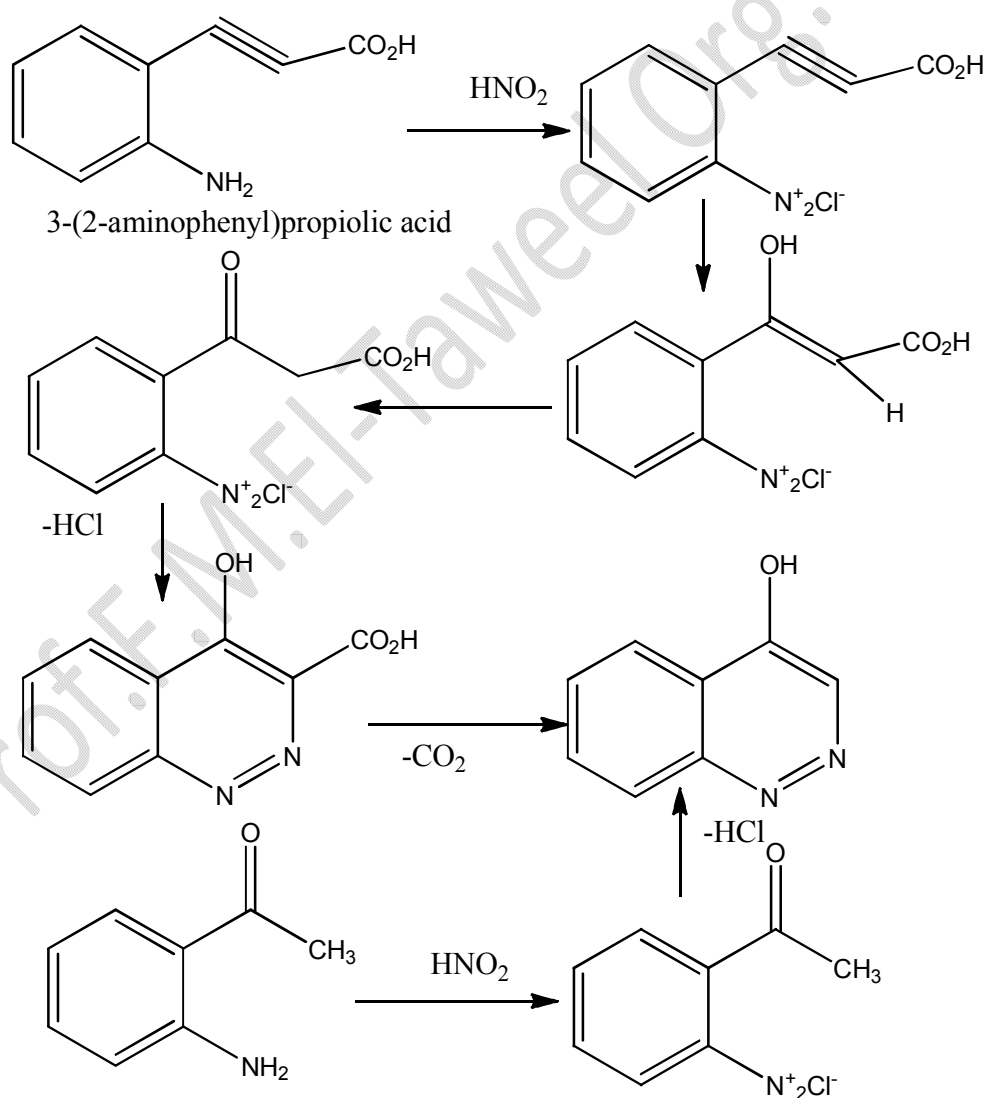


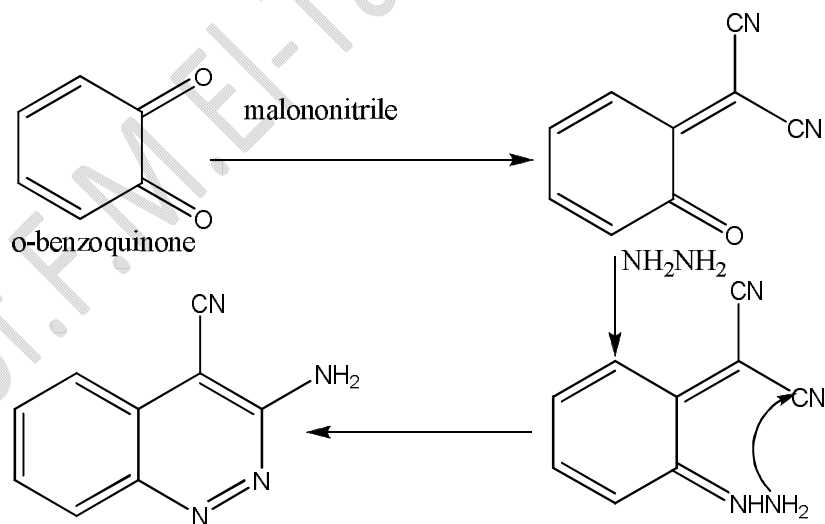
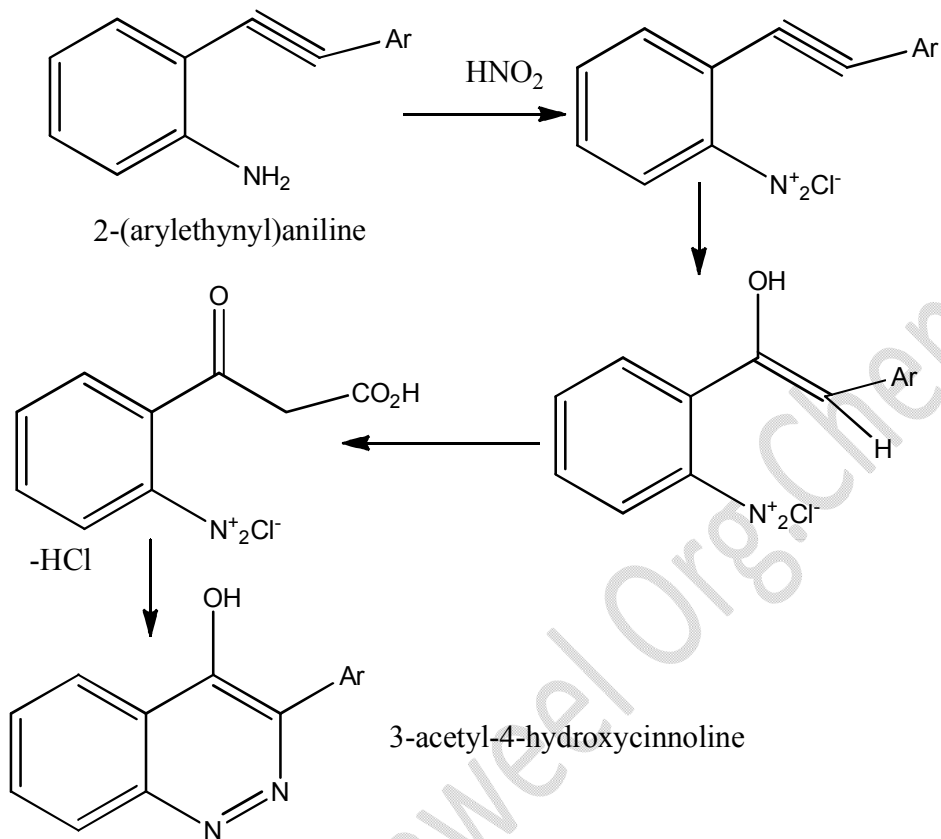
B) Diazanaphthalenes (Benzodiazines)

