

First insights into the Faecal Metabolome of Healthy, Free-roaming Giraffe (*Giraffa camelopardalis*): an Untargeted GCxGC/TOF-MS Metabolomics study

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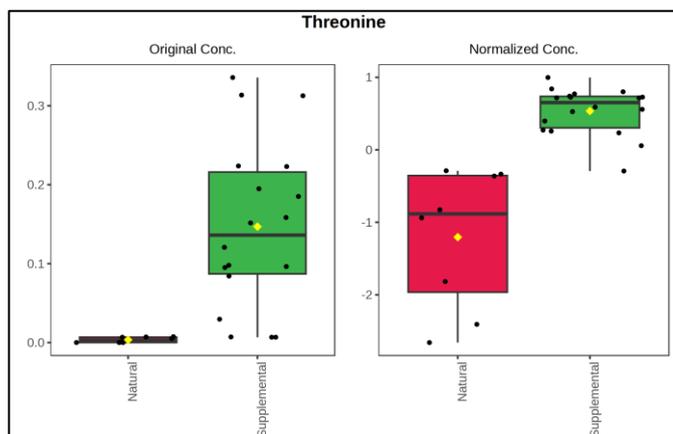
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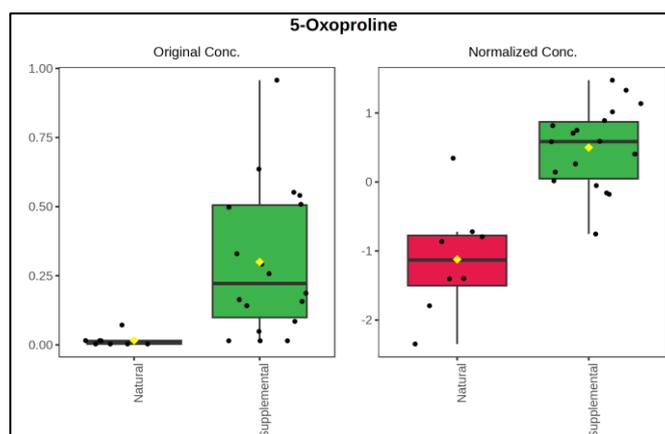
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Supplementary Material

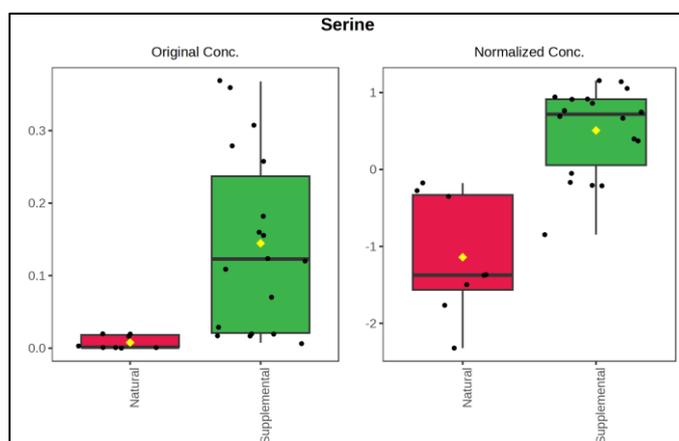
The identified differentiating metabolites are hypothesis generating, and can be used to guide the choice of future, more targeted analysis on giraffe health quantification. The following Box-whisker plots will be made available online at <http://www.mdpi.com/????>, Figure S1: Significant ($p < 0.05$) metabolites with a fold change test ($\text{Log}^2 [\text{FC}] > 4$) identified for giraffe receiving SF or only NAV; Figure S2: Significant ($p < 0.05$) metabolites with a fold change test ($\text{Log}^2 [\text{FC}] > 4$) identified for the wet and dry seasons from faeces collected from one, adult male giraffe individual; Figure S3: Significant ($p < 0.05$) metabolites with a fold change test ($\text{Log}^2 [\text{FC}] > 4$) identified for male and female giraffes. Other data sets can be made available by the authors on request.



