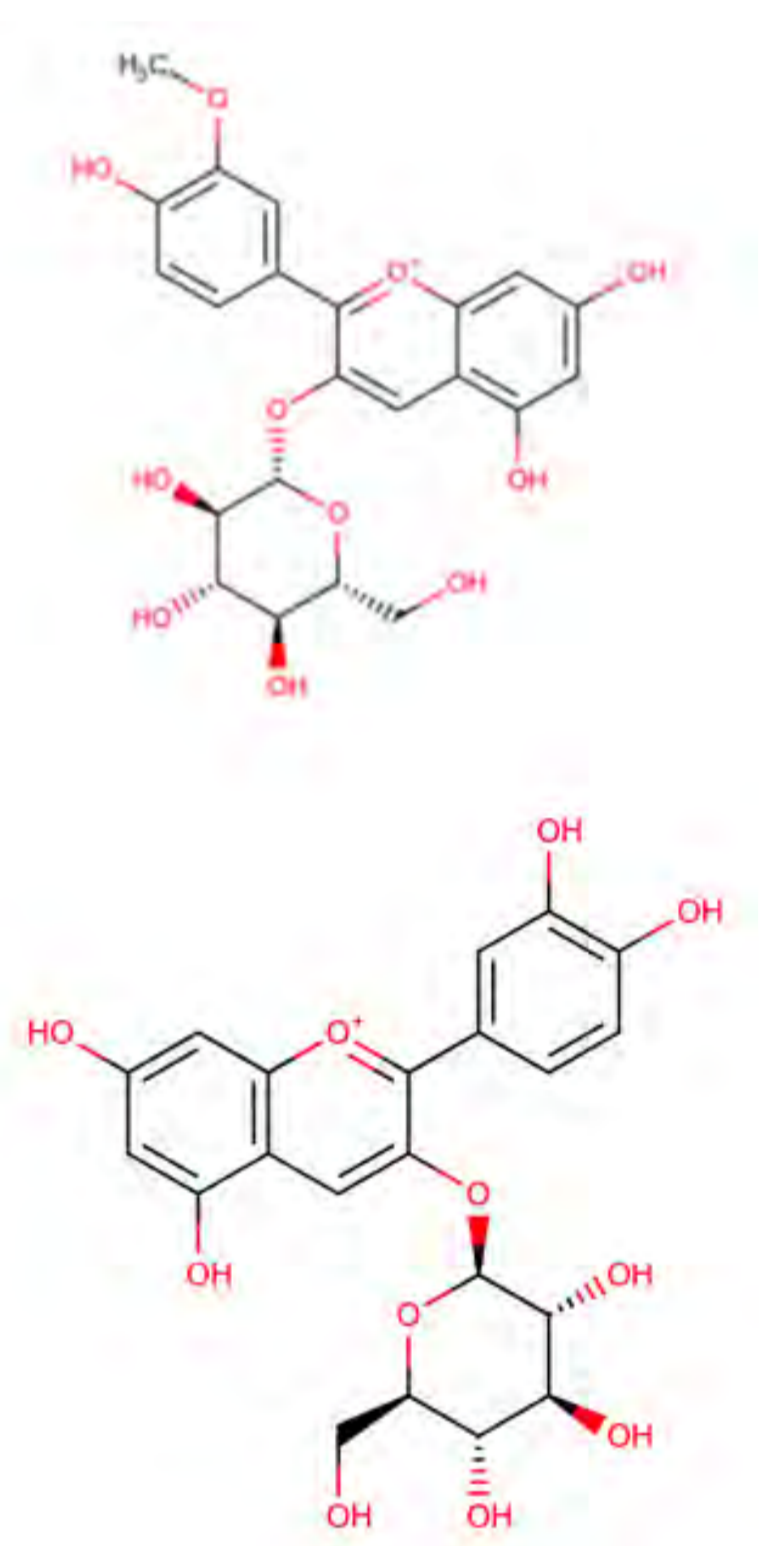
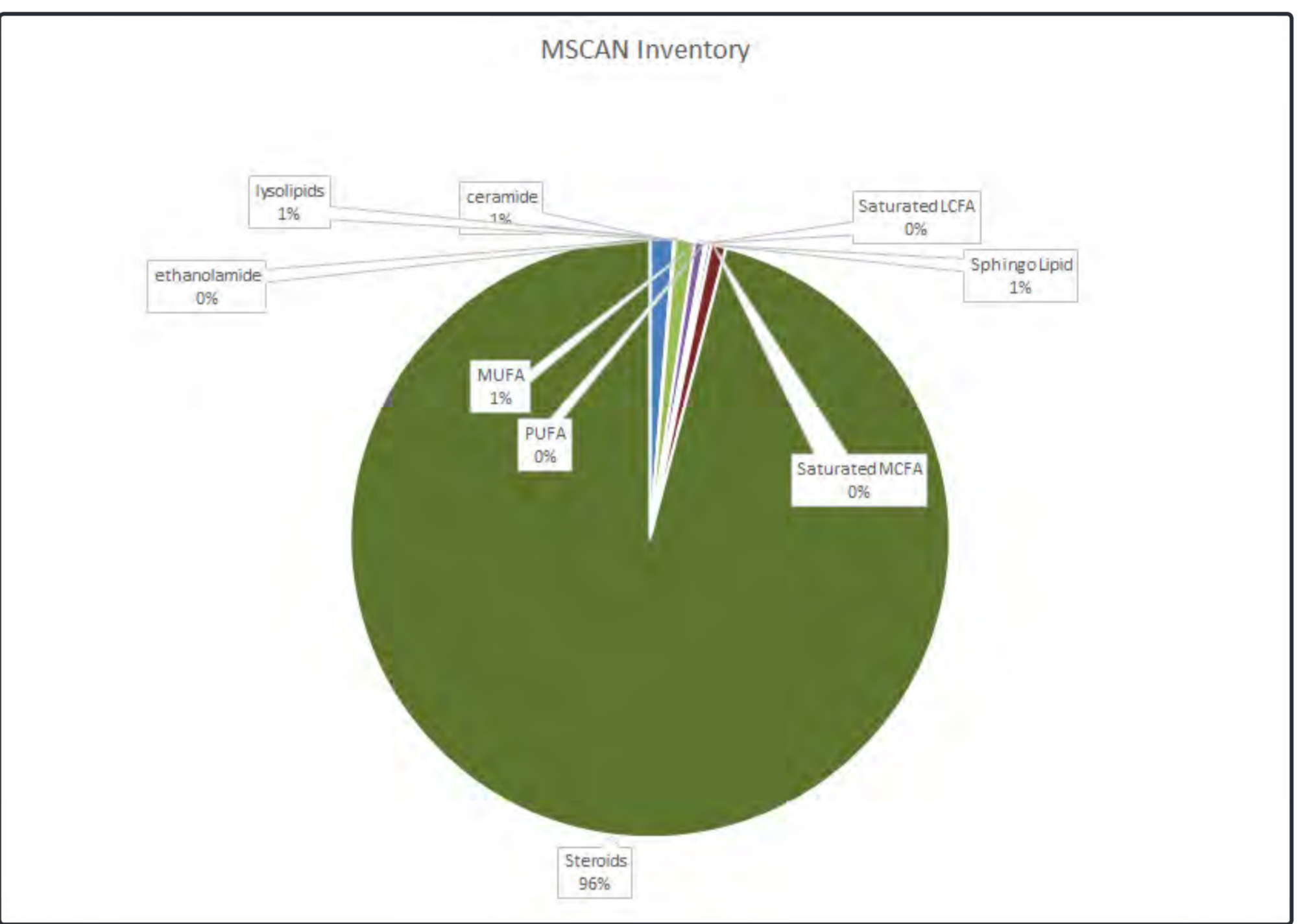
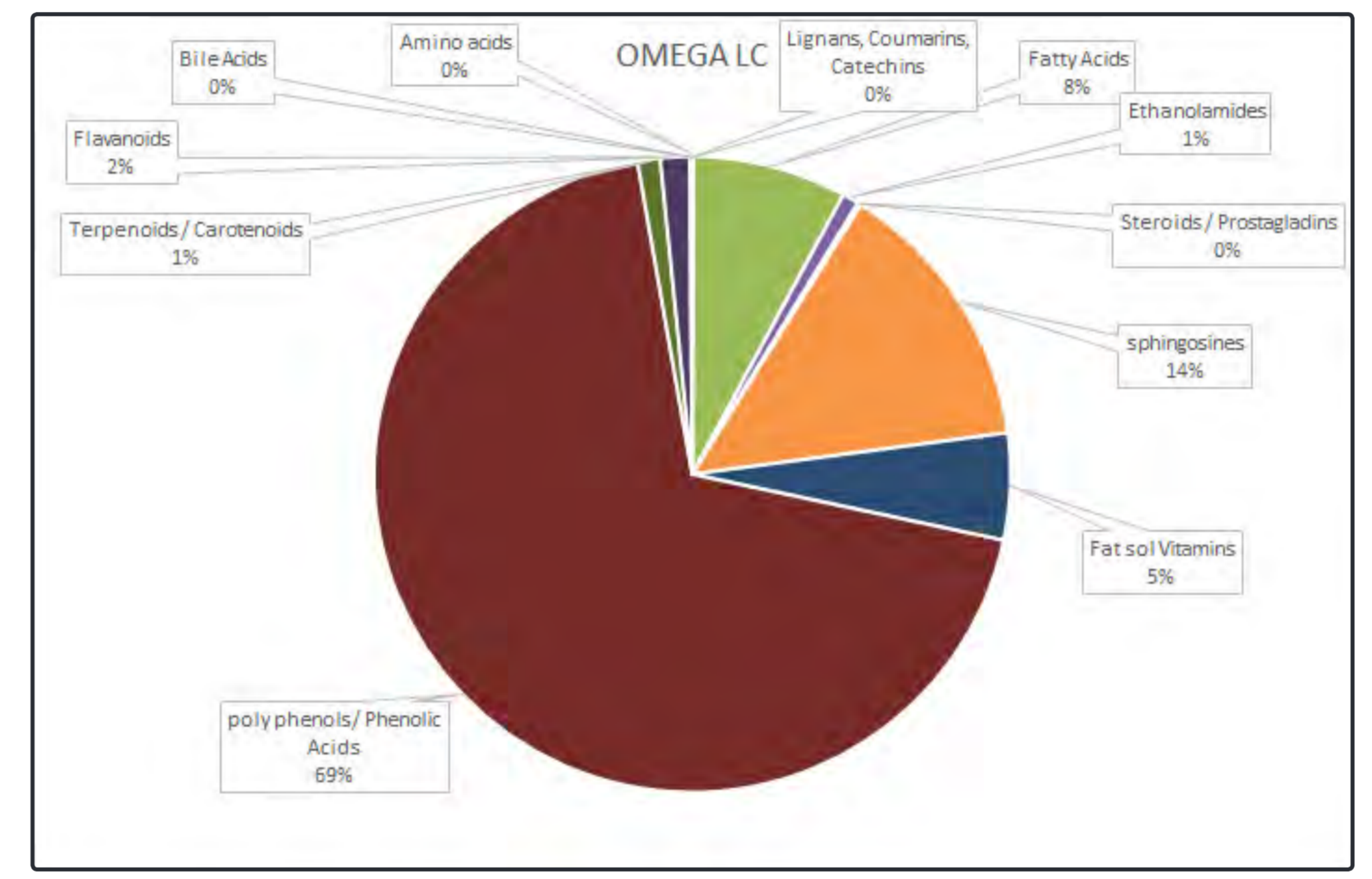
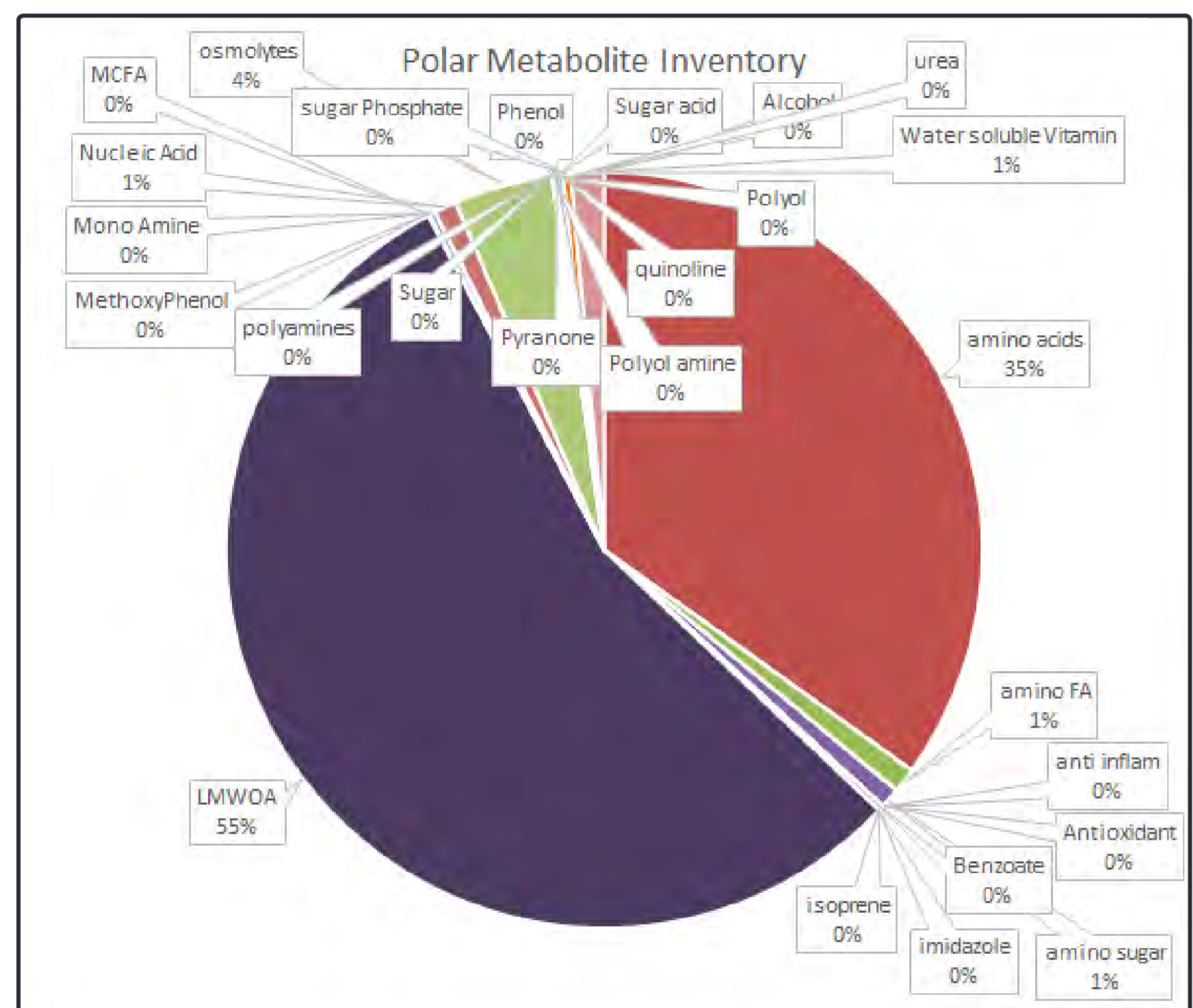
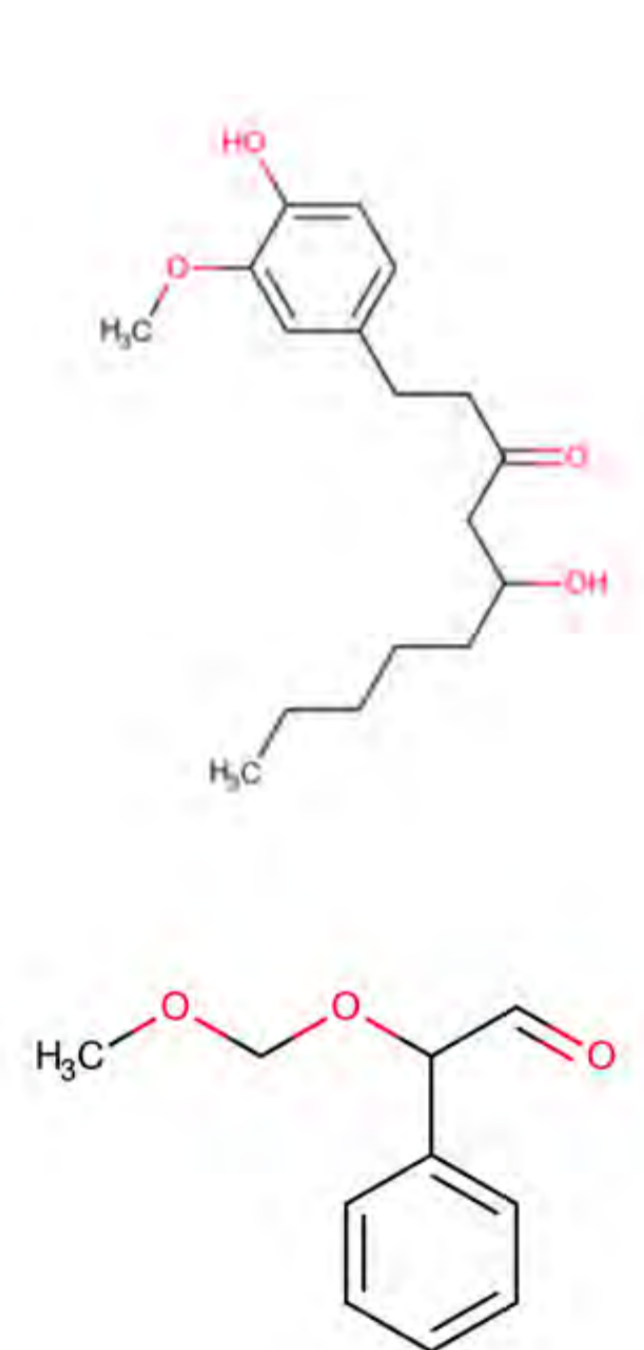