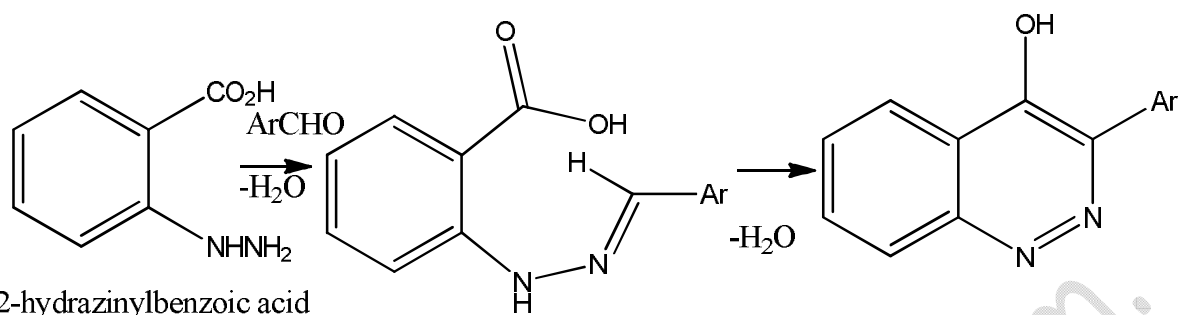
1) Cinnoline

1-Richter Cinnoline synthesis :

Formation of 4-hydroxycinnoline derivatives by diazotization of o-aminophenylpropionic acid or o-aminoarylacetylene, followed by hydration and cyclization. This method is applicable for preparation of substituted in the benzene ring.

