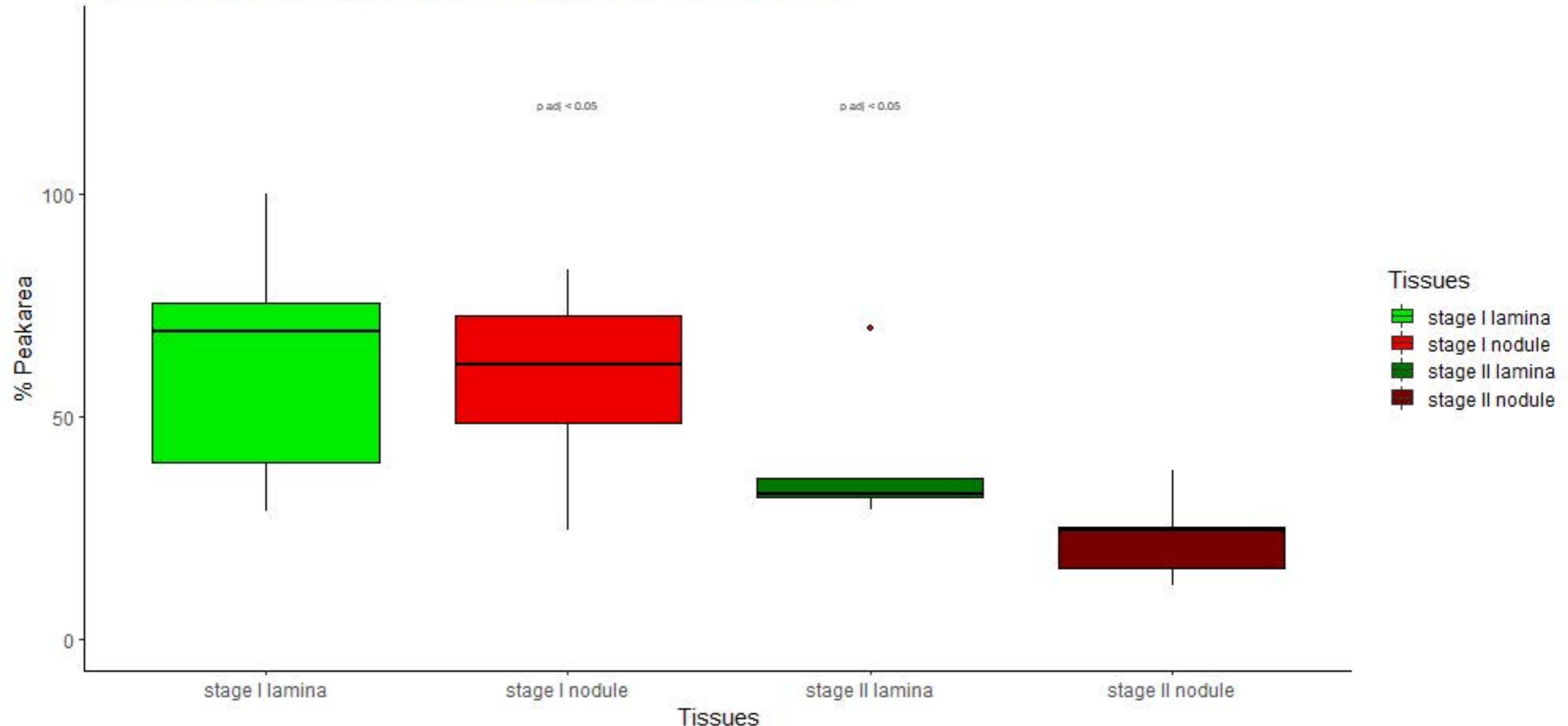


Quercetin_rha_hex_pent_RT:20.71_min_m/z:743.2029



Quercetin_RT:20.72_min_m/z:303.0499

% Peakarea

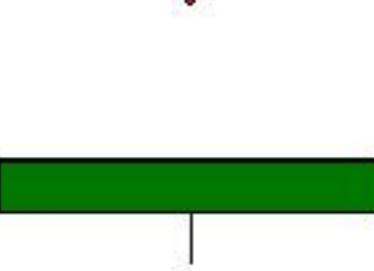
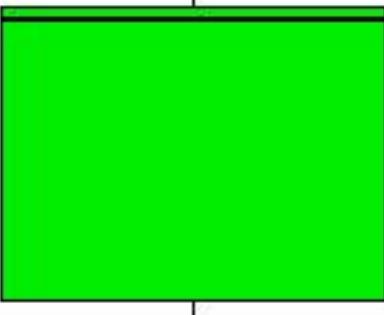
100

50

0

p adj < 0.05

p adj < 0.05



Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

stage I lamina

stage I nodule

stage II lamina

stage II nodule

Tissues

Caffeoylquinic_acid_RT:17.96_min_m/z:355.1024

% Peakarea

100

50

0

$p_{adj} < 0.05$
 $p_{adj} < 0.05$

$p_{adj} < 0.05$

$p_{adj} < 0.05$

stage I lamina

stage I nodule

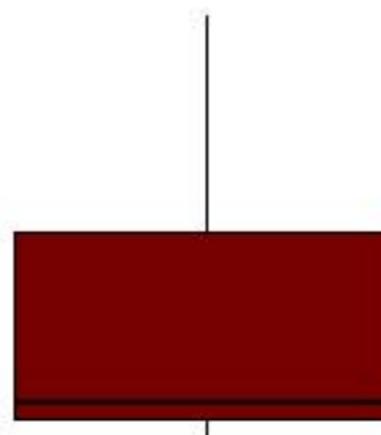
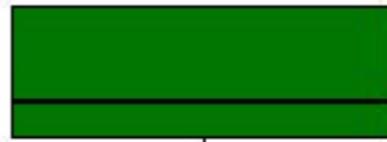
stage II lamina