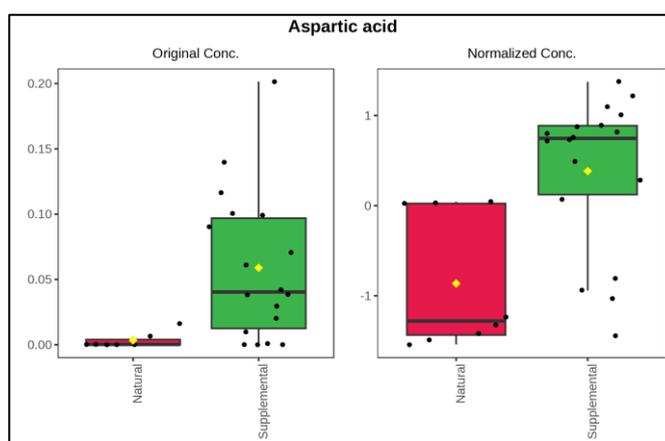
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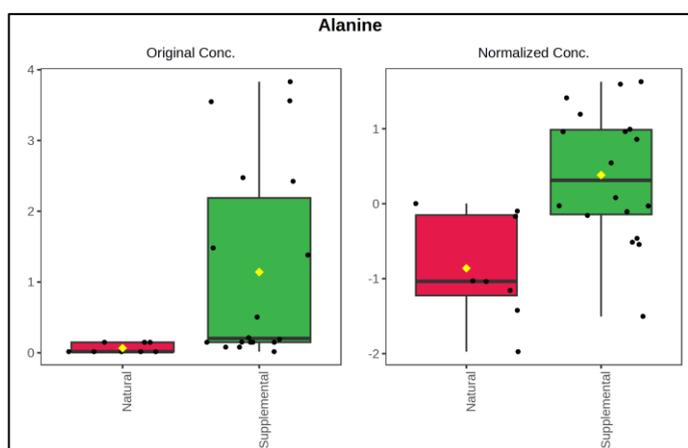
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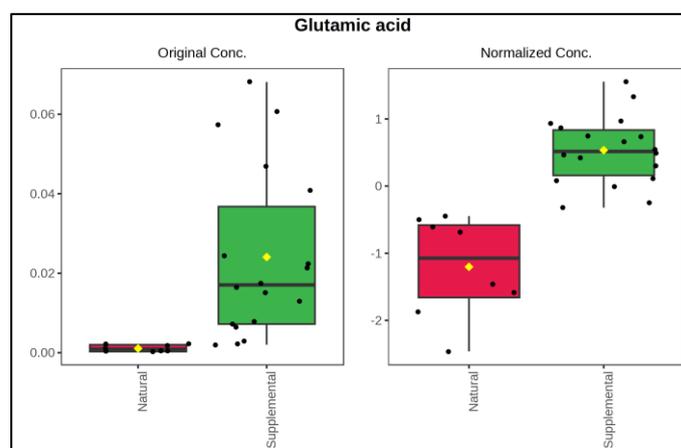
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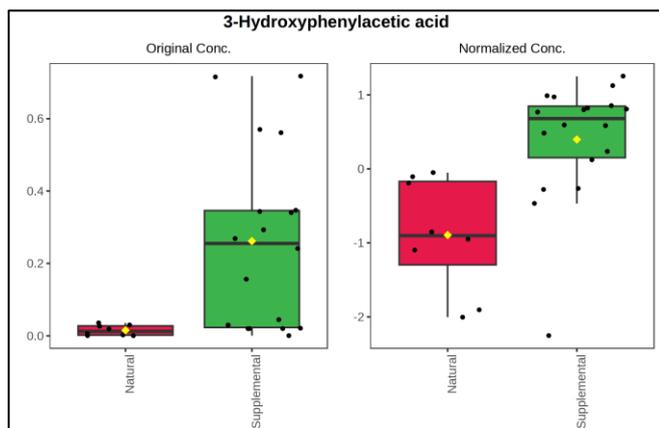
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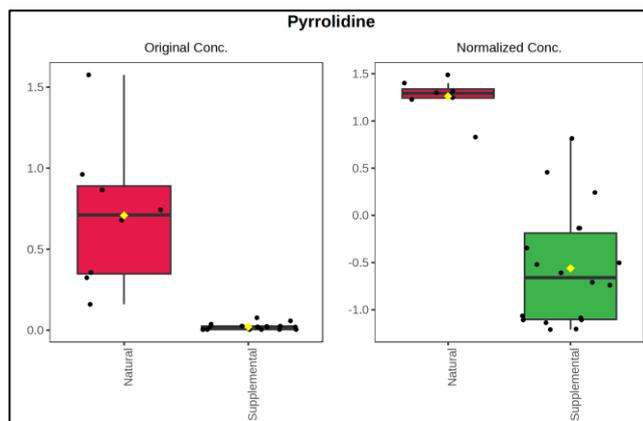
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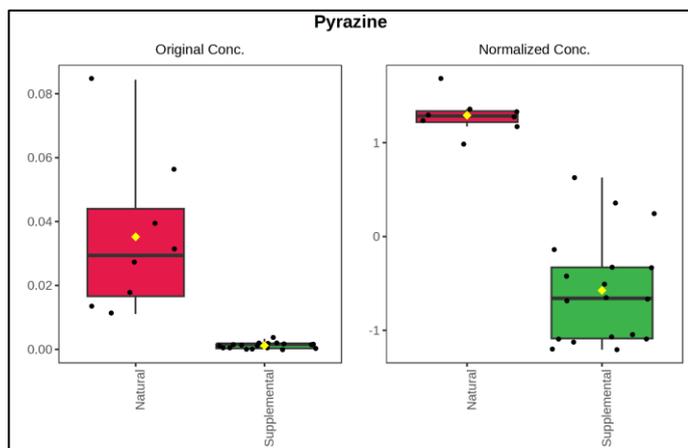
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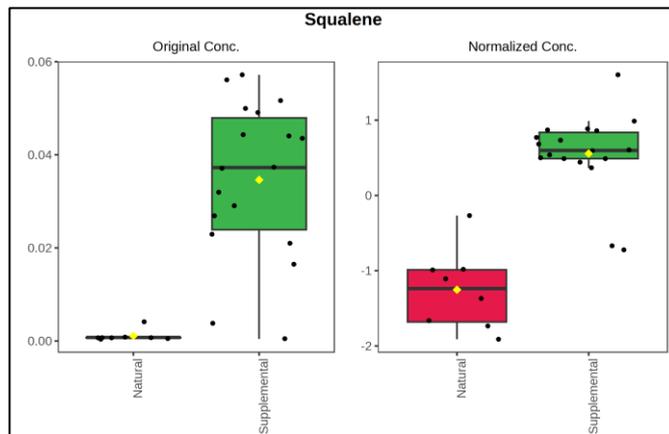