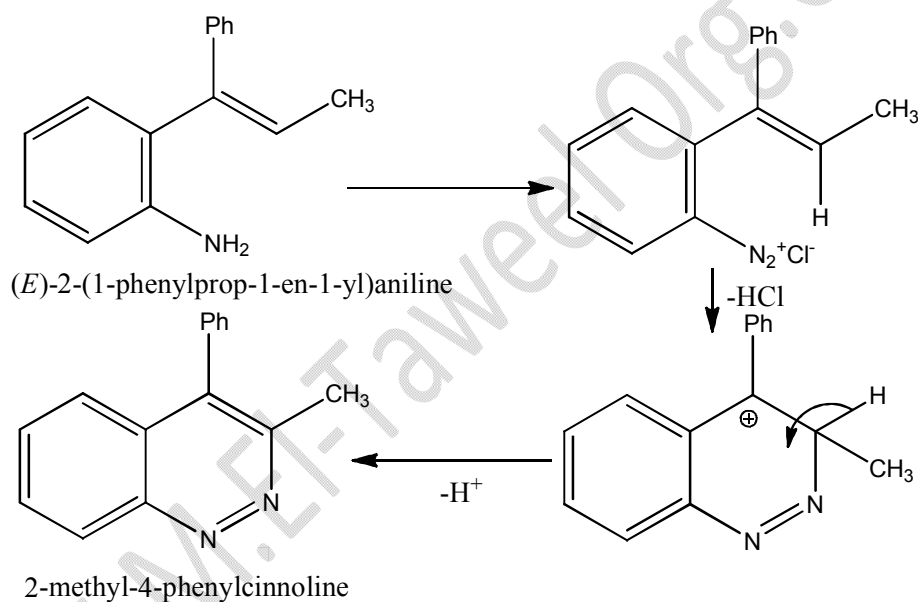




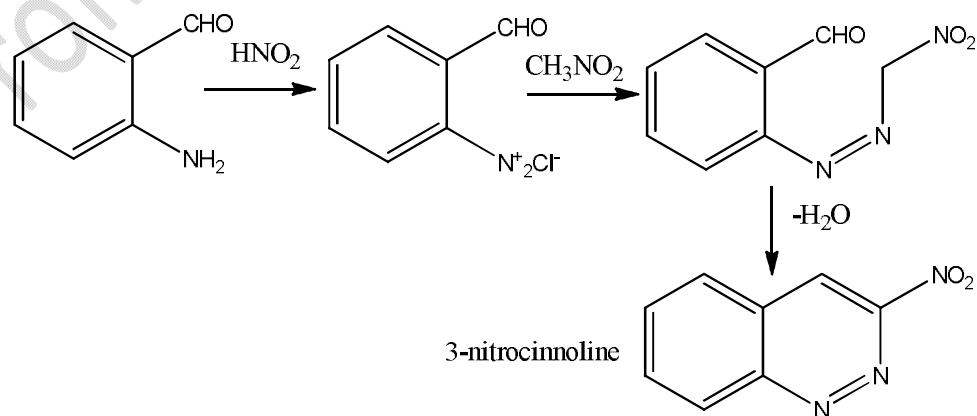


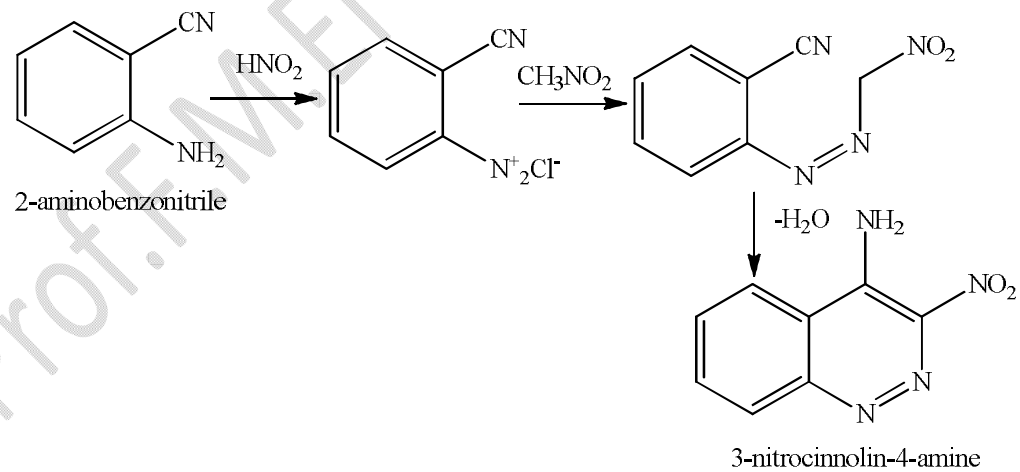