stage II nodule

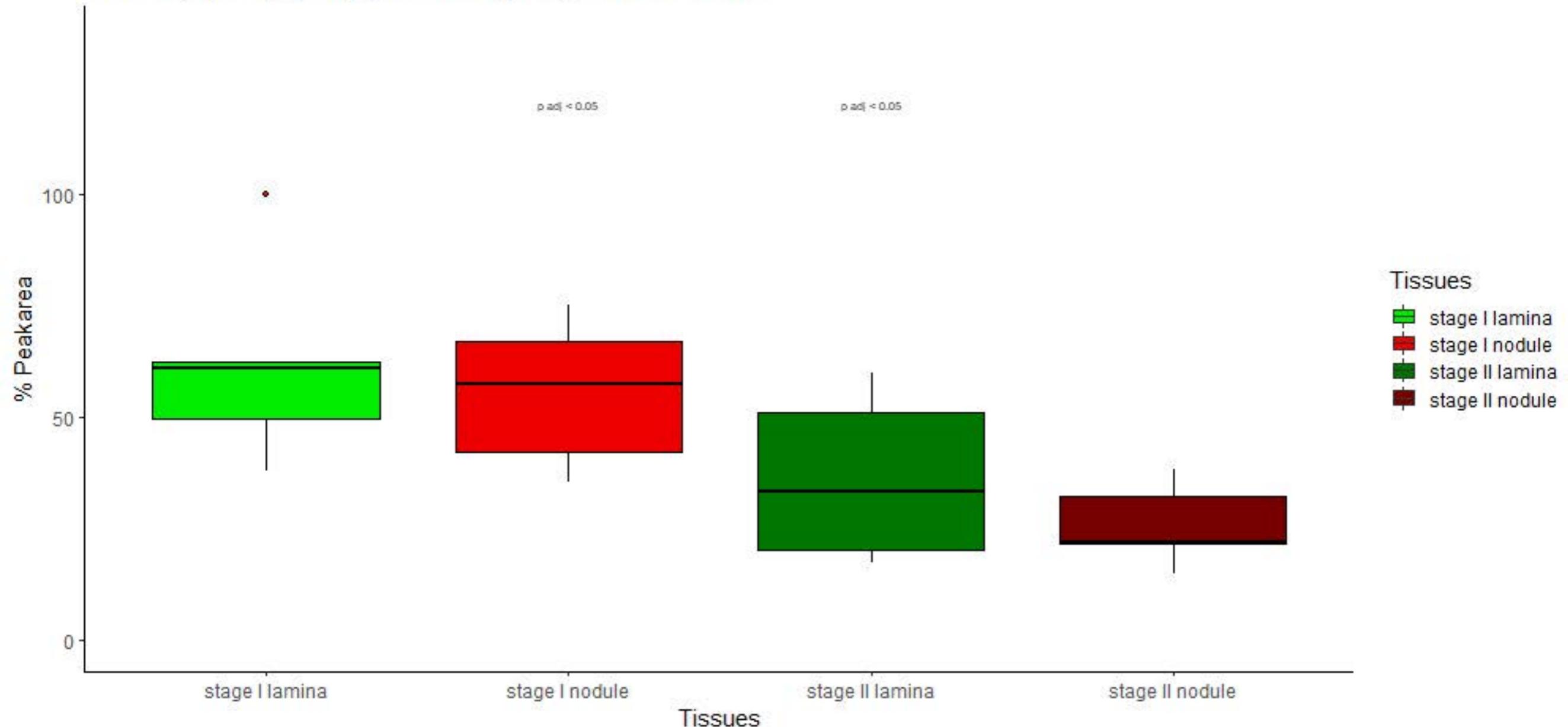
Tissues

Tissues

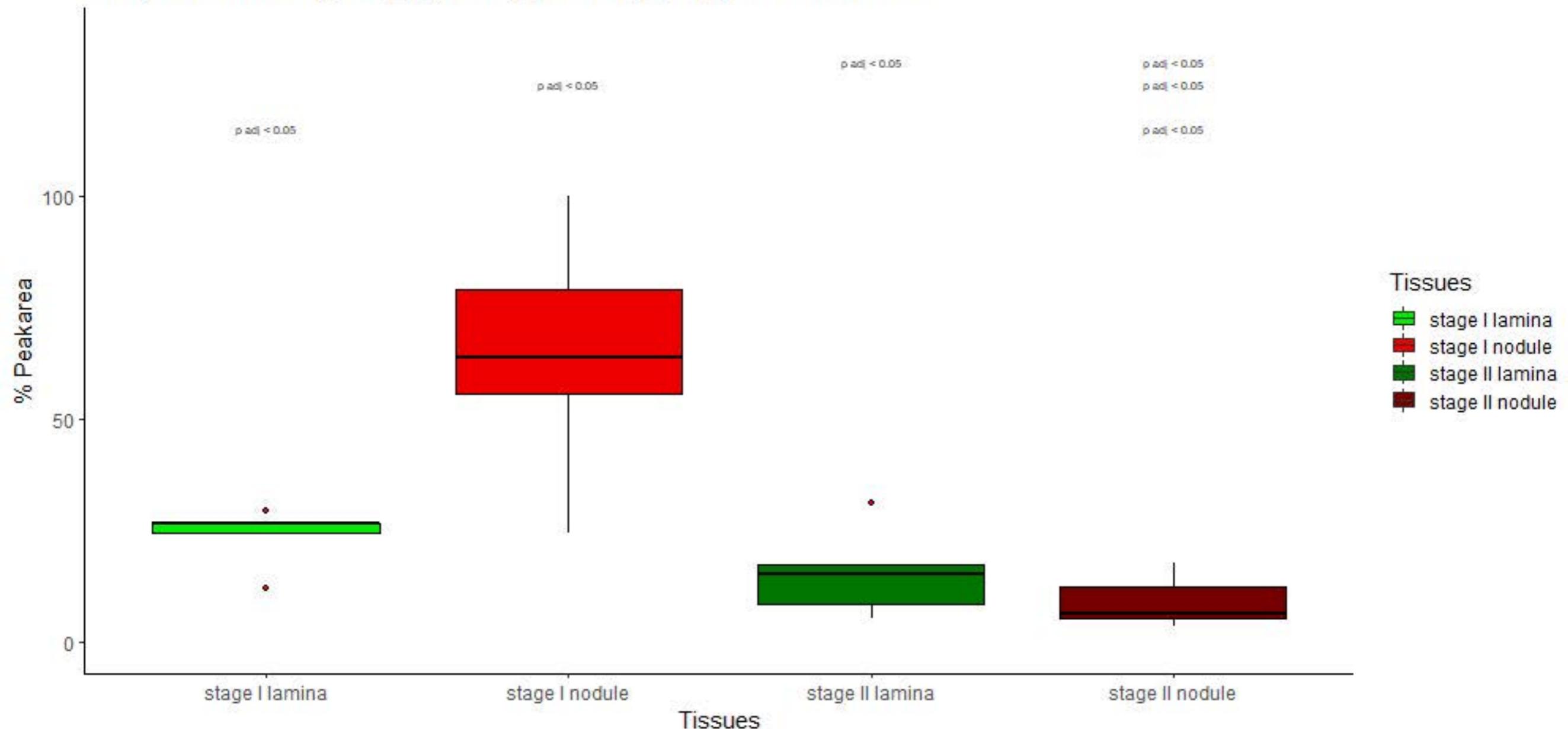
- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule



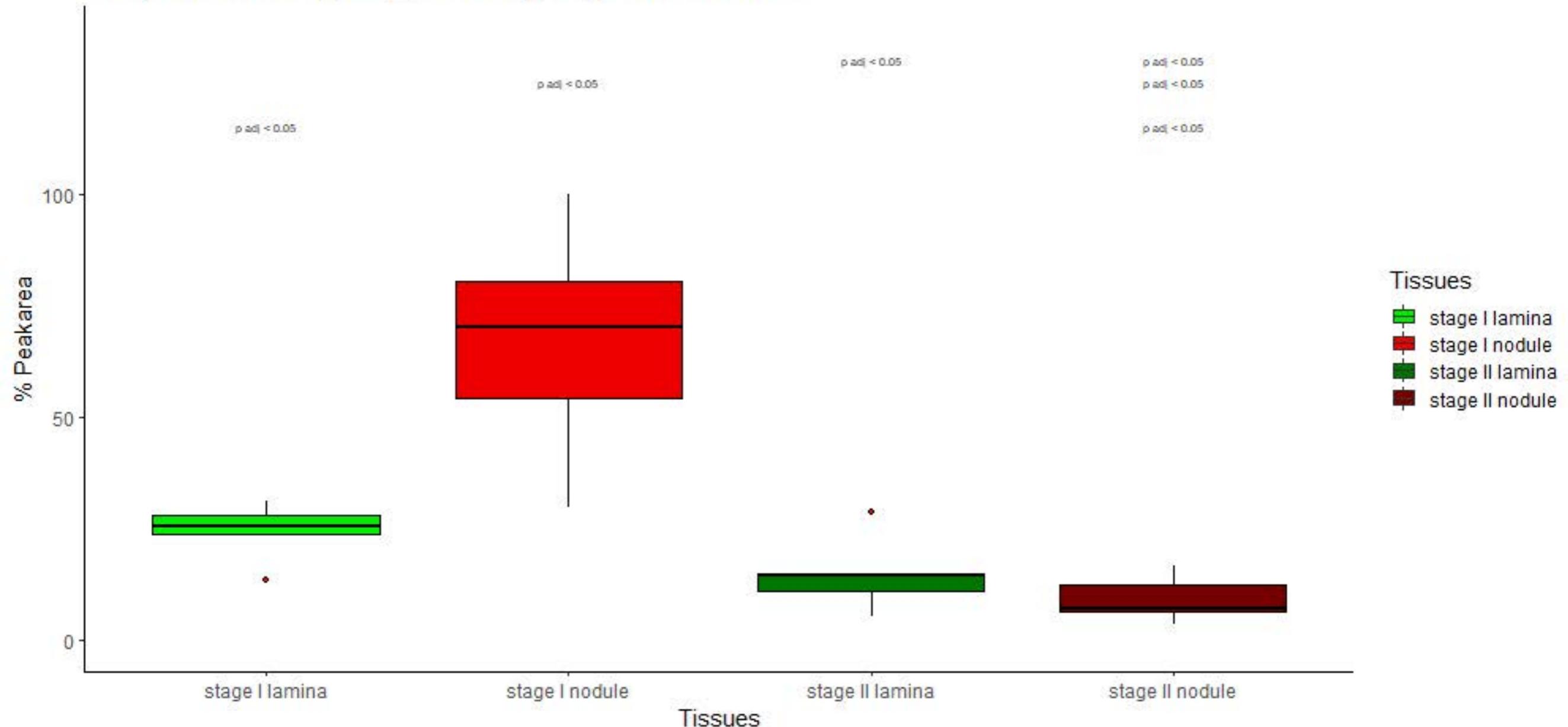
Caffeoylquinic_acid_RT:18.33_min_m/z:355.1024



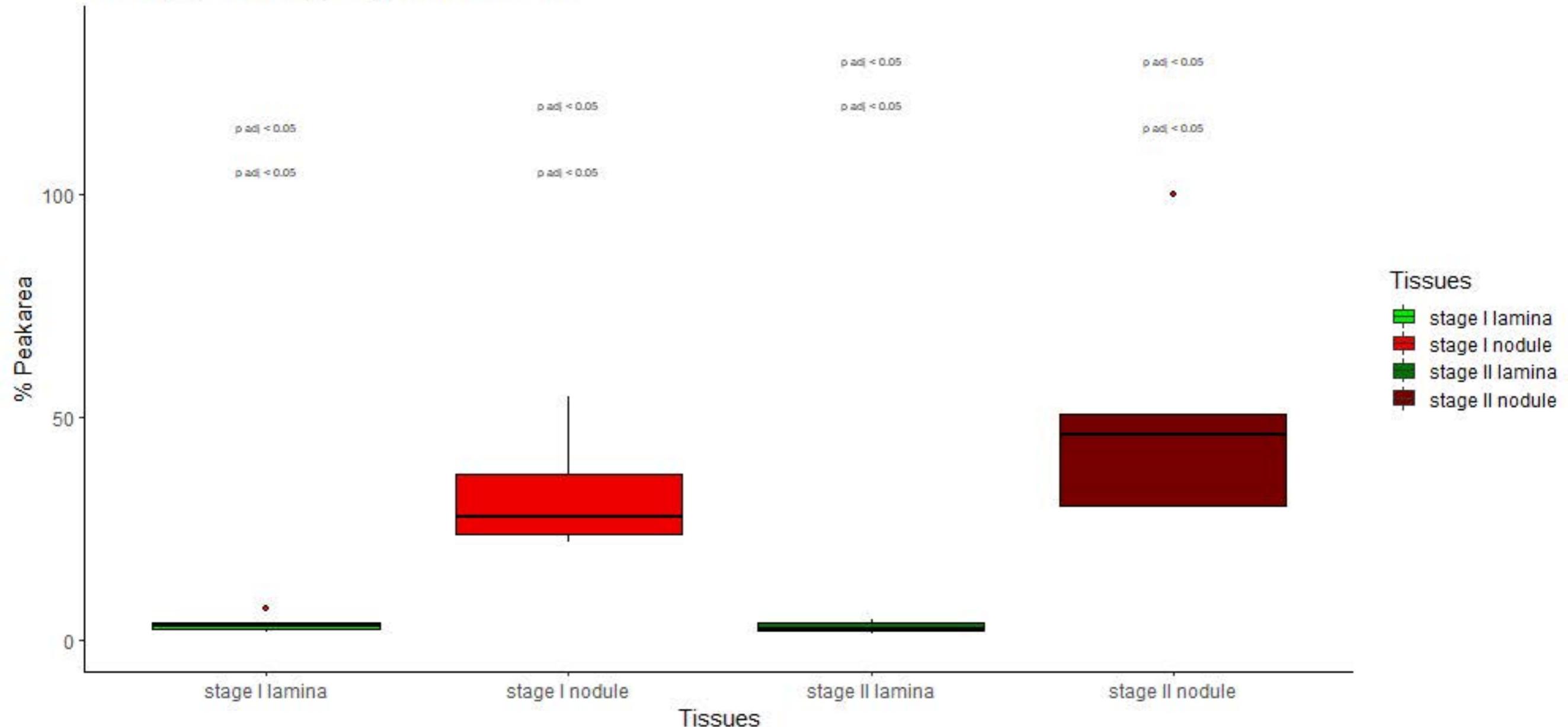
Dehydroascorbic_acid_hydrate_RT:4.05_min_m/z:193.0343



