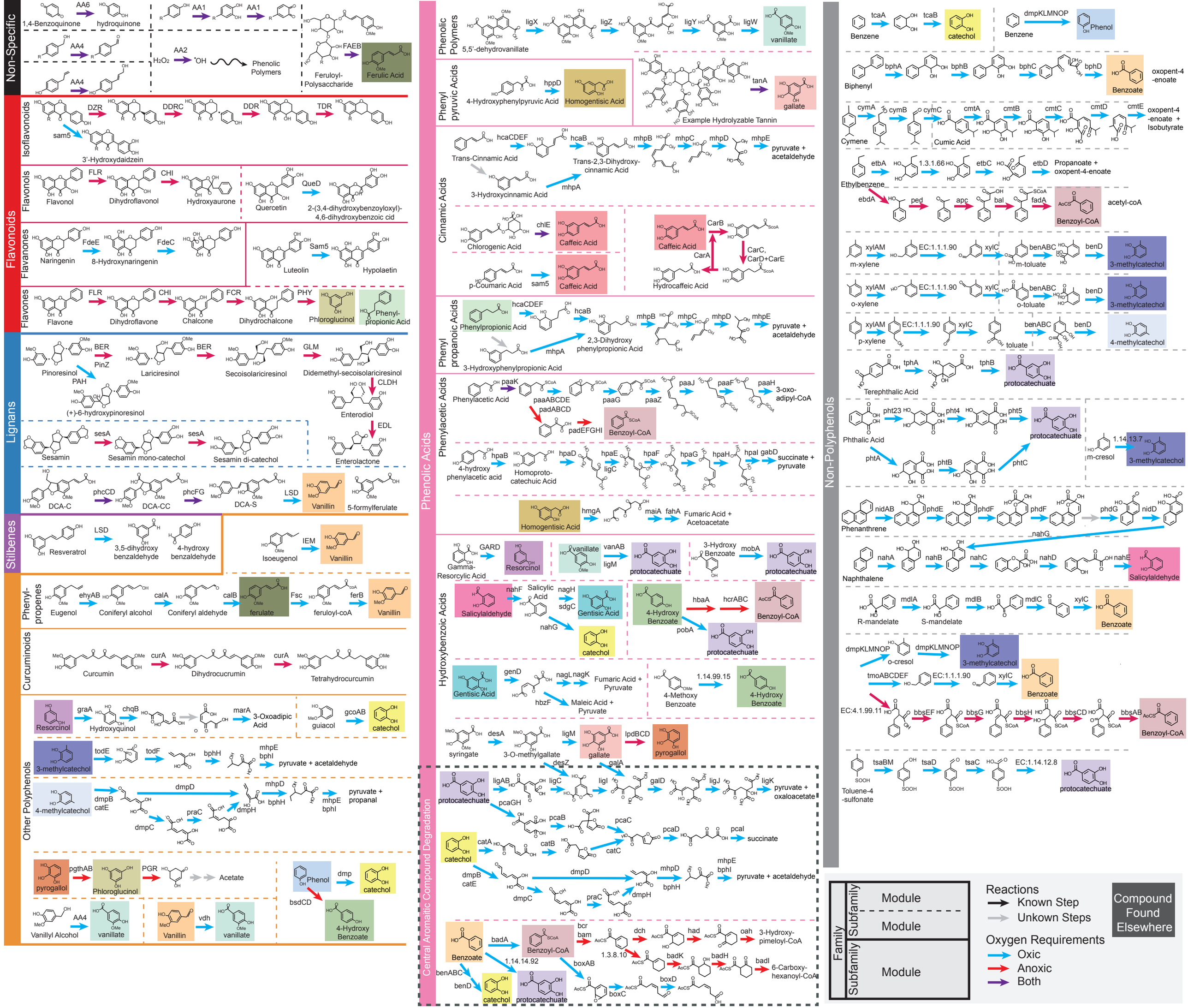
Non-Specific
1,4-Benzoquinone
AA6
hydroquinone
AA1
AA1
AA4
AA4
AA2
H2O2
•OH
Phenolic Polymers
FAEB
Feruloyl-Polysaccharide
Ferulic Acid
Flavonoids
Isoflavonoids
DZR
DDRC
DDR
TDR
sam5
3'-Hydroxydaidzein
Flavonols
FLR
CHI
Flavonol
Dihydroflavonol
Hydroxyaurone
Quercetin
QueD
2-(3,4-dihydroxybenzoyloxyl)-4,6-dihydroxybenzoic cid
Flavanones
FdeE
FdeC
Naringenin
8-Hydroxynaringenin
Sam5
Luteolin
Hypolaetin
Flavones
FLR
CHI
FCR
PHY
Flavone
Dihydroflavone
Chalcone
Dihydrochalcone
Phloroglucinol
Phenyl-propionic Acid
Lignans
BER
PinZ
BER
GLM
Pinoresinol
Lariciresinol
Secoisolariciresinol
Didemethyl-secoisolariciresinol
PAH
(+)-6-hydroxypinoresinol
CLDH
Enterodiol
EDL
Enterolactone
sesA
sesA
Sesamin
Sesamin mono-catechol
Sesamin di-catechol
phcCD
phcFG
LSD
DCA-C
DCA-CC
DCA-S
Vanillin
5-formylferulate
Stilbenes
LSD
Resveratrol
3,5-dihydroxy benzaldehyde
4-hydroxy benzaldehyde
IEM
Isoeugenol
Vanillin
Phenyl-propenes
ehyAB
calA
calB
Fsc
ferB
Eugenol
Coniferyl alcohol
Coniferyl aldehyde
ferulate
feruloyl-coA
Vanillin
Curcuminoids
curA
curA
Curcumin
Dihydrocucrumin
Tetrahydrocurcumin
Other Polyphenols
graA
chqB
marA
Resorcinol
Hydroxyquinol
3-Oxoadipic Acid
gcoAB
guiacol
catechol
todE
todF
bphH
mhpE
bphI
3-methylcatechol
pyruvate + acetaldehyde
dmpD
mhpD
bphH
dmpB
catE
dmpC
praC
dmpH
mhpE
bphI
4-methylcatechol
pyruvate + propanal
pgthAB
PGR
pyrogallol
Phloroglucinol
Acetate
Phenol
dmp
bsdCD
catechol
4-Hydroxy Benzoate
AA4
Vanillyl Alcohol
vanillate
vdh
Vanillin
vanillate
Phenolic Acids
Phenolic Polymers
ligX
ligZ
ligY
ligW
5,5'-dehydrovanillate
vanillate
Phenyl pyruvic Acids
hppD
4-Hydroxyphenylpyruvic Acid
Homogentisic Acid
tanA
gallate
Example Hydrolyzable Tannin
Cinnamic Acids
hcaCDEF
hcaB
mhpB
mhpC
mhpD
mhpE
Trans-Cinnamic Acid
Trans-2,3-Dihydroxy-cinnamic Acid
pyruvate + acetaldehyde
mhpA
3-Hydroxycinnamic Acid
chlE
Chlorogenic Acid
Caffeic Acid
CarB
CarA
CarC, CarD+CarE
Caffeic Acid
Hydrocaffeic Acid
sam5
p-Coumaric Acid
Caffeic Acid
Phenyl propanoic Acids
Phenylpropionic Acid
hcaCDEF
hcaB
mhpB
mhpC
mhpD
mhpE
2,3-Dihydroxy phenylpropionic Acid
pyruvate + acetaldehyde
mhpA
3-Hydroxyphenylpropionic Acid
Phenylacetic Acids
paaK
Phenylacetic Acid
paaABCDE
padABCD