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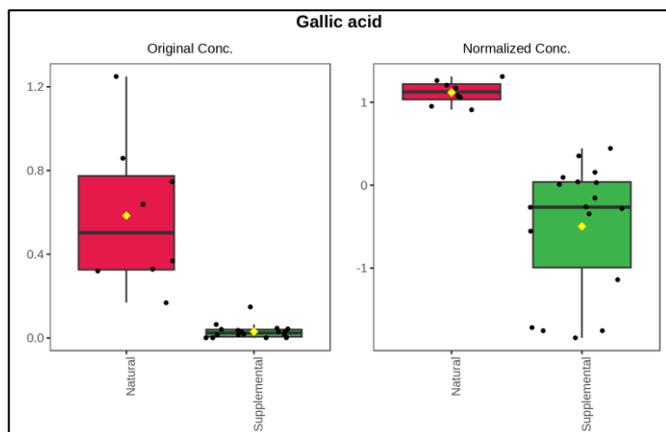
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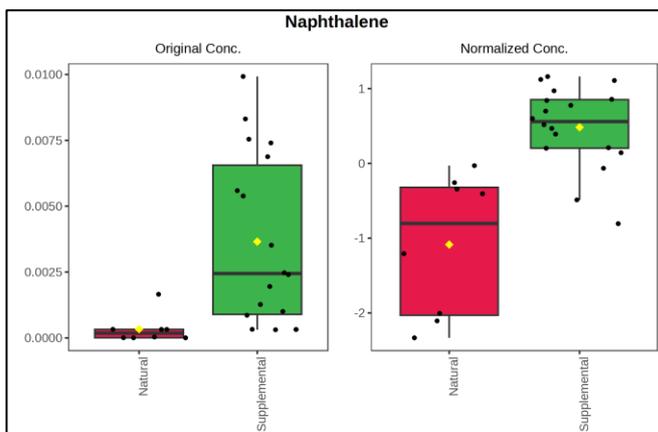
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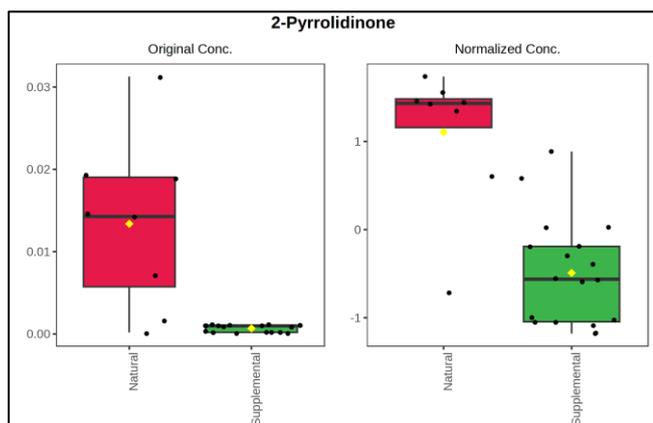
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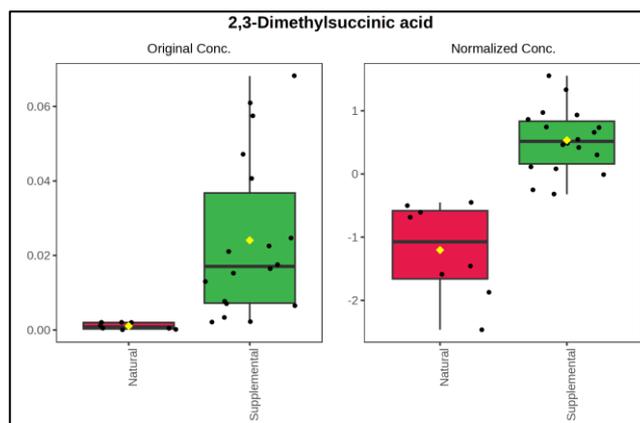
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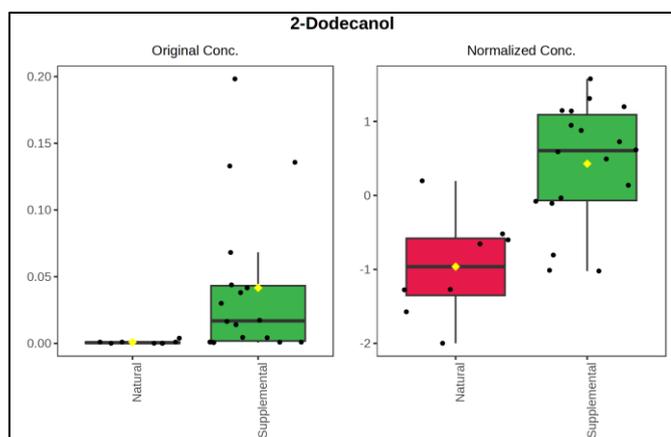
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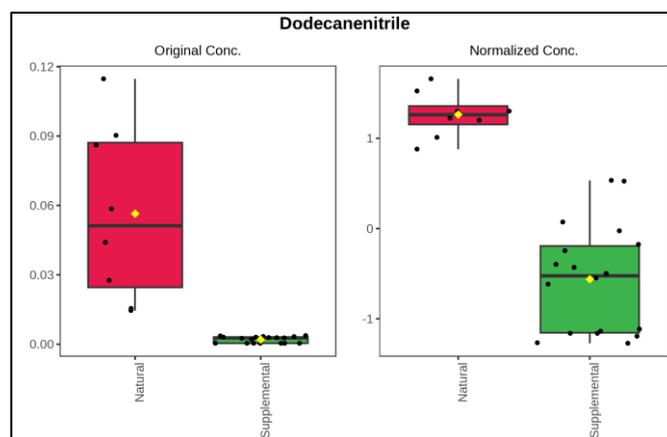