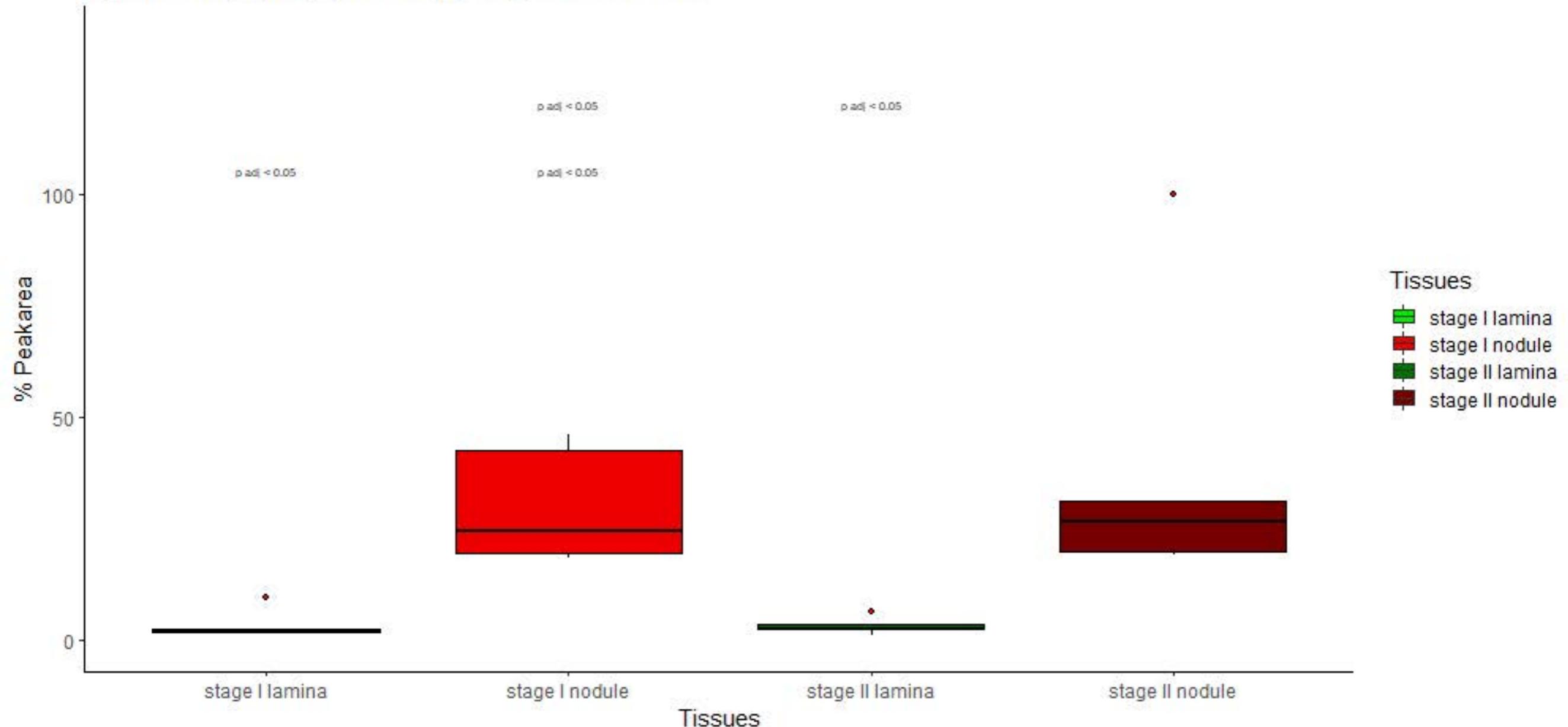
Dehydroascorbic_acid_RT:4.05_min_m/z:175.0237



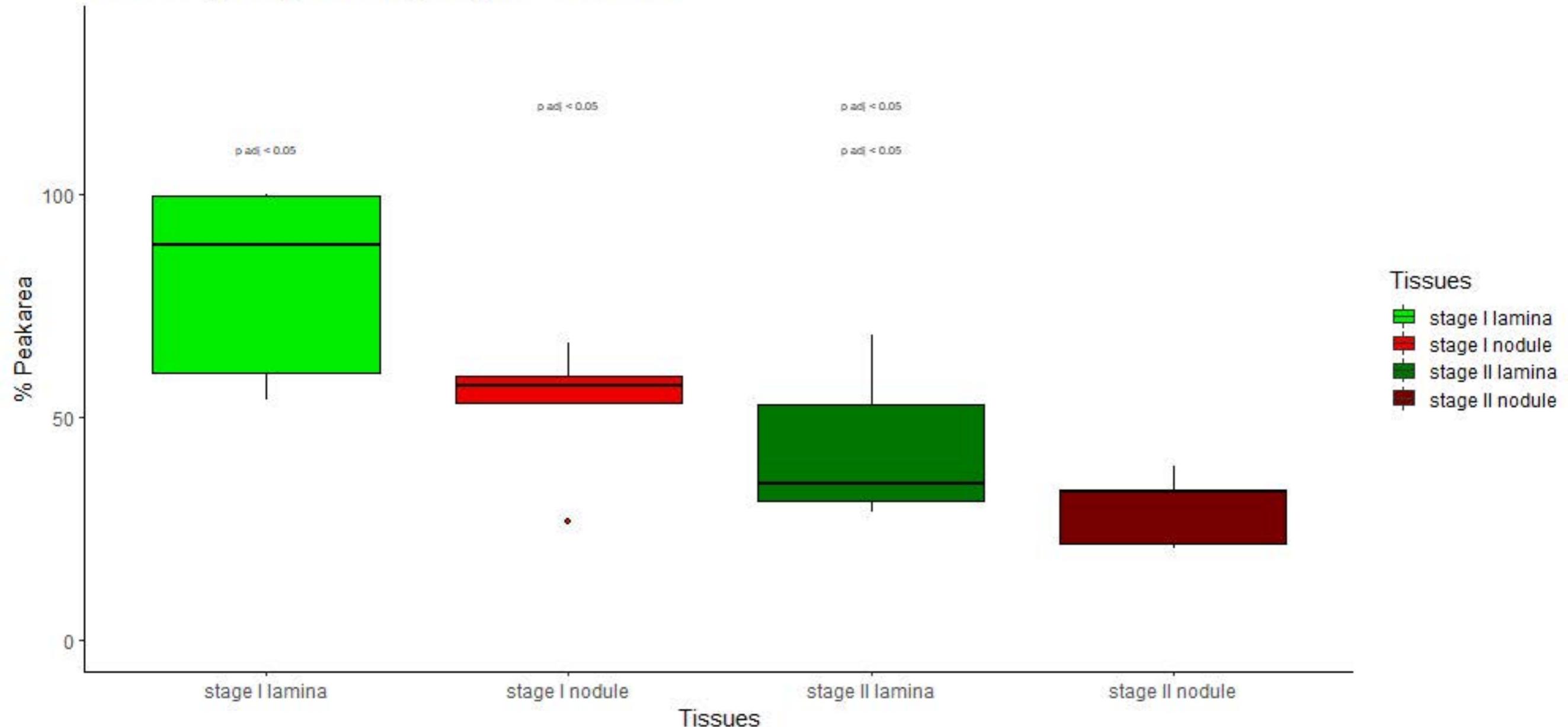
GSSG_RT:6.09_min_m/z:613.1592



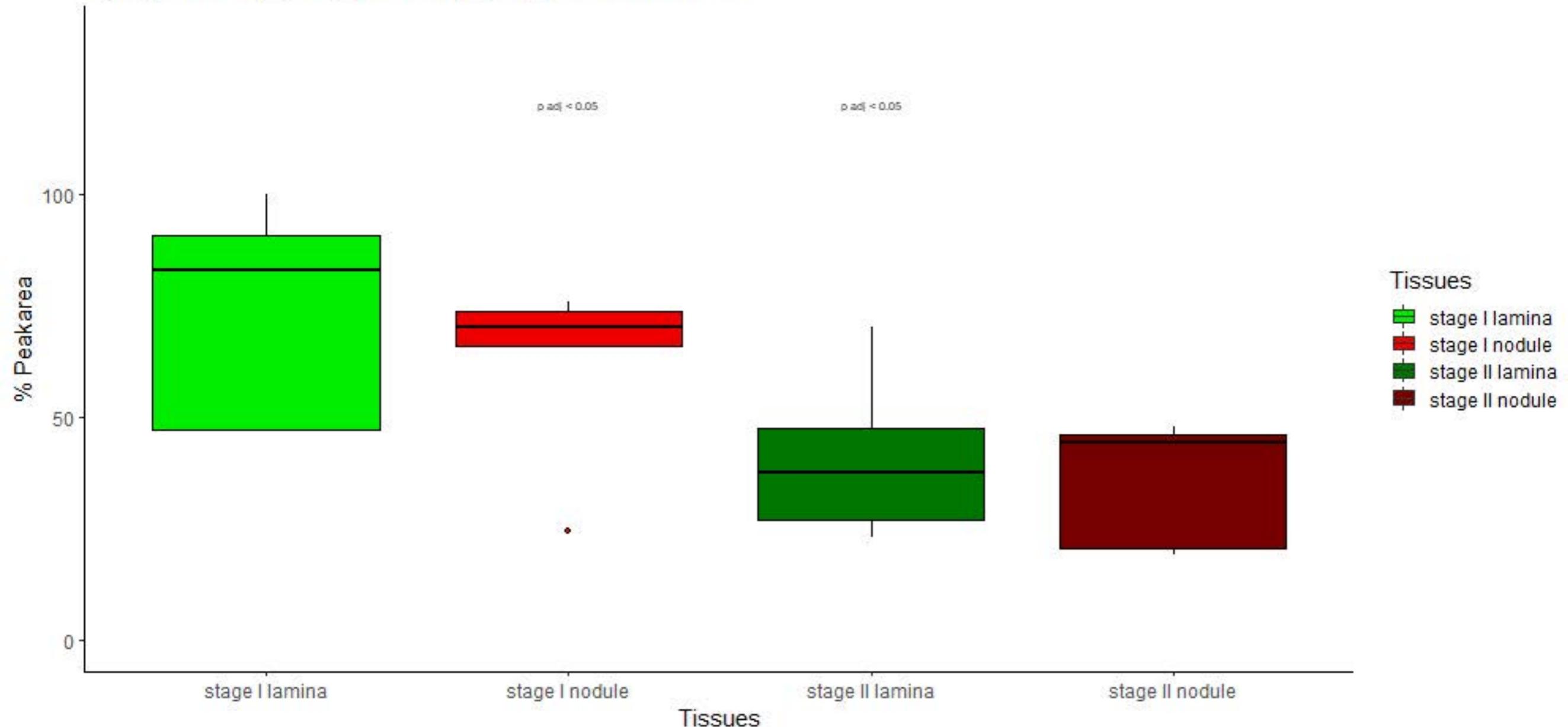
Ophthalmic_acid_RT:4.05_min_m/z:290.1347



