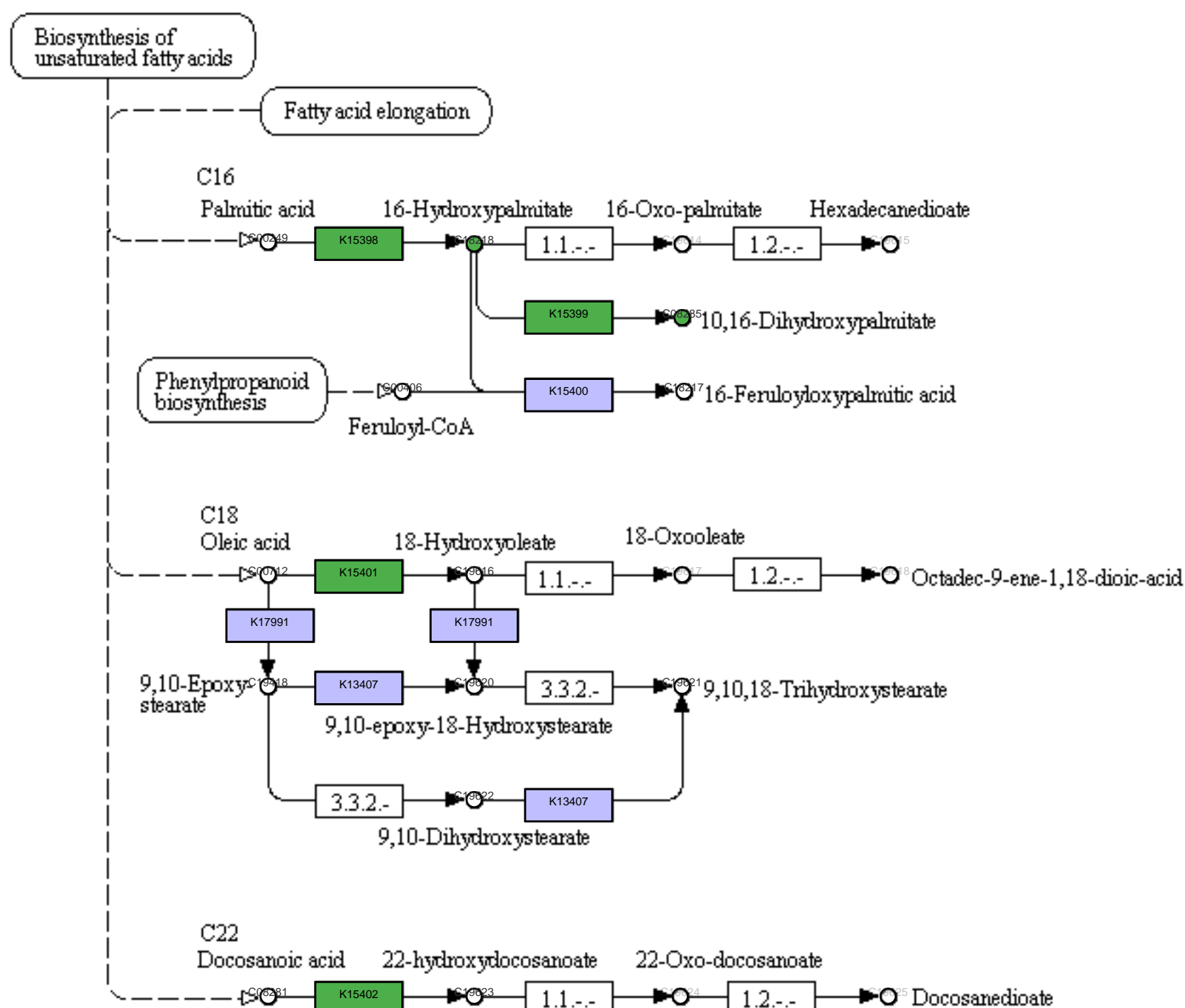


CUTIN, SUBERINE AND WAX BIOSYNTHESIS

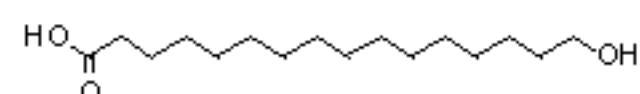


Structure of common cutin and suberin monomers

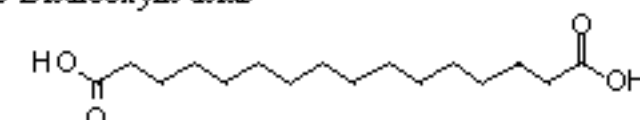
Unsubstituted fatty acids



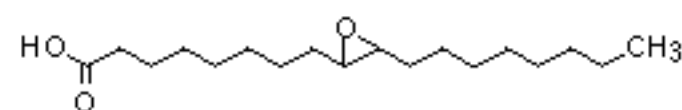
ω -Hydroxy fatty acids



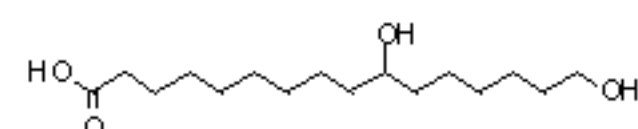
α,ω -Dicarboxylic acids



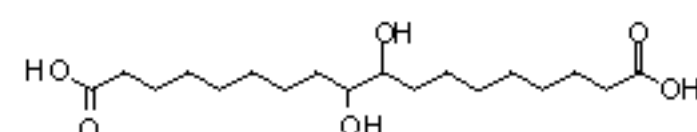
