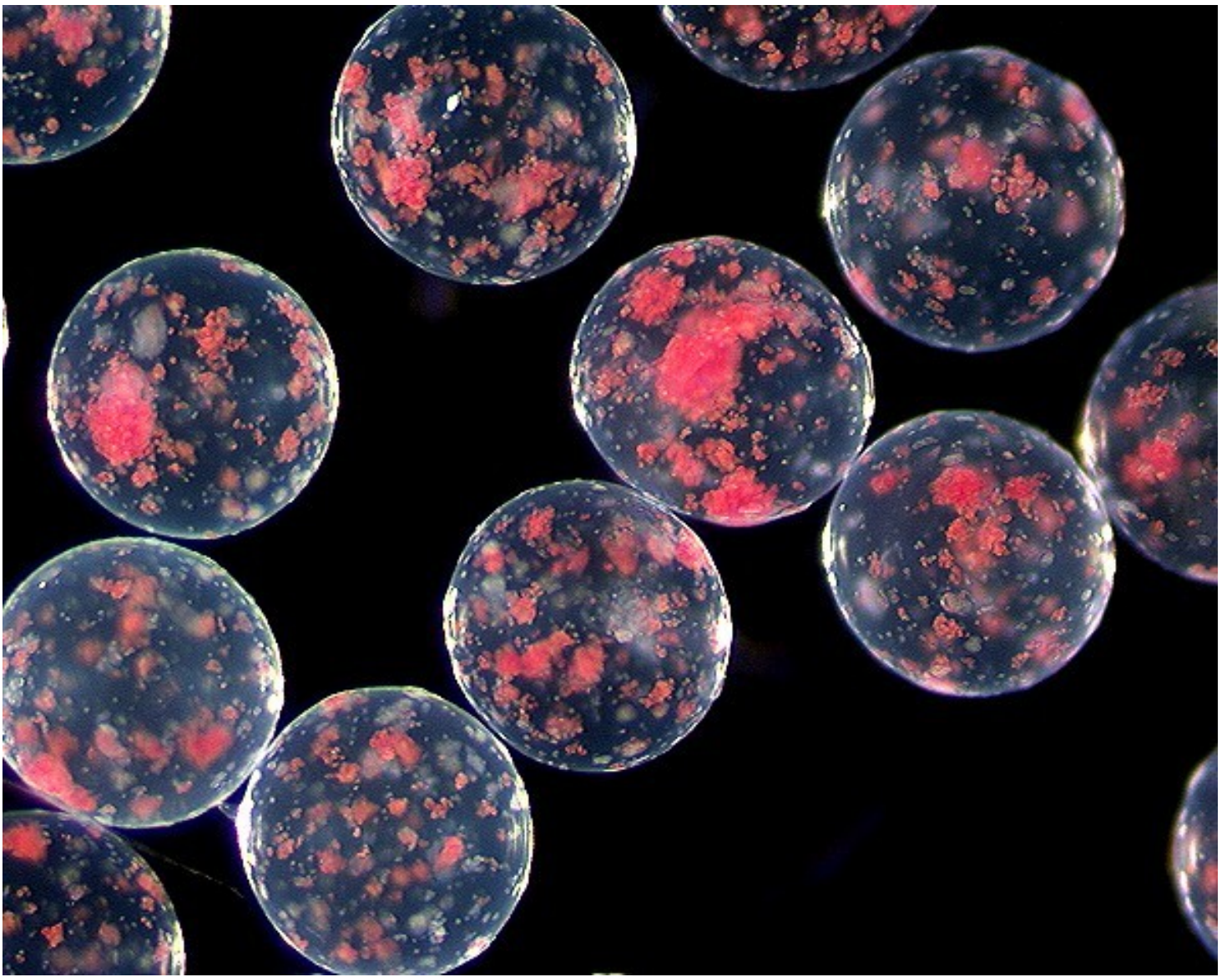




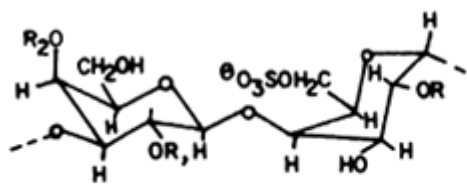
Algináty



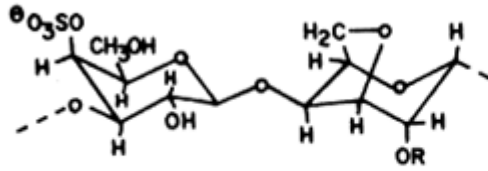
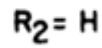
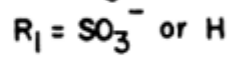
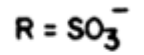
Struktura alginátu vápenatého



Karagenany



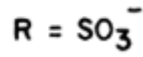
λ -carrageenan :



κ -carrageenan :



i-carrageenan :



Carrageenan