Glutamic_acid_RT:2.38_min_m/z:148.0604



Pyroglutamic_acid_RT:2.33_min_m/z:130.0499



Spermidine_RT:2.24_min_m/z:146.1652

% Peakarea

p adj < 0.05
p adj < 0.05

p adj < 0.05

p adj < 0.05

100

50

0

stage I lamina

stage I nodule

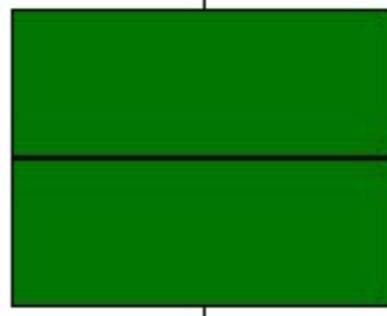
stage II lamina

stage II nodule

Tissues

Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule



Pavettamine_RT:2.03_min_m/z:252.1918

% Peakarea

100

50

0

Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

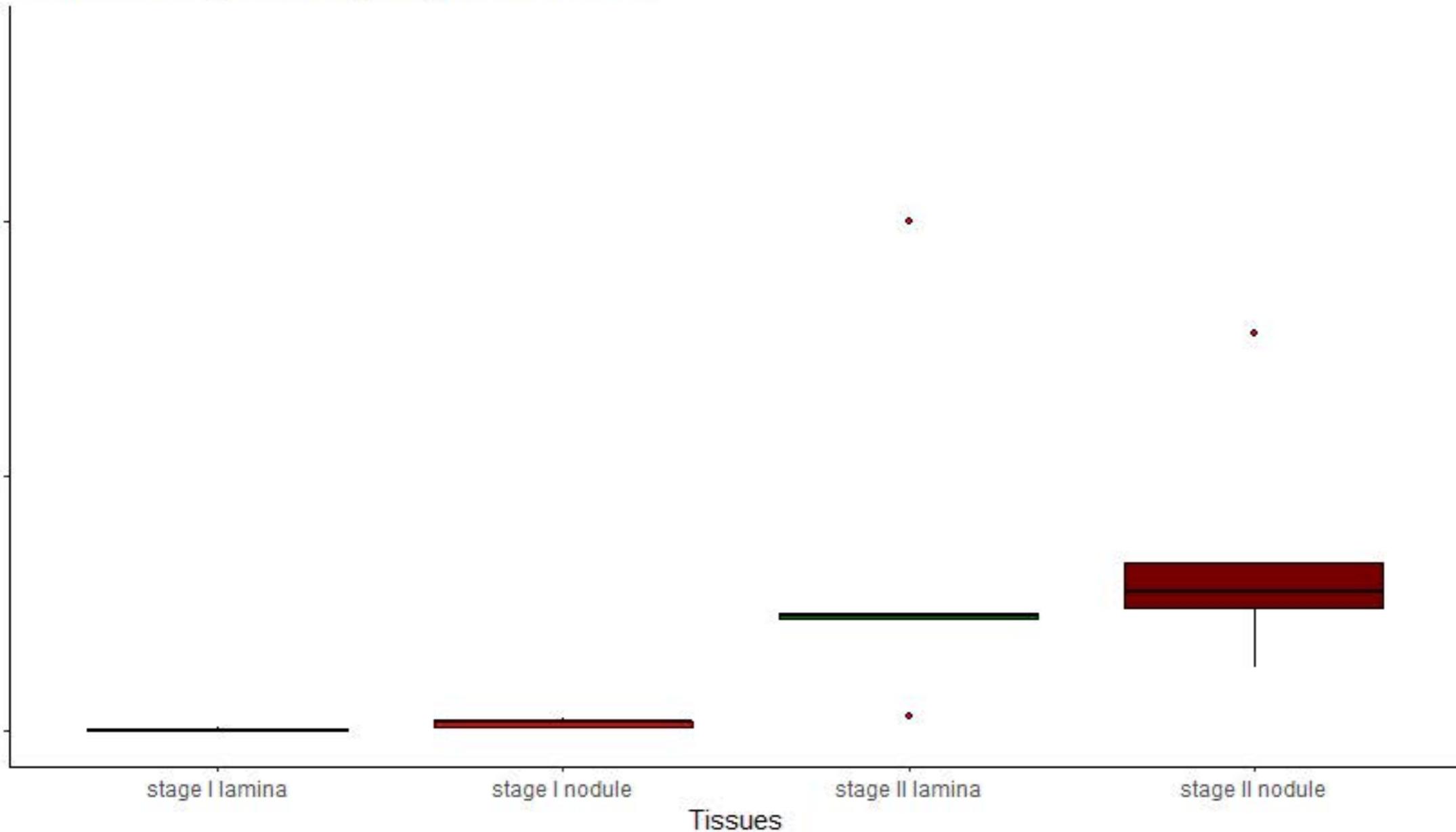
stage I lamina

stage I nodule

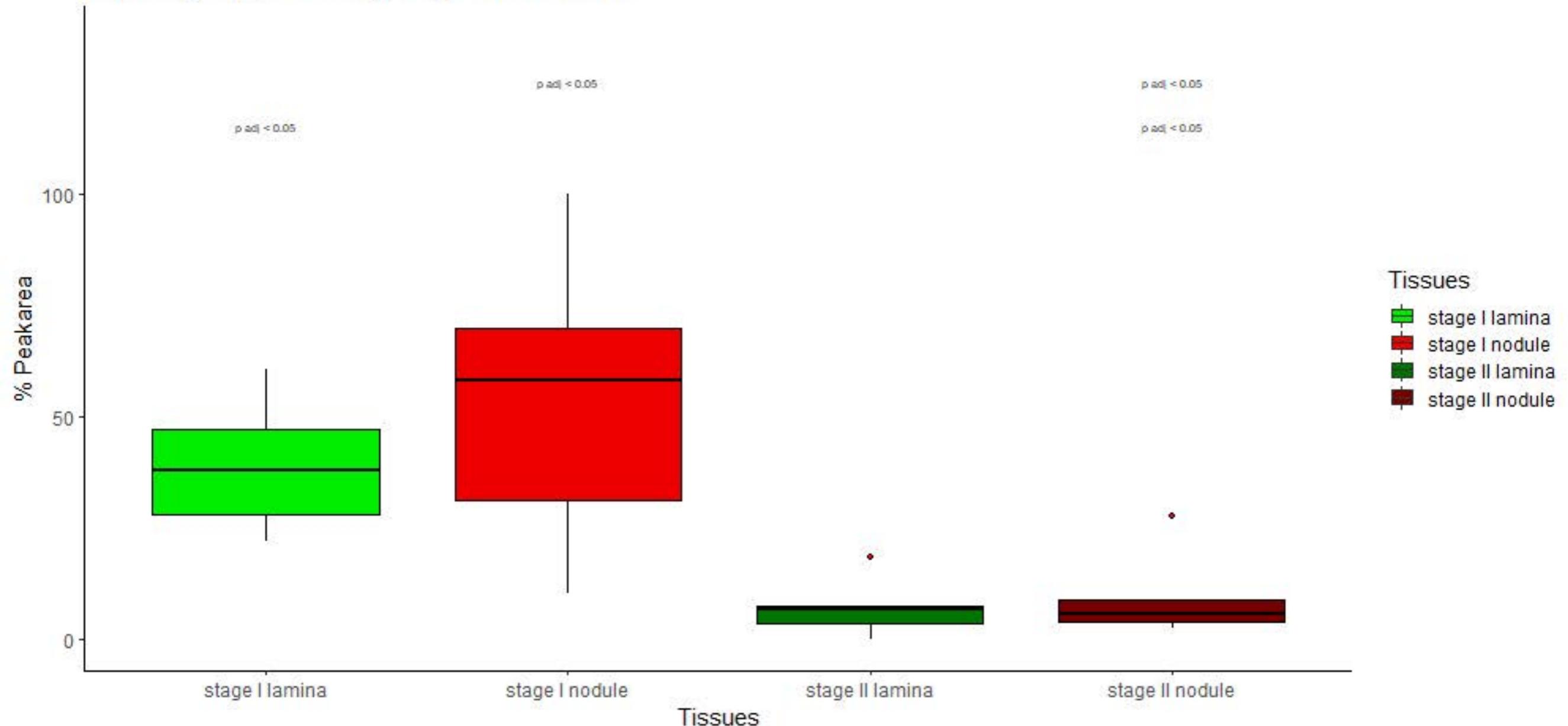
stage II lamina

stage II nodule

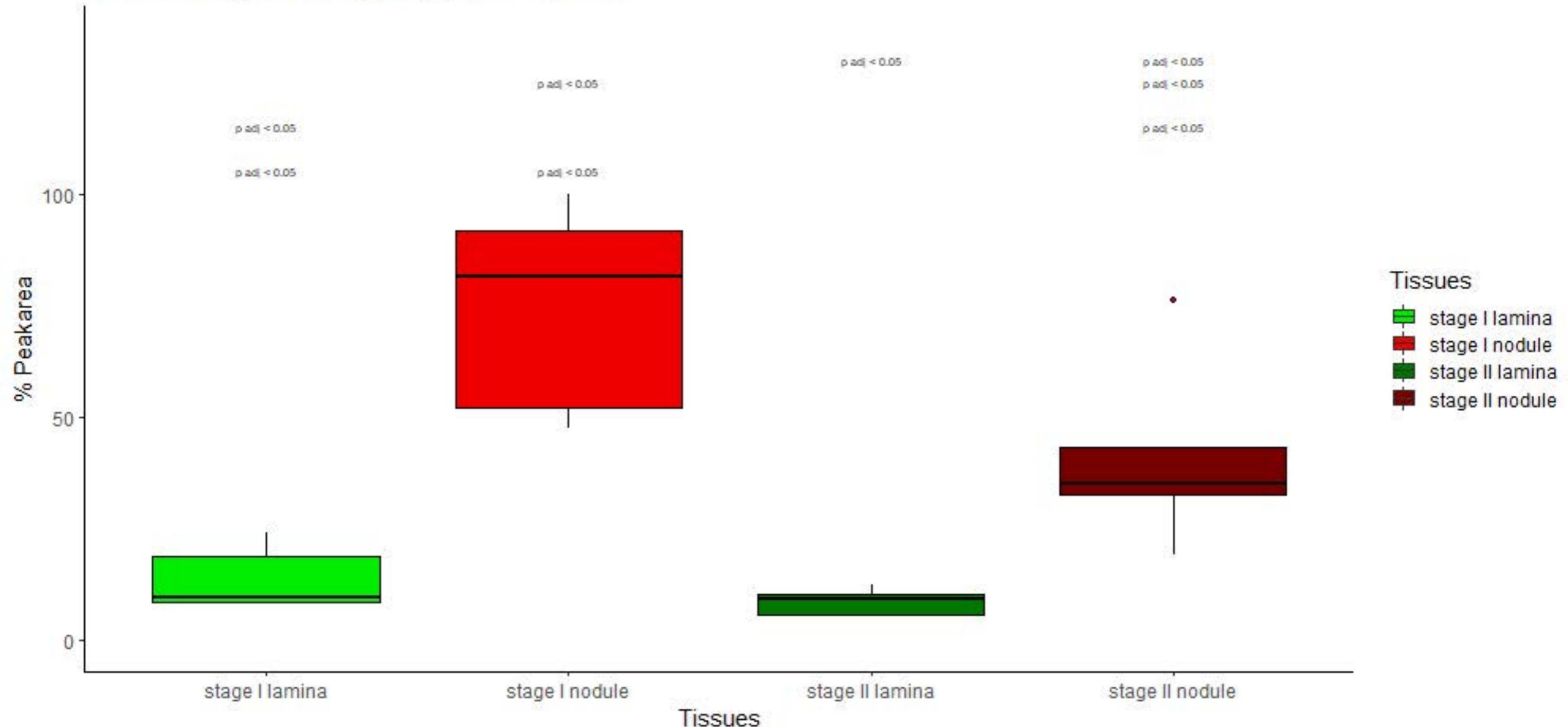
Tissues



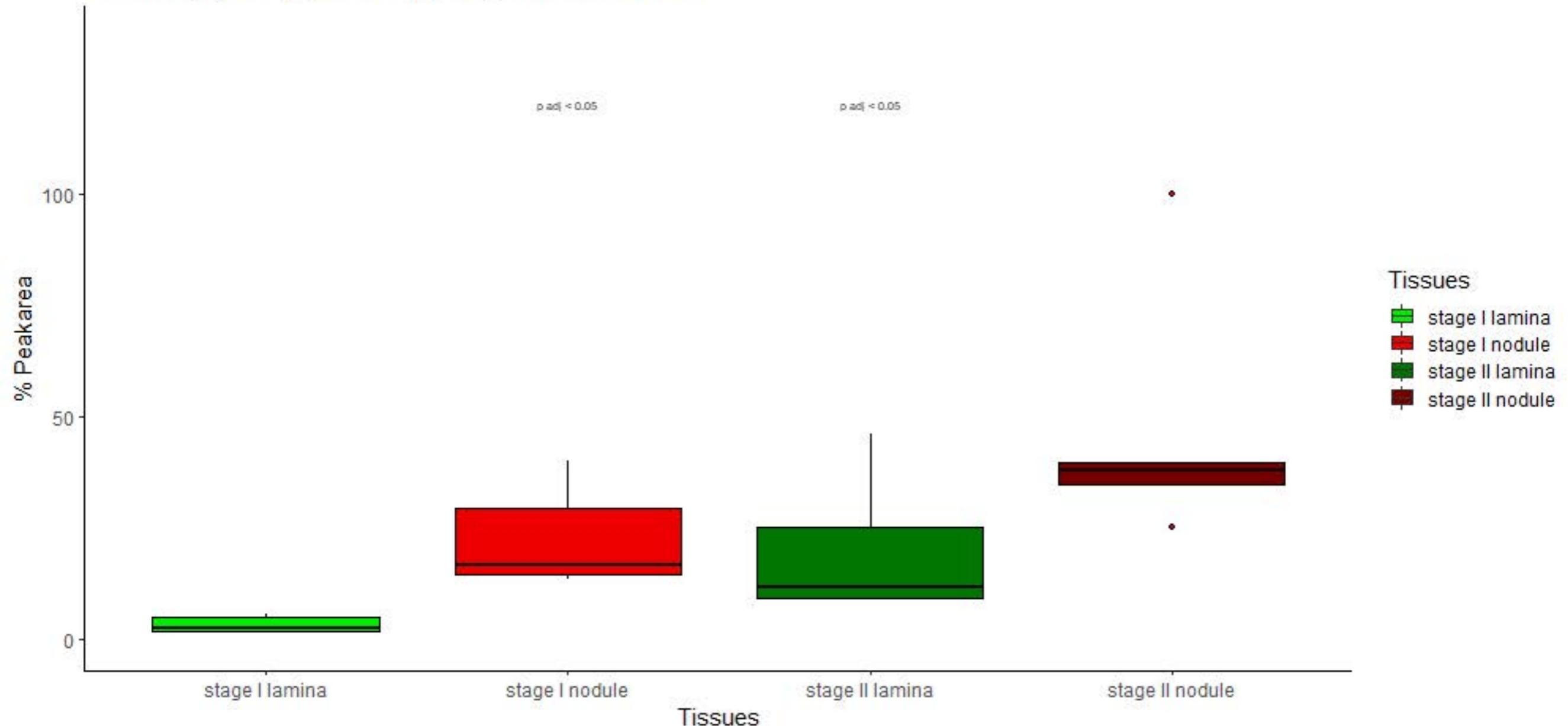
Asparagine_RT:2.34_min_m/z:133.0608



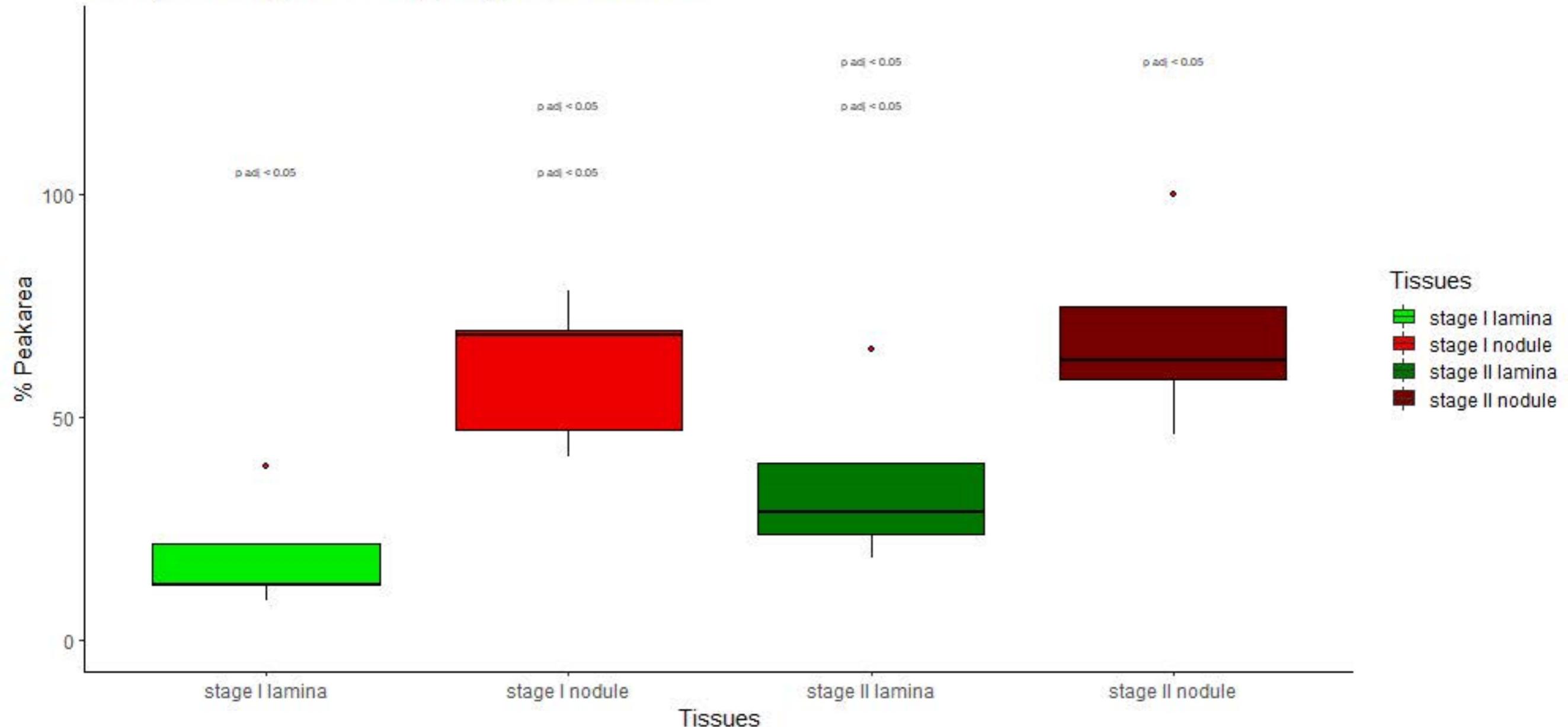
Methionine_RT:3.43_min_m/z:150.0583



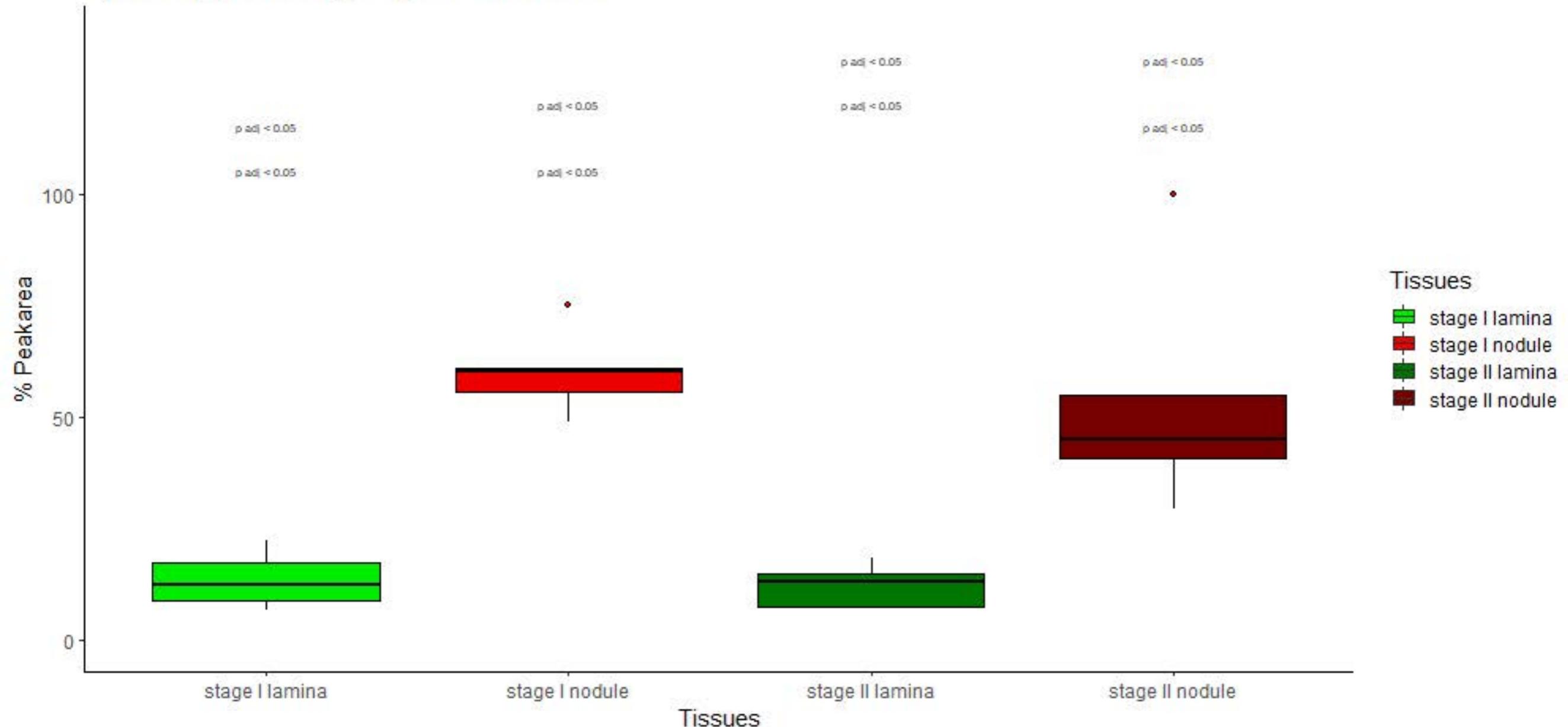
Trimethyllysine_RT:2.18_min_m/z:189.1598