Mid-chain functionalized monomers



Epoxy-fatty acids



Polyhydroxy-fatty acids



Polyhydroxy α,ω -dicarboxylic acids

Fatty alcohols

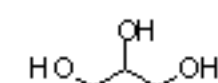


Alkan-1-ols and alken-1-ols

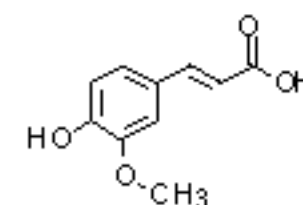


α,ω -Alkanediols and α,ω -alkenediols

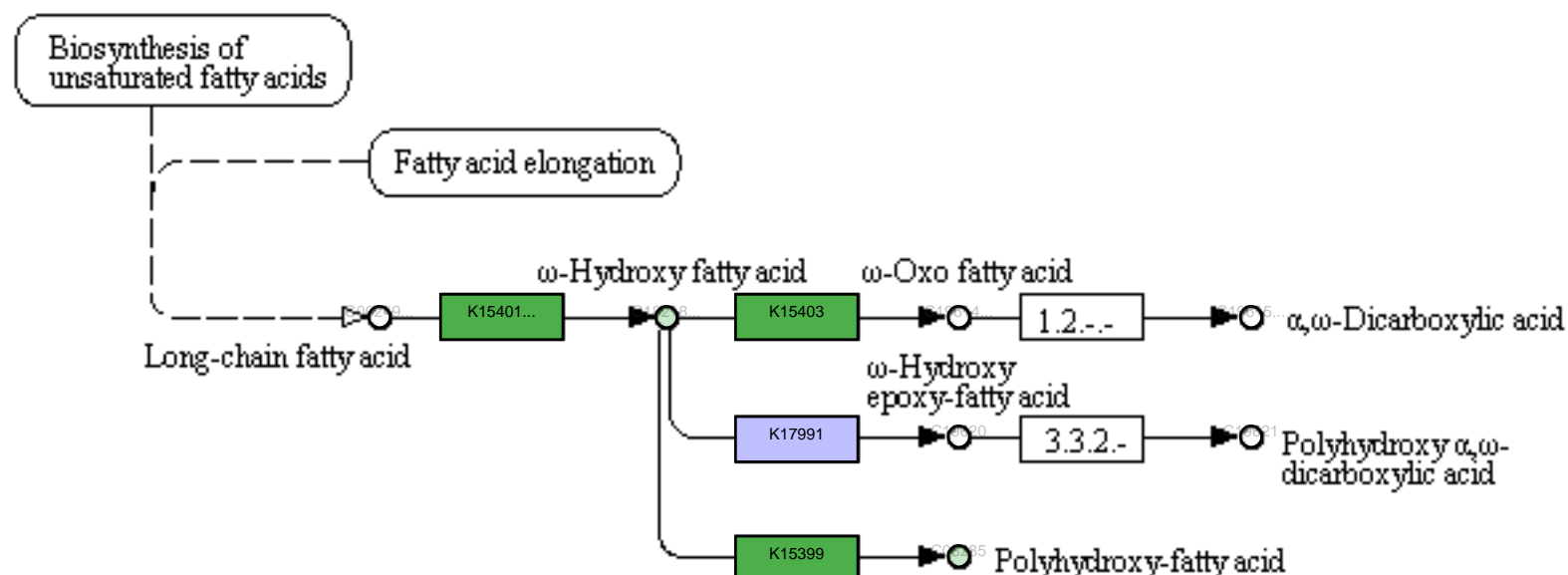
Glycerol



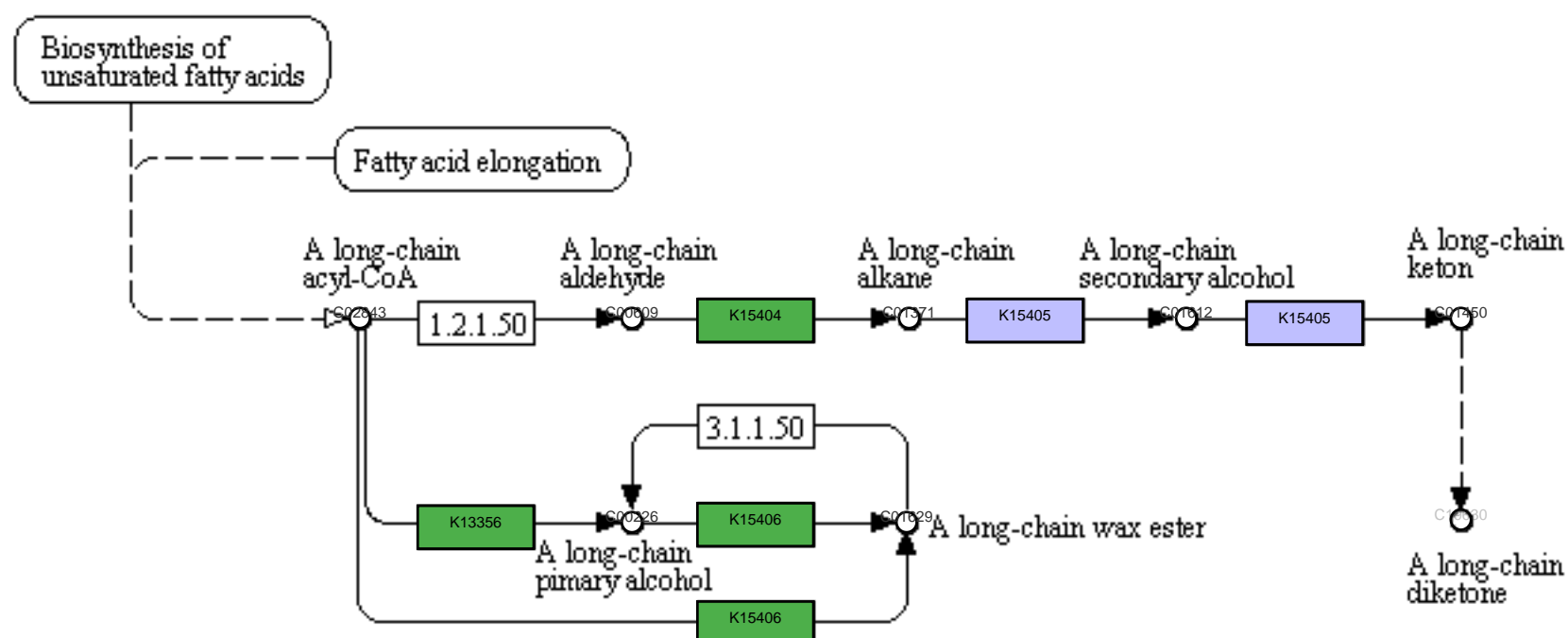
Phenolics



Cutin and suberin biosynthesis (general form)



Wax biosynthesis (general form)

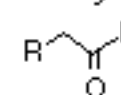


Structure of common wax

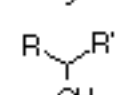
Alkenes



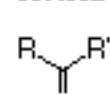
Aldehydes



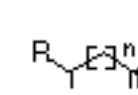
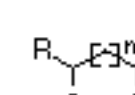
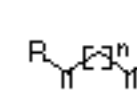
Secondary alcohols



Ketons



Diketones



Primary alcohols



Alkyl esters