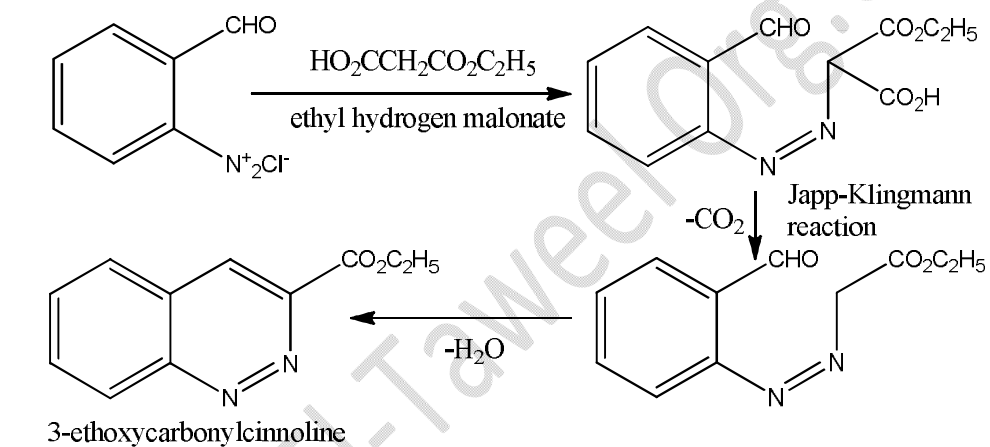
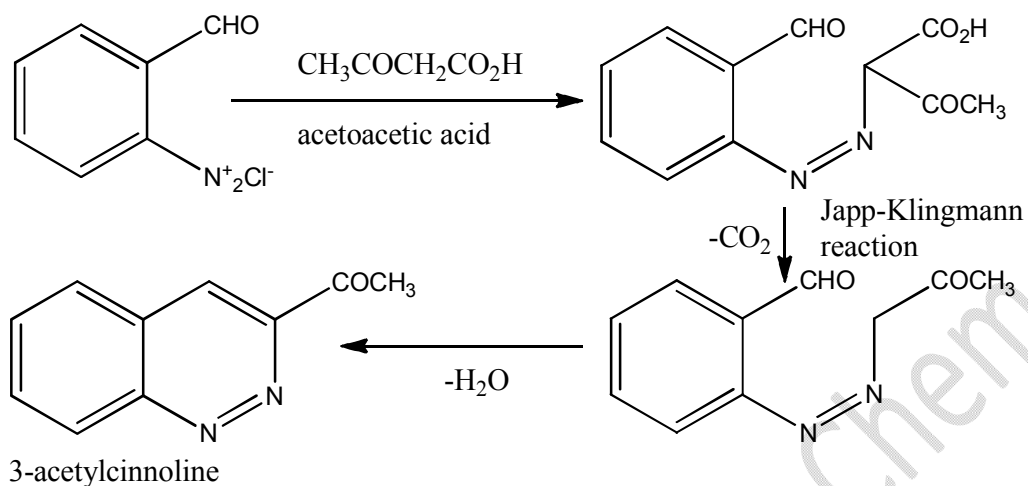
3-Widmann-Stoermer synthesis :