Phenylalanine_RT:11.48_min_m/z:166.0863

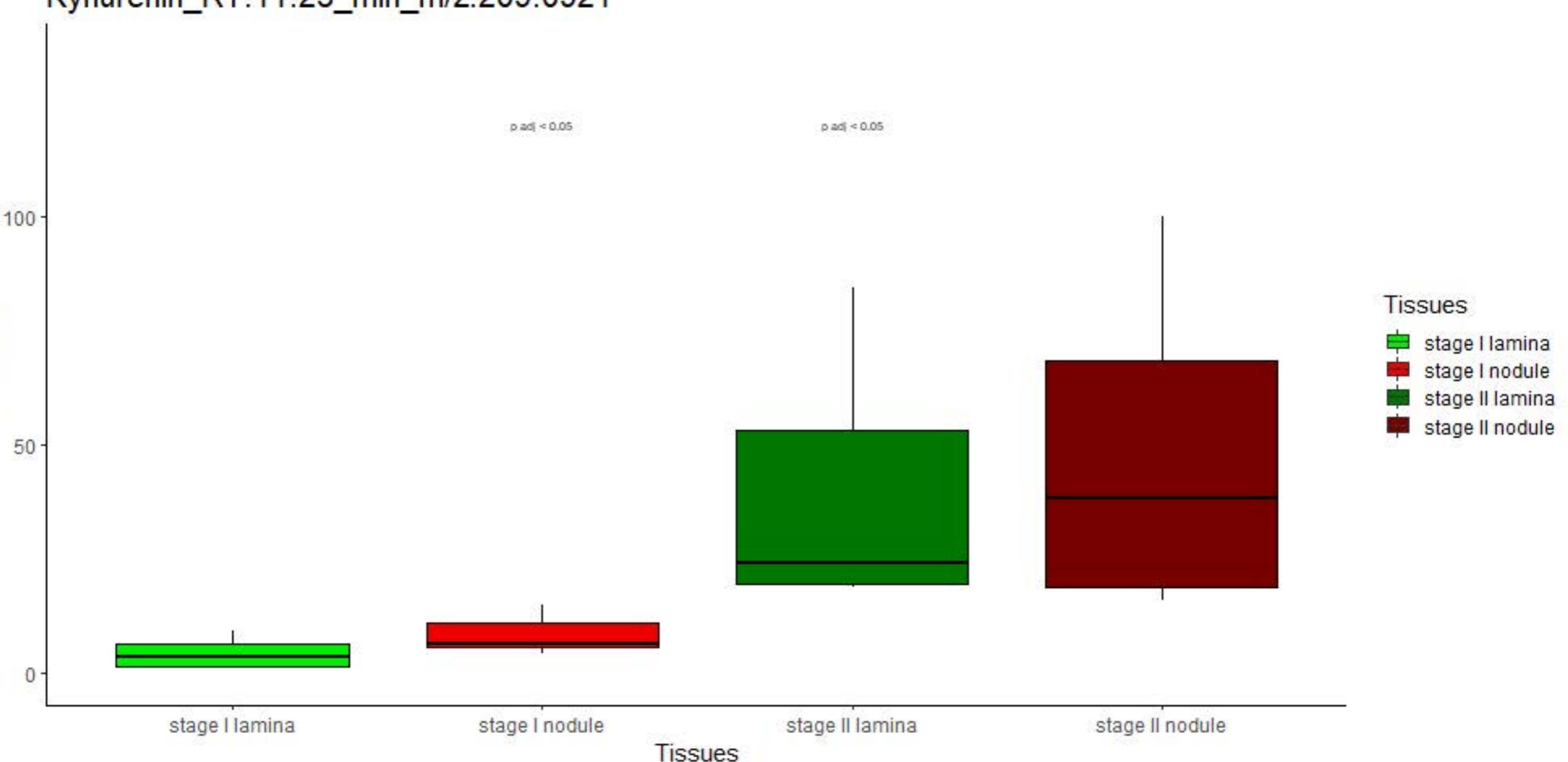


Tyrosine_RT:5.43_min_m/z:182.0812

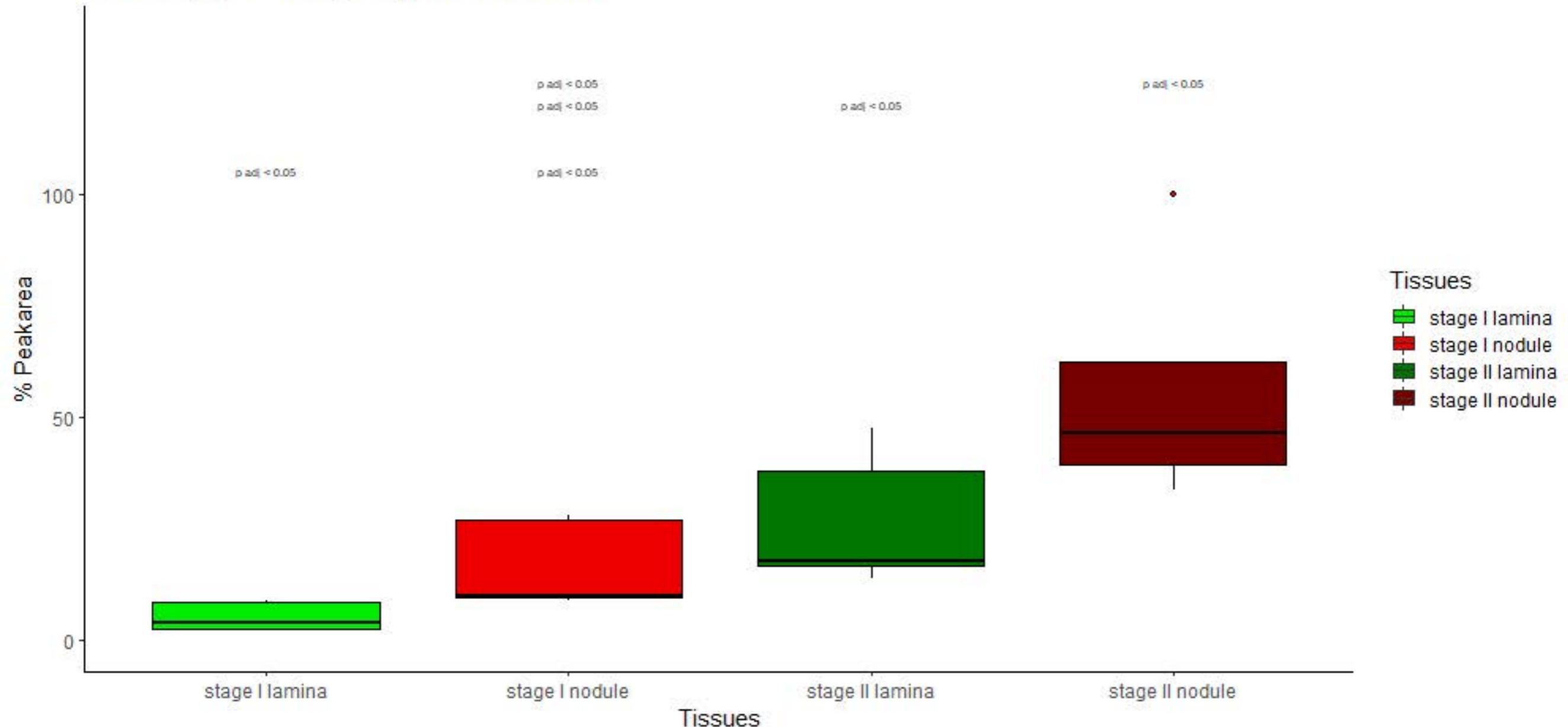


Kynurenin_RT:11.23_min_m/z:209.0921