Metabolite Inventory of Natural Product Extracts

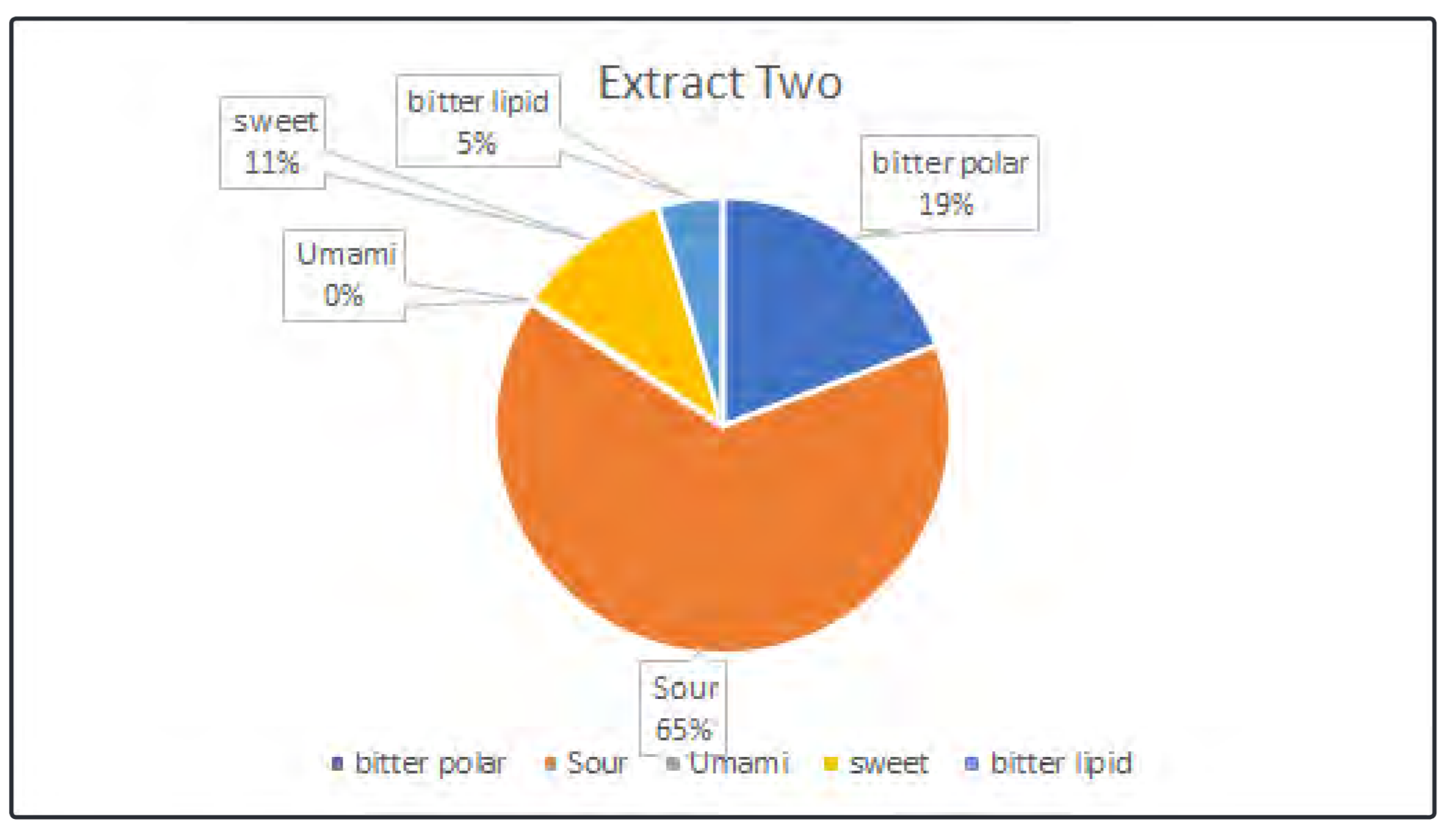
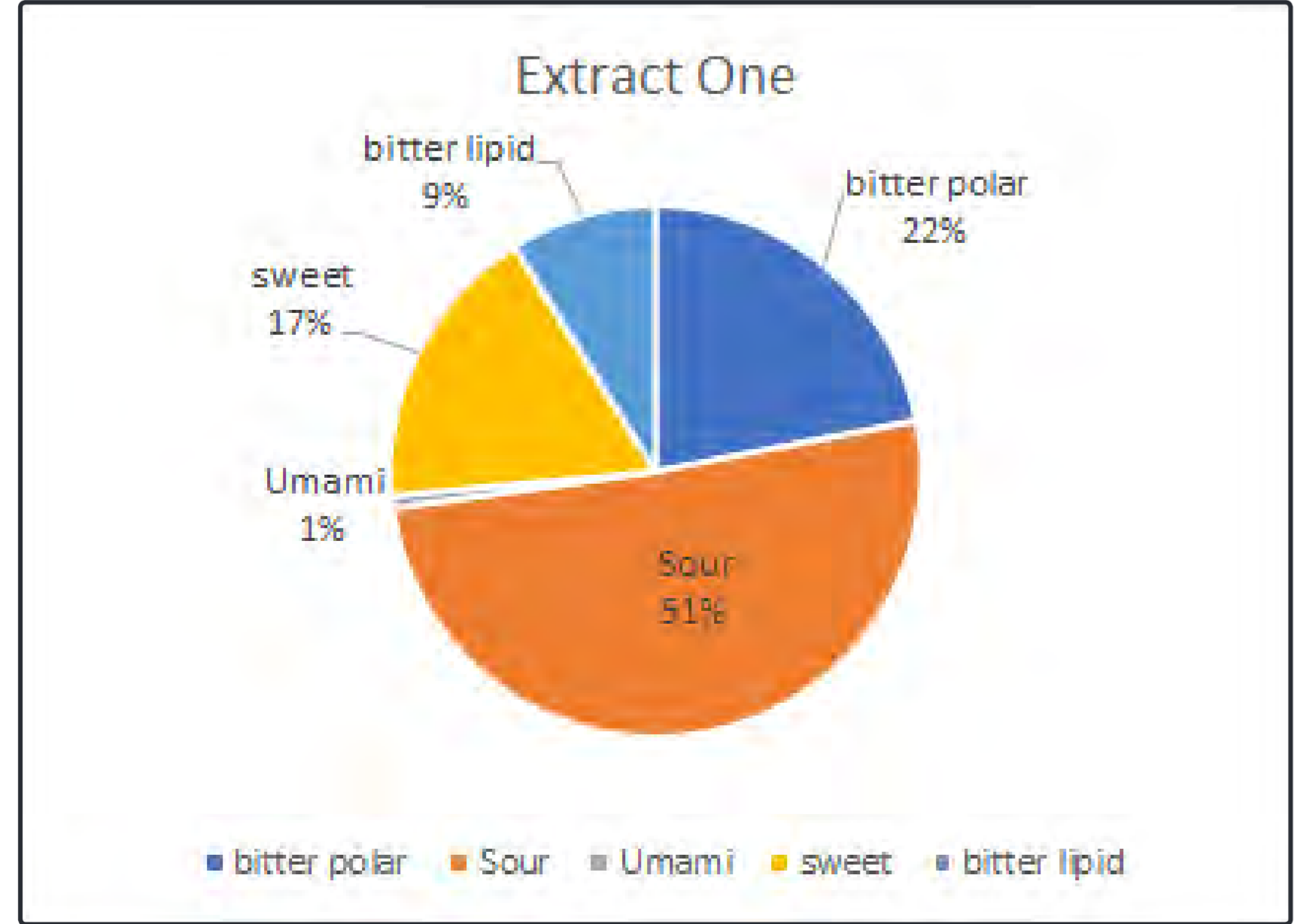
Plant, Fruit, Berry, Fungi Extracts contain a significantly large biodiversity of metabolite classes and abundances. To capture an extensive inventory of functional metabolites HMT uses 3 methods. Our OMEGA Advanced method to measure polar metabolites, our LC-OMEGA advanced method to capture lipid metabolites and our MSCAN method to observe complex phospholipids and very long chain fatty acids.

This method often results in over 1400 metabolites per sample covering many different classes of metabolites including amino acids, organic acids, polyphenols, cartenoids, nucleic acids, alkoloids, monoamines and more. In addition to chemical classes, abundant metabolites that may be bioavailable can be related to their health benefits:



Aside from chemical classes and functional health, taste can also be profiled in such extracts:

While small organic acids can have taste and health benefits, they can also represent metal content of extracts through their chelating abilities:



Malic acid	Ca, Cd, Mg, Cr, Sn
Quinic acid	Co, Mn, Fe, Ni, Zn
Gluconic acid	Ca, Fe, Al, Cu
3-Hydroxy-2-methyl-4-pyrone	Fe, Al, Ga
Citric acid	Ca, Se, Ni, Fe, Cd
Succinic acid	Se
Asp	Co, Cu, Zn, Cr, Sn, Cd, Mg
Glu	Co, Cu, Zn, Cr, Sn, Cd, Ni

