

Eterocicli-quadro riassuntivo

Gli eterocicli sono composti ciclici nei quali almeno un atomo del ciclo non è carbonio

Gli eterocicli più comuni contengono azoto, ossigeno o zolfo ma anche derivati contenenti boro, silicio, fosforo o arsenico stanno assumendo una certa importanza.

Classificazione:

- ❖ Non aromatici

- ❖ Aromatici

 - PENTATOMICI

 - ESATOMICI

 - BENZOCONDENSATI

 - POLICICLICI

Cicli a tre atomi: ossirani, aziridine e tiirani



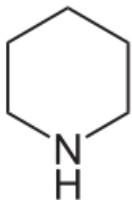
Cicli a quattro atomi: ossetani, azetidina e tiettani



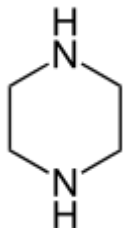
**Cicli a cinque atomi:
tetraidrofurano, pirrolidina e tetraidrotiofene**



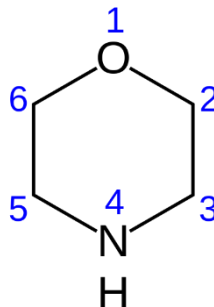
Cicli a sei atomi non aromatici



Piperidina

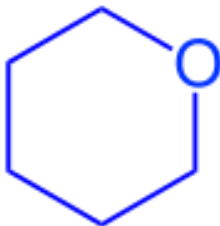


Piperazina

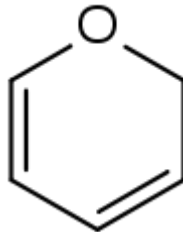


Morfolina

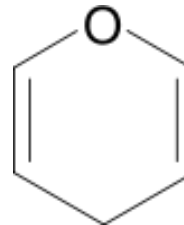
Cicli a sei atomi non aromatici



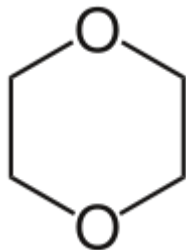
Tetraidropirano



2H-pirano



4H-pirano



1,4-diosano

Eterocicli aromatici

PENTATOMICI con 1 ETEROATOMO



pirrolo



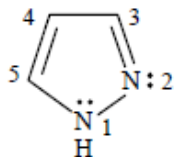
furano



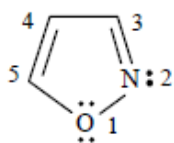
tiofene

Eterocicli aromatici pentatomici azotati con 2 eteroatomi: azoli

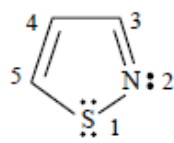
ETEROATOMI: 1,2-



pirazolo
1,2-diazolo



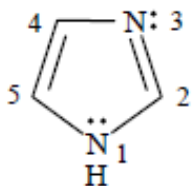
isossazolo
1,2-ossazolo



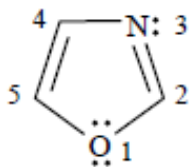
isotiazolo
1,2-tiazolo

Eterocicli aromatici pentatomici azotati con 2 eteroatomi: azoli

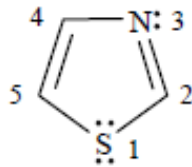
ETEROATOMI: 1,3-



imidazolo
1,3-diazolo

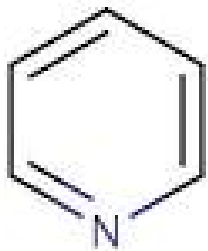


ossazolo
1,3-ossazolo

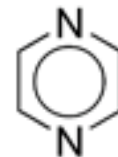
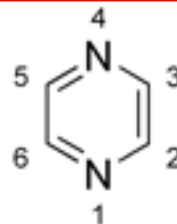
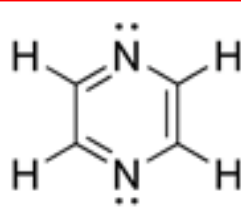


tiazolo
1,3-tiazolo

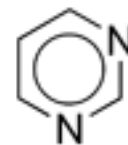
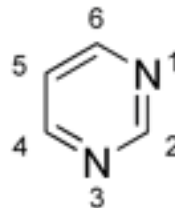
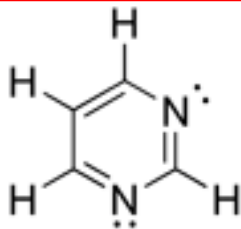
Eterocicli aromatici azotati a 6 termini



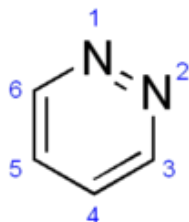
Piridina



Pirazina

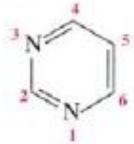


Pirimidina

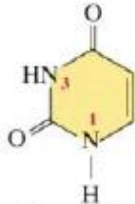


Piridazina

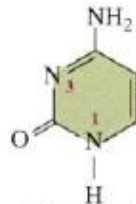
Derivati pirimidinici presenti negli acidi nucleici



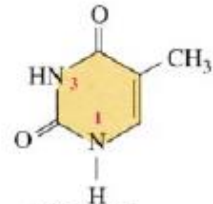
Pirimidina



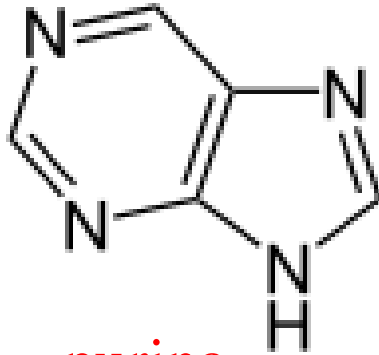
Uracile (U)



Citosina (C)



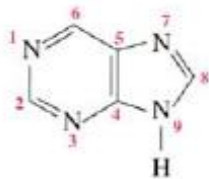
Timina (T)



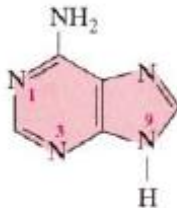
purina

Eterociclo aromatico: anello
pirimidinico fuso con un anello
imidazolico

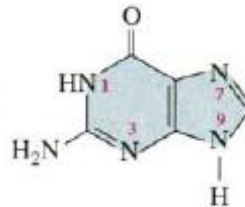
Derivati purinici presenti negli acidi nucleici



Purina

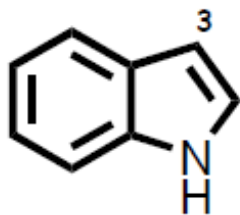


Adenina (A)



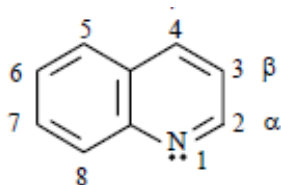
Guanina (G)

Principali eterocicli benzocondensati

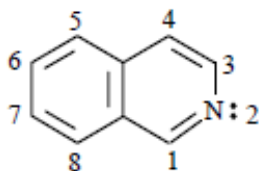


indolo

ENSATI



chinolina



isochinolina