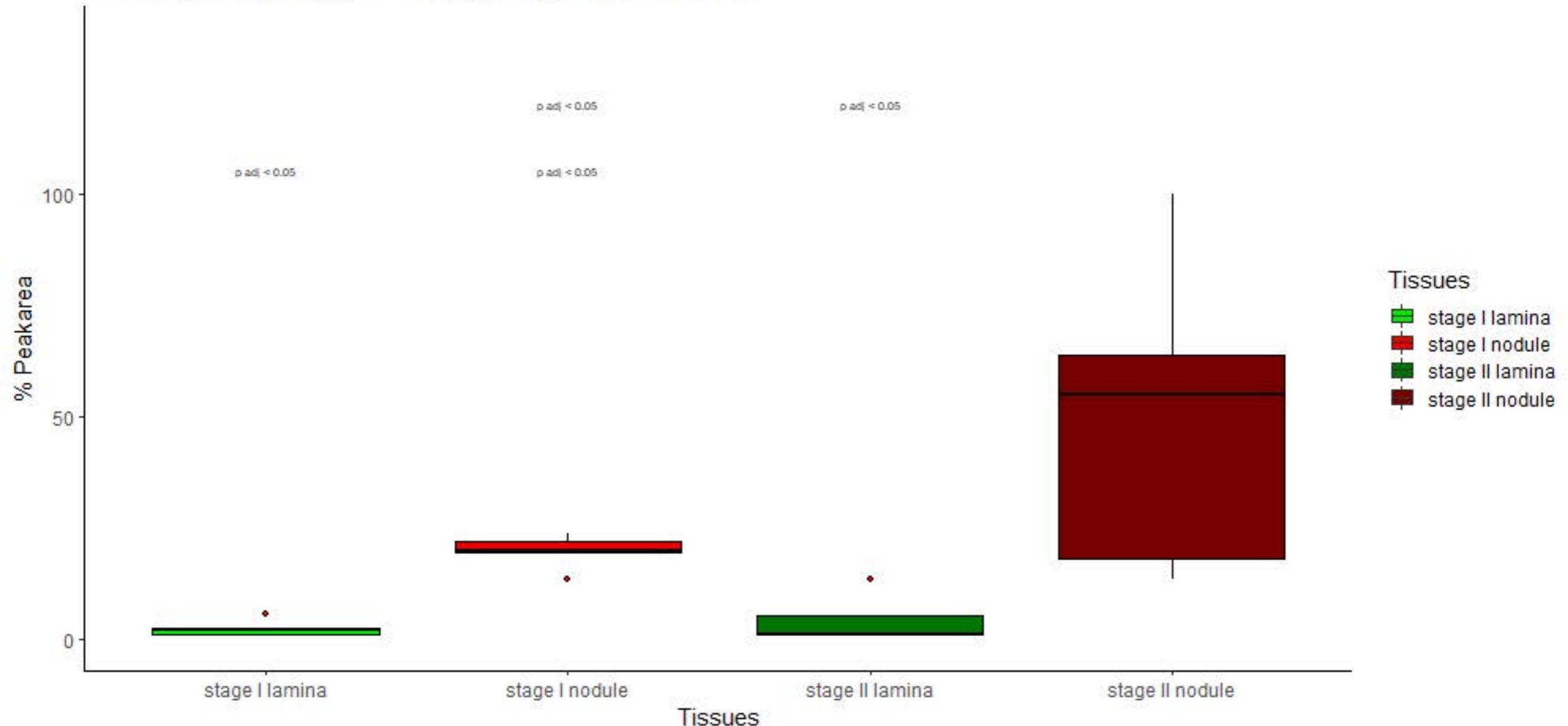
% Peakarea



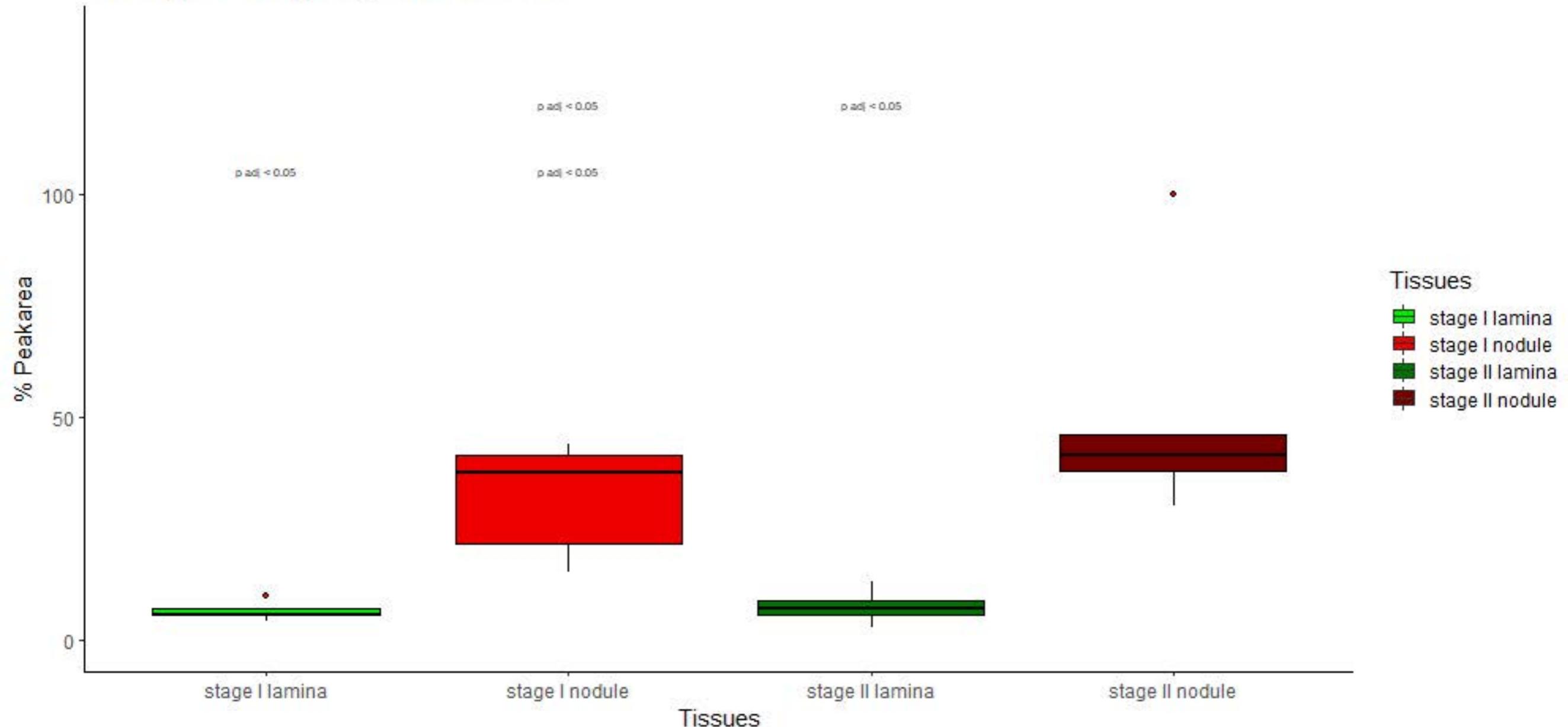
Creatine_RT:2.64_min_m/z:132.0768



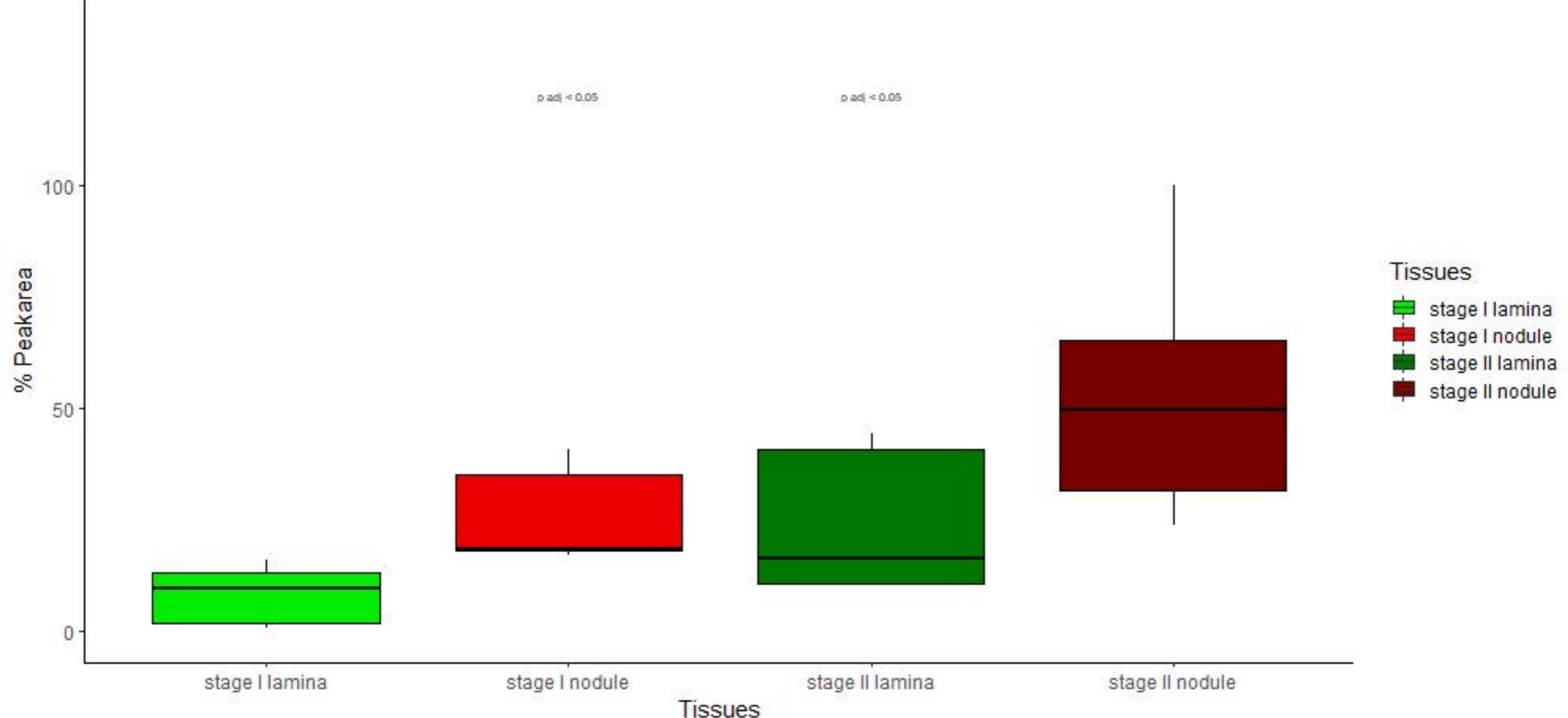
N-Acetylserotonin_RT:20.76_min_m/z:219.1128