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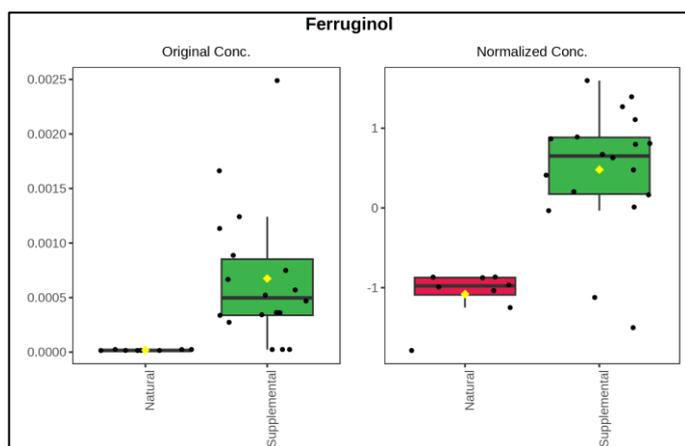
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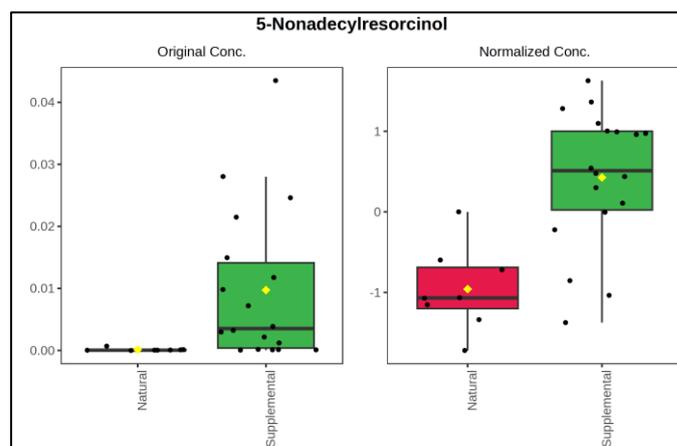
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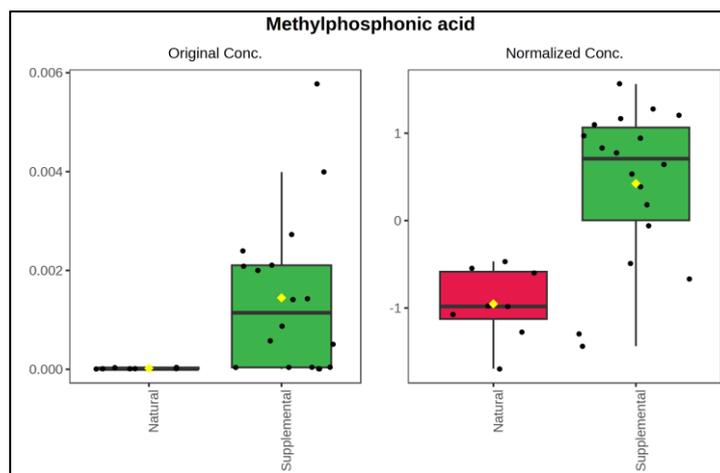
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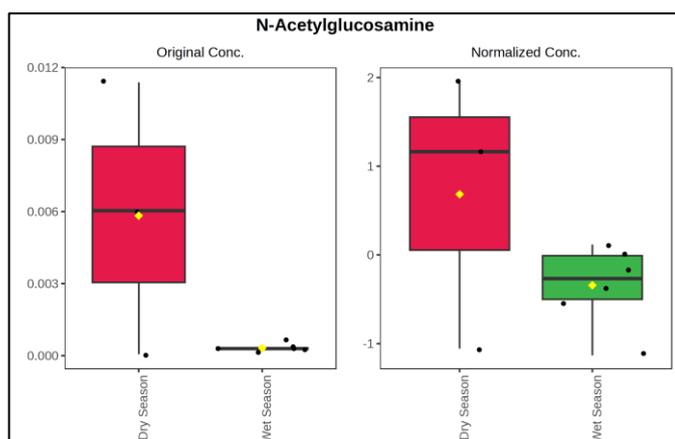


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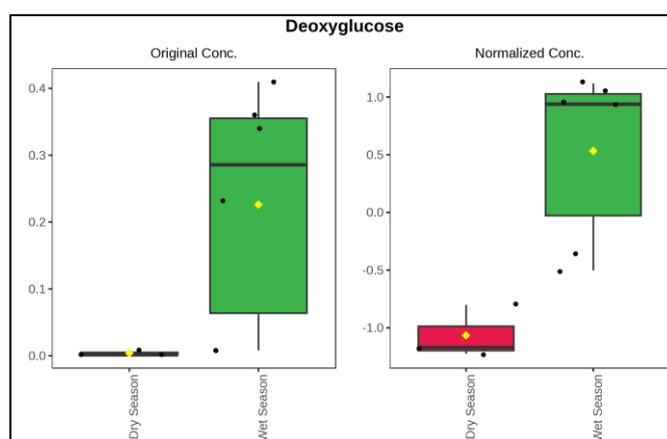


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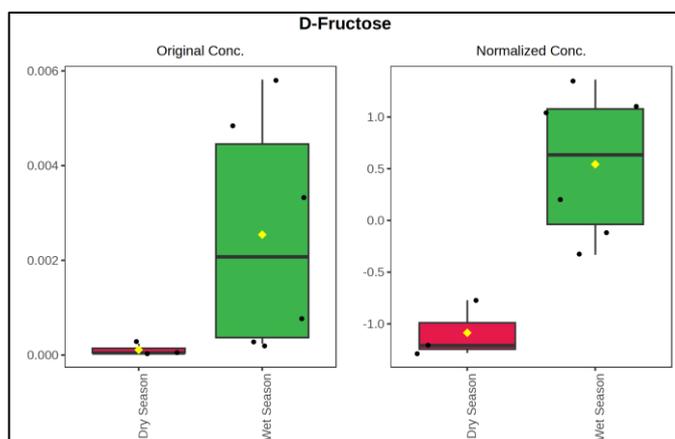
Figure S1: Significant ($p < 0.05$) metabolites with a fold change test ($\text{Log}_2 [\text{FC}] > 4$) identified for giraffe receiving supplemental feed (SF) or only natural available vegetation (NAV): (a) Threonine; (b) 5-Oxoproline; (c) Serine; (d) Aspartic acid; (e) Alanine; (f) Glutamic acid; (g) 3-Hydroxyphenylacetic acid; (h) Pyrrolidine; (i) Pyrazine; (j) Squalene; (k) Gallic acid; (l) Naphthalene; (m) 2-Pyrrolidinone; (n) 2,3-Dimethylsuccinic acid; (o) 2-Dodecanol; (p) Dodecanenitrile; (q) Ferruginol; (r) 5-Nonadecylresorcinol; (s) Methylphosphonic acid.