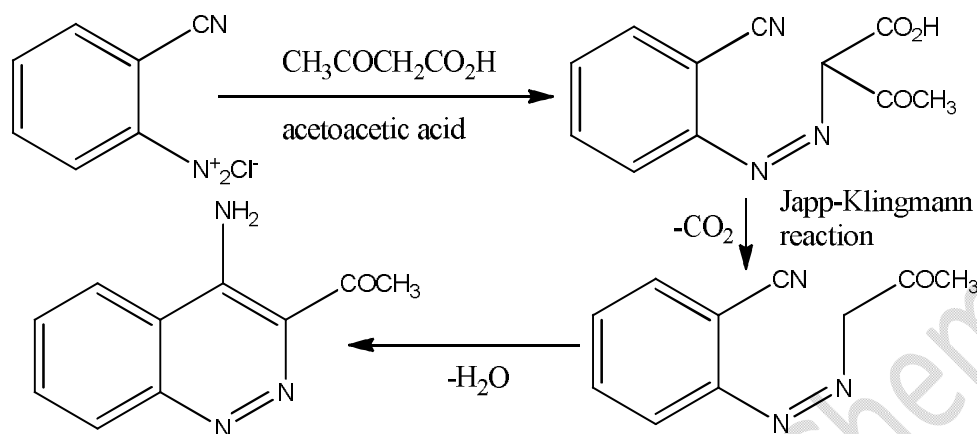
Cyclization of diazotized *o*-aminophenylarylethylenes at room temperature give cinnoline derivatives.



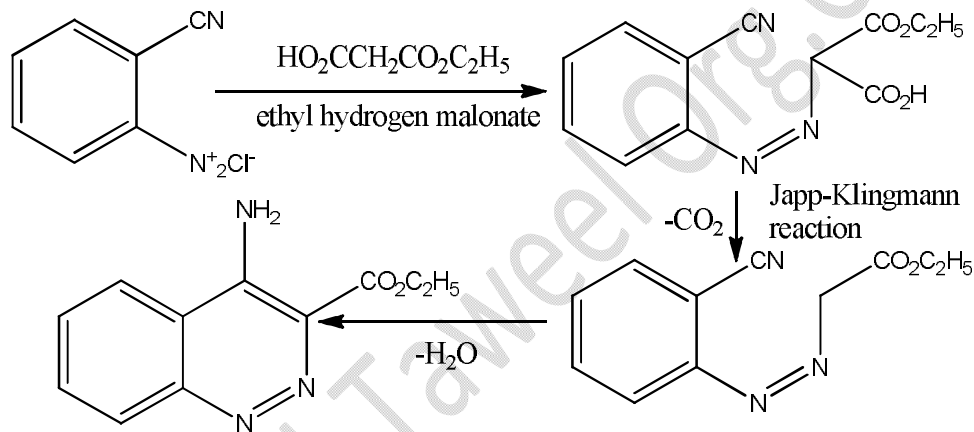
From *o*-aminobenzaldehyde :







1-(4-aminocinnolin-3-yl)ethanone



ethyl 4-aminocinnoline-3-carboxylate

From aryl hydrazones :