paaG
paaZ
paaJ
paaF
paaH
3-oxo-adipyl-CoA
padEFGHI
Benzoyl-CoA
hpaB
hpaD
hpaE
ligC
hpaF
hpaG
hpaH
hpaI gabD
4-hydroxy phenylacetic acid
Homoproto-catechuic Acid
succinate + pyruvate
Homogentisic Acid
hmgA
maiA
fahA
Fumaric Acid + Acetoacetate
Hydroxybenzoic Acids
GARD
Gamma-Resorcylic Acid
Resorcinol
vanillate
vanAB
ligM
protocatechuate
3-Hydroxy Benzoate
mobA
protocatechuate
nahF
Salicylic Acid
nagH
sdgC
Salicylaldehyde
Gentisic Acid
nahG
catechol
4-Hydroxy Benzoate
hbaA
hcrABC
Benzoyl-CoA
pobA
protocatechuate
Gentisic Acid
genD
nagL nagK
Fumaric Acid + Pyruvate
hbzF
Maleic Acid + Pyruvate
4-Methoxy Benzoate
1.14.99.15
4-Hydroxy Benzoate
desA
ligM
lpdBCD
syringate
3-O-methylgallate
gallate
pyrogallol
desZ
galA
Central Aromatic Compound Degradation
protocatechuate
ligAB
ligC
ligI
galD
ligJ
ligK
pyruvate + oxaloacetate
pcaGH
pcaB
pcaC
pcaD
pcaI
succinate
catA
catB
catC
catechol
dmpB
catE
dmpD
mhpD
mhpE
bphI
pyruvate + acetaldehyde
bphH
dmpC
praC
dmpH
Benzoate
badA
Benzoyl-CoA
bcr
bam
dch
had
oah
3-Hydroxy-pimeloyl-CoA
1.14.14.92
1.3.8.10
boxAB
badK
badH
badI
6-Carboxy-hexanoyl-CoA
benABC
benD
catechol
protocatechuate
boxC
boxD
Non-Polyphenols
tcaA
tcaB
Benzene
catechol
dmpKLMNOP
Benzene
Phenol
Biphenyl
bphA
bphB
bphC
bphD
Benzoate
oxopent-4-enoate
Cymene
cymA
cymB
cymC
cmtA
cmtB
cmtC
cmtD
cmtE
Cumic Acid
oxopent-4-enoate + Isobutyrate
Ethylbenzene
etbA
1.3.1.66
etbC
etbD
Propanoate + oxopent-4-enoate
ebdA
ped
apc
bal
fadA
Benzoyl-CoA
acetyl-coA
m-xylene
xylAM
EC:1.1.1.90
xylC
benABC
benD
m-toluate
3-methylcatechol
o-xylene
o-toluate
3-methylcatechol
p-xylene
toluate
4-methylcatechol
Terephthalic Acid
tphA
tphB
protocatechuate
Phthalic Acid
pht23
pht4
pht5
protocatechuate
phtA
phtB
phtC
m-cresol
1.14.13.7
3-methylcatechol
Phenanthrene
nidAB
phdE
phdF
phdG
nidD
nahG
Naphthalene
nahA
nahB
nahC
nahD
nahE
Salicylaldehyde
R-mandelate
S-mandelate
mdlA
mdlB
mdlC
xylC
Benzoate
dmpKLMNOP
o-cresol
3-methylcatechol
tmoABCDEF
EC:1.1.1.90
xylC
Benzoate
EC:4.1.99.11
bbsEF
bbsG
bbsH
bbsCD
bbsAB
Benzoyl-CoA
Toluene-4-sulfonate
tsaBM
tsaD
tsaC
EC:1.14.12.8
protocatechuate
Family
Subfamily
Module
Module
Subfamily
Module
Reactions
Known Step
Unkown Steps
Oxygen Requirements
Oxic
Anoxic
Both
Compound Found Elsewhere