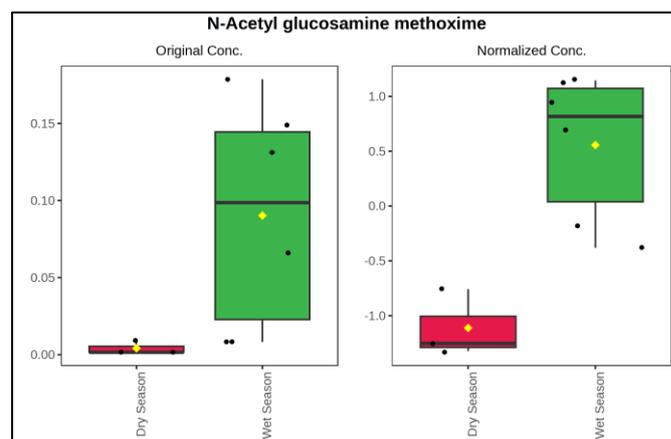
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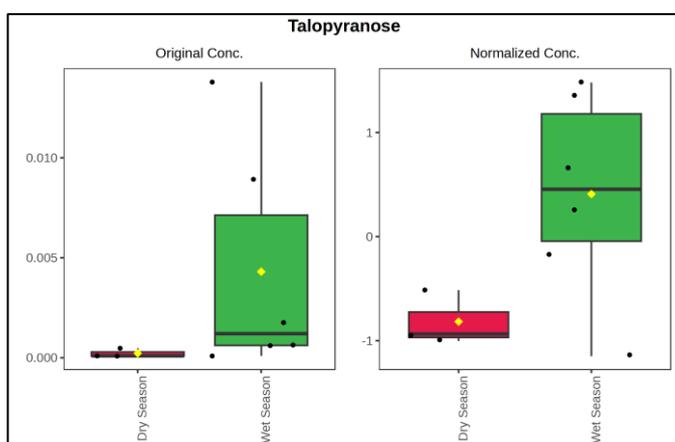
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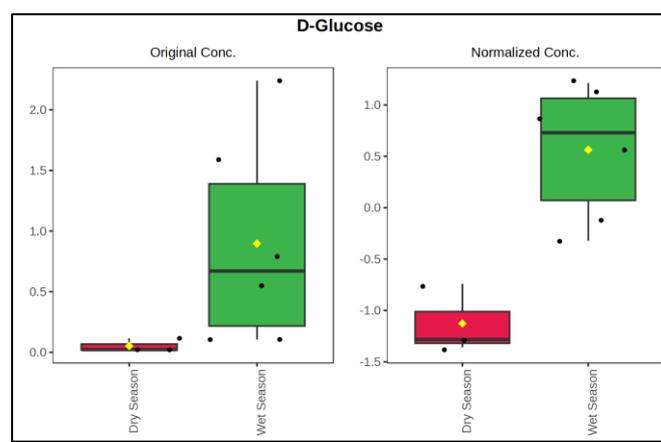
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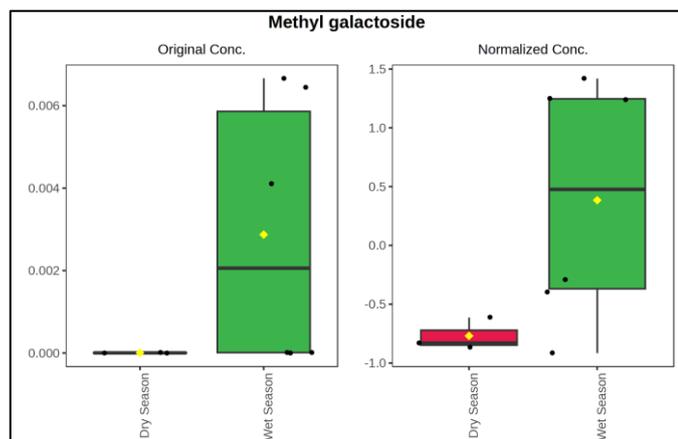
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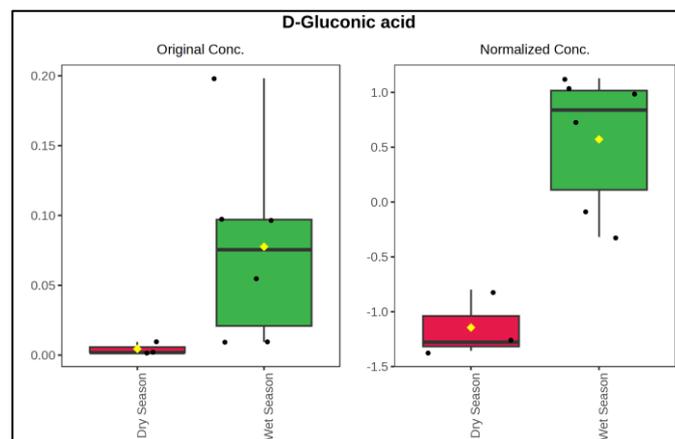
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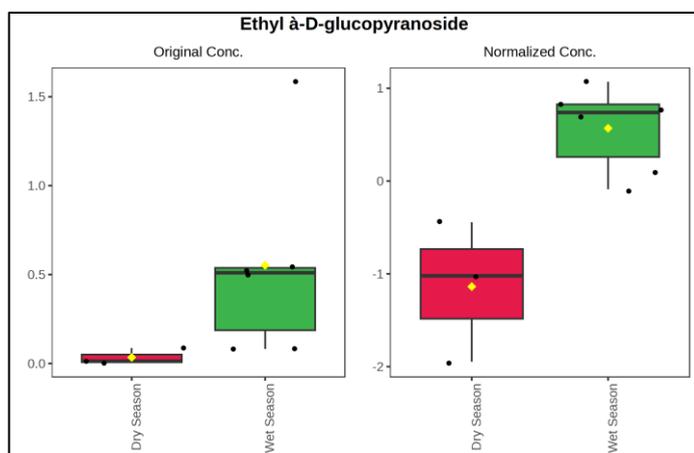
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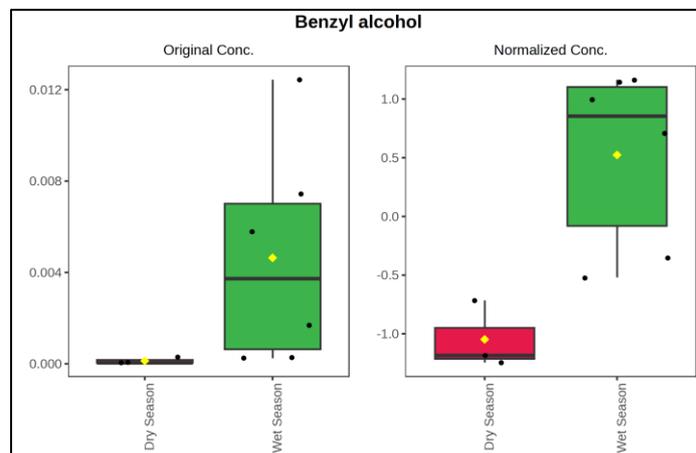
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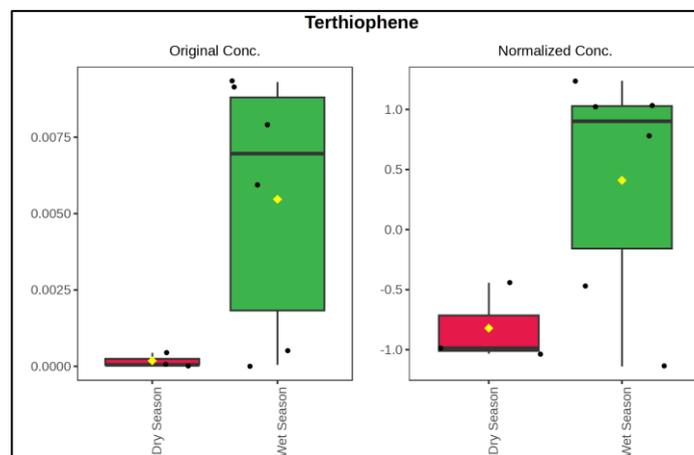
