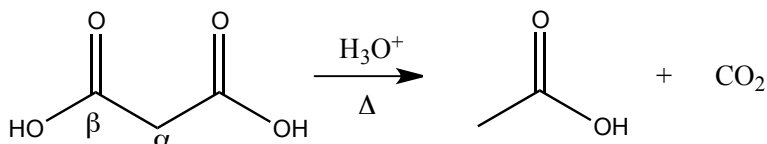


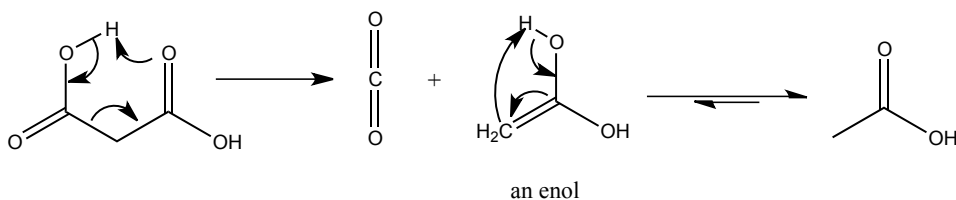
Chem 345 – Organic Reactions Chapter 20
Prepared by José Laboy, MS
[http: www.chem.wisc.edu/areas/clc](http://www.chem.wisc.edu/areas/clc) (Resource page)

Decarboxylation of β -dicarboxylic Acids

Reaction:



Mechanism:



The presence of withdrawing group in the β position with respect to the carboxylic acid moiety is crucial. The *enol* formed in the decarboxylation rapidly converts to the *keto* form. These two forms are called **tautomers**. They are not resonance structures. Notice that tautomers have different bonding.