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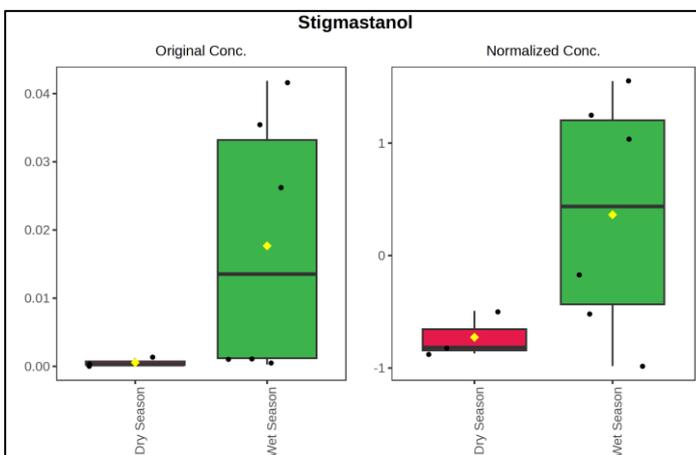
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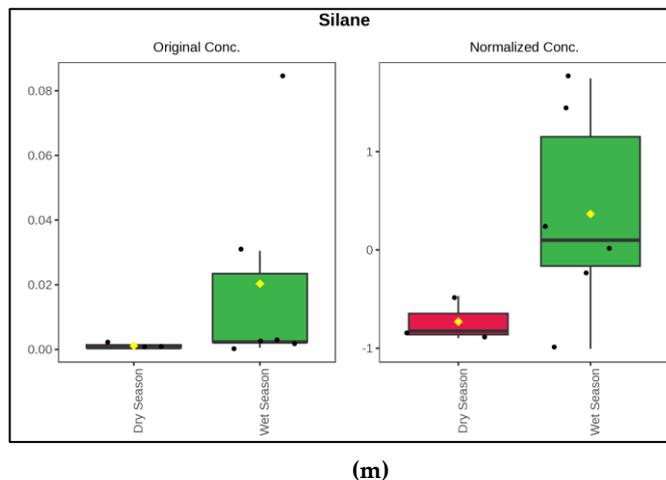
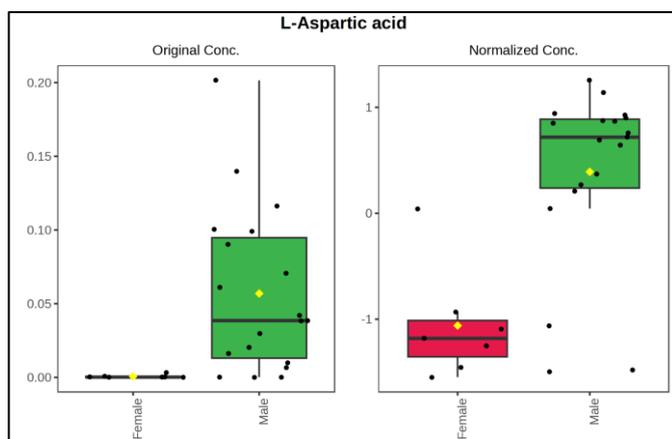
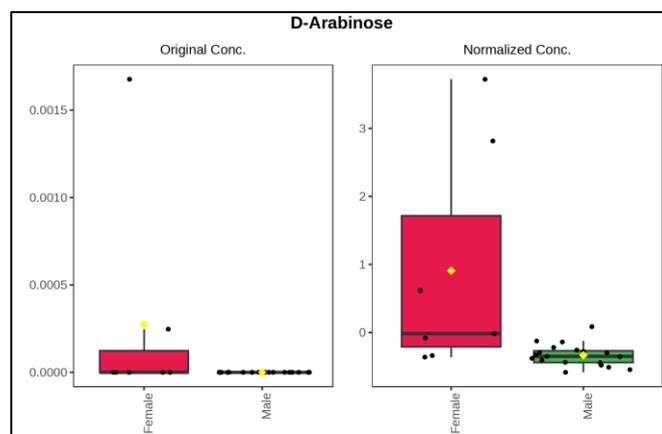


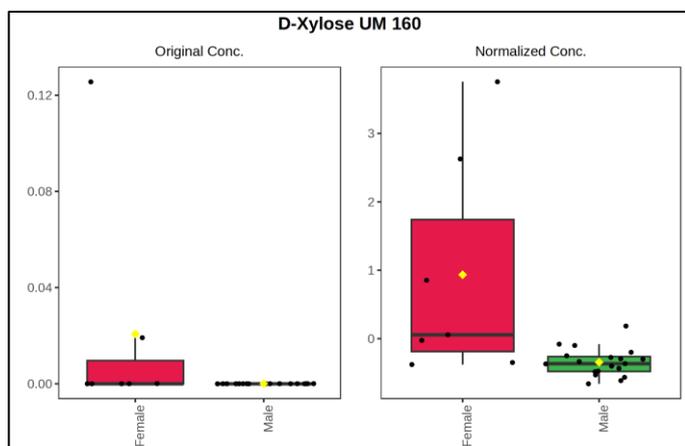
Figure S2: Significant ($p < 0.05$) metabolites with a fold change test ($\text{Log}^2 [\text{FC}] > 4$) identified for the wet and dry seasons from faeces collected from a single adult male giraffe: (a) N-Acetylglucosamine; (b) Deoxyglucose; (c) D-Fructose; (d) N-Acetyl glucosamine methoxime; (e) Talopyranose; (f) d-Glucose; (g) Methyl galactoside; (h) D-Gluconic acid; (i) Ethyl α -D-glucopyranoside; (j) Benzyl alcohol; (k) Terthiophene; (l) Stigmastanol; (m) Silane.



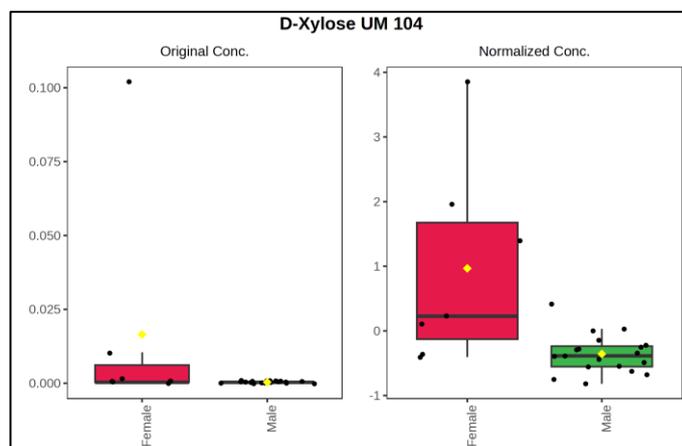
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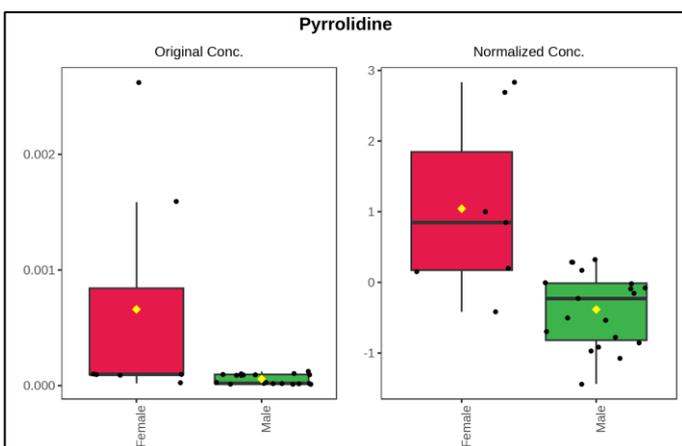
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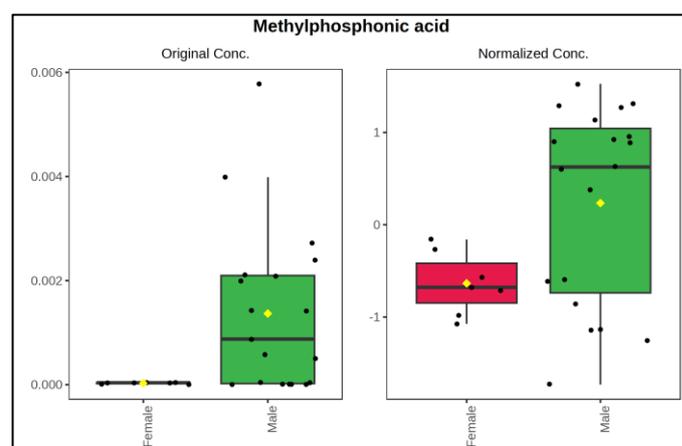
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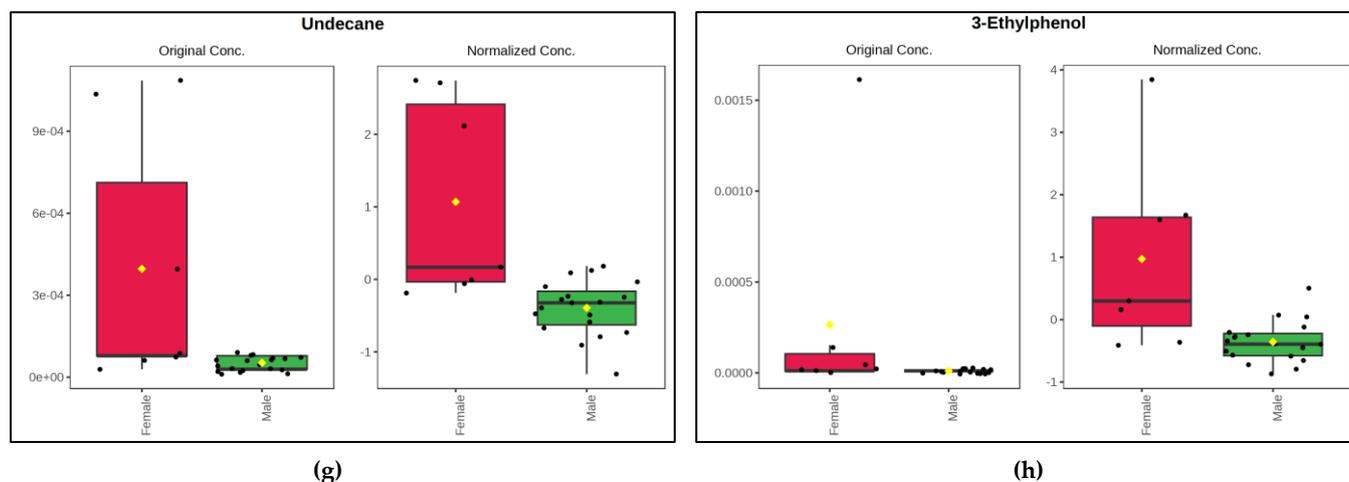
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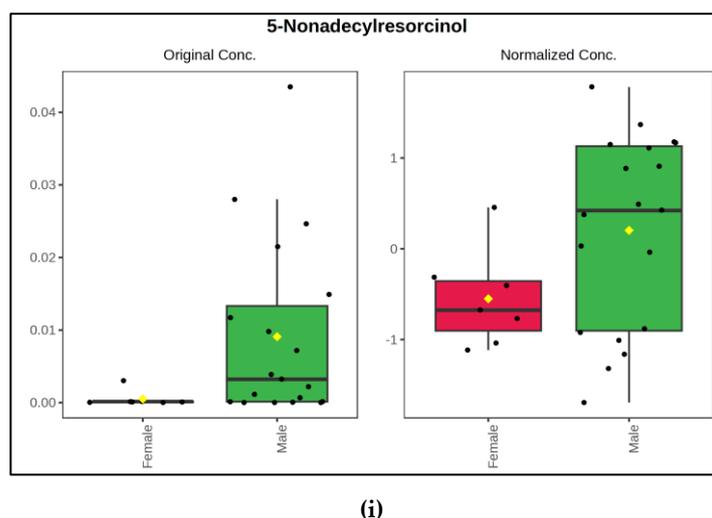


Figure S3: Significant ($p < 0.05$) metabolites with a fold change test ($\text{Log}^2[\text{FC}] > 4$) identified for male and female giraffes: (a) L-Aspartic acid; (b) D-Arabinose; (c) D-Xylose UM 160; (d) D-Xylose UM 104; (e) Pyrrolidine; (f) Methylphosphonic acid; (g) Undecane; (h) 3-Ethylphenol; (i) 5-Nonadecylresorcinol.

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