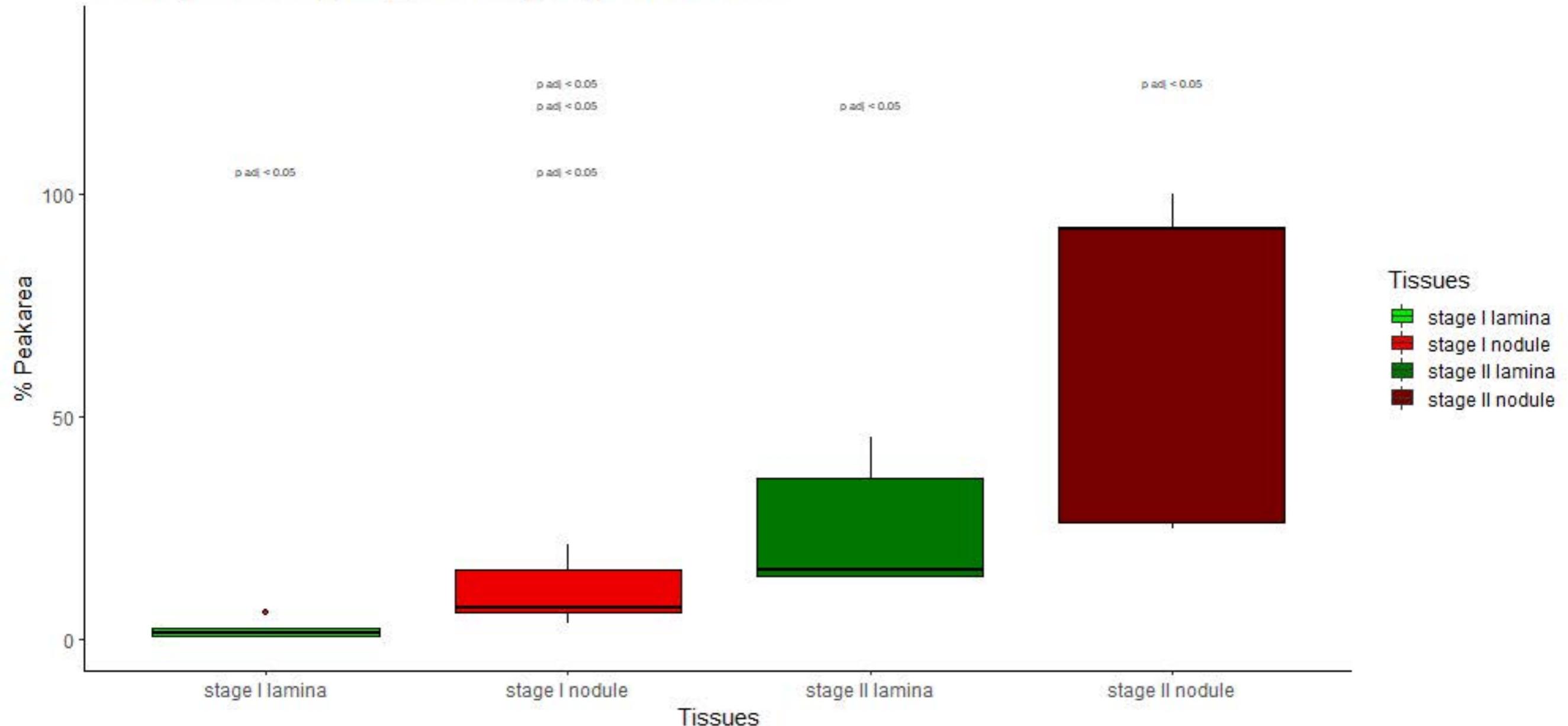
NAD+_RT:4.23_min_m/z:664.1164



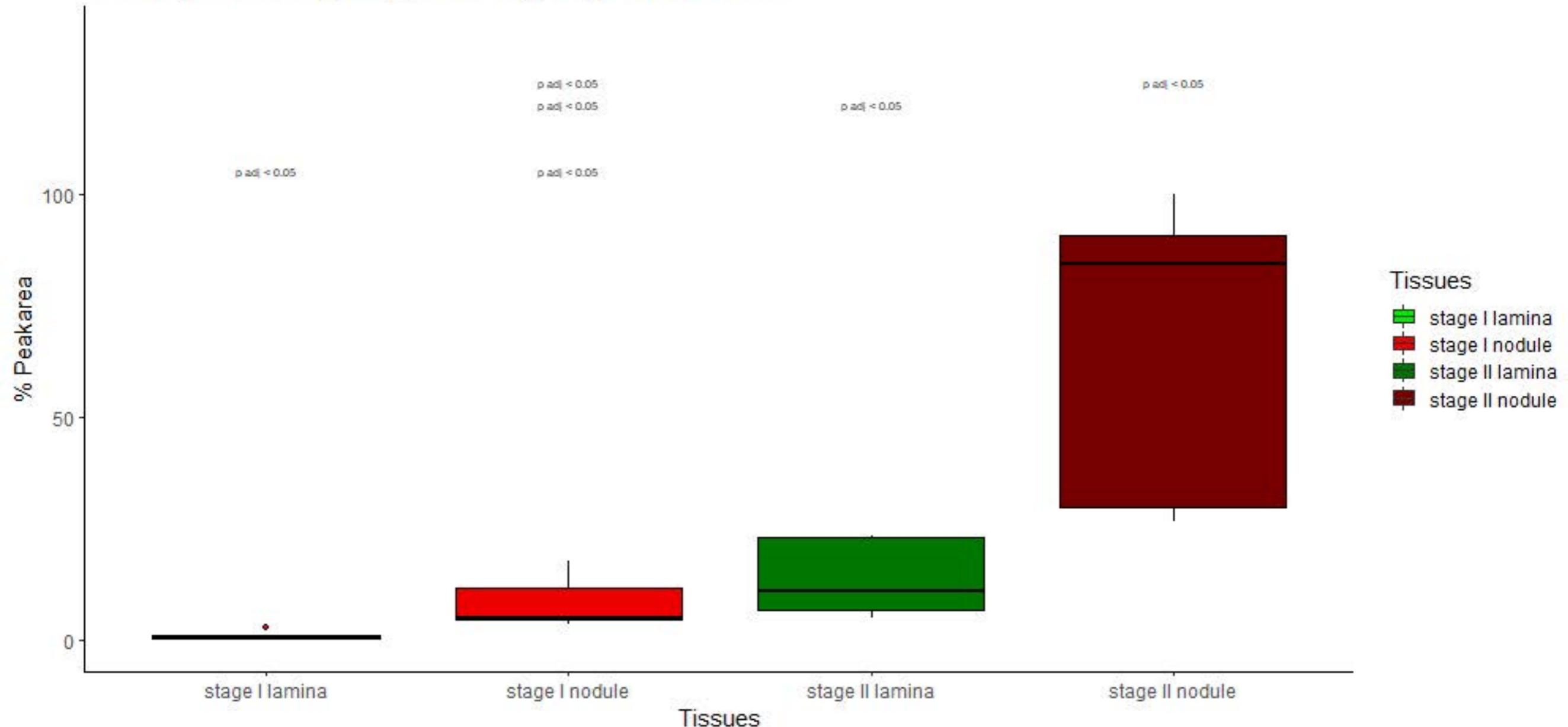
Leukopterin_RT:4.48_min_m/z:196.0465



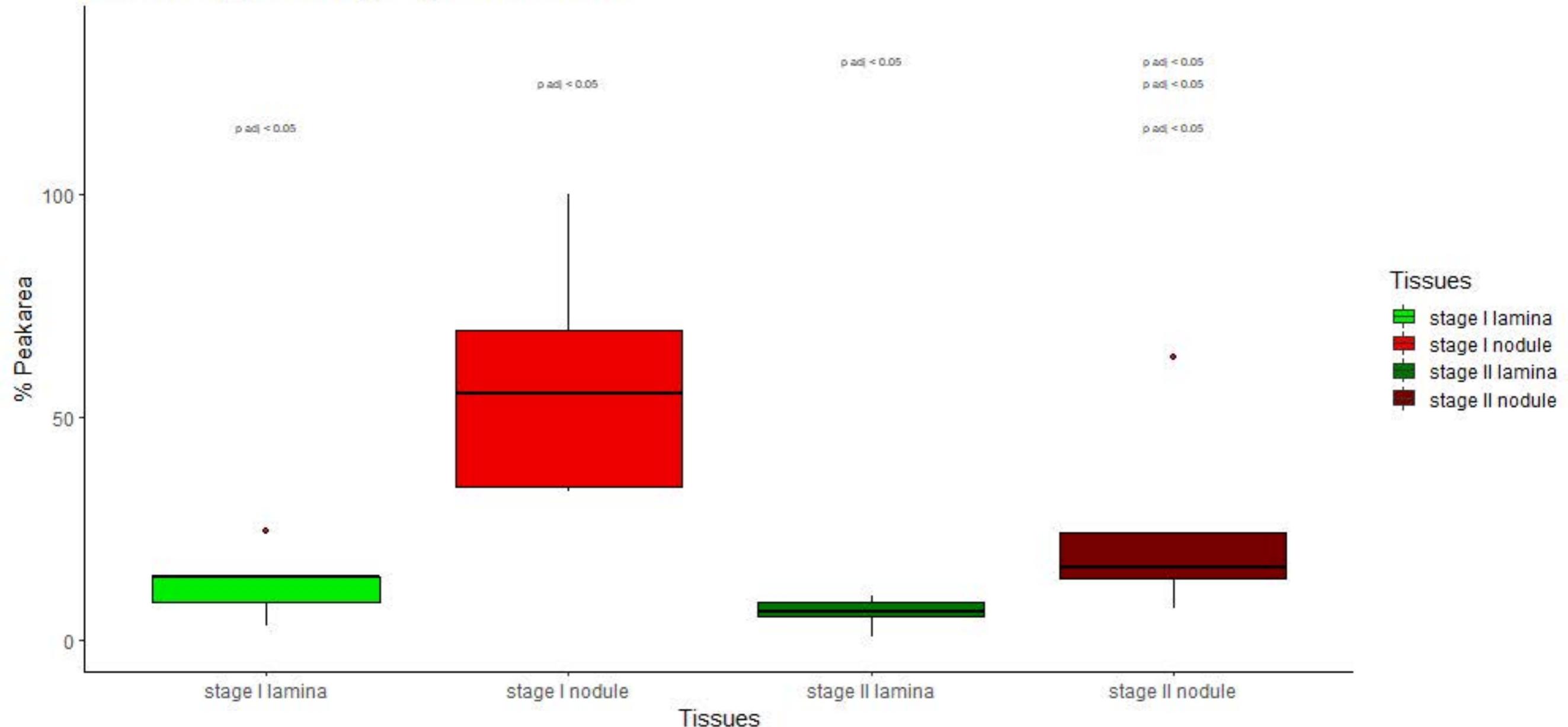
N-Acetylmuramic_acid_RT:3.95_min_m/z:294.1183



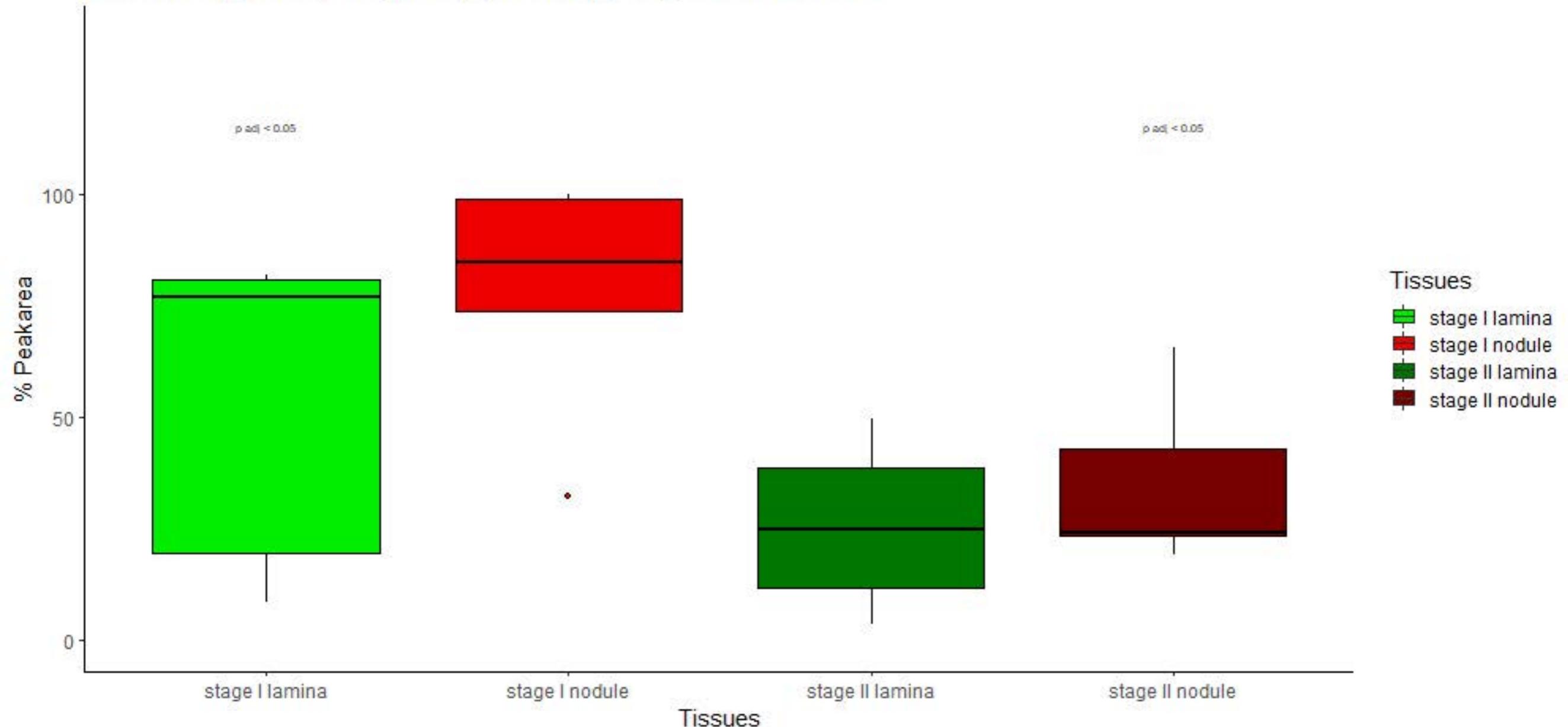
N-Acetylmuramic_acid_RT:6.49_min_m/z:294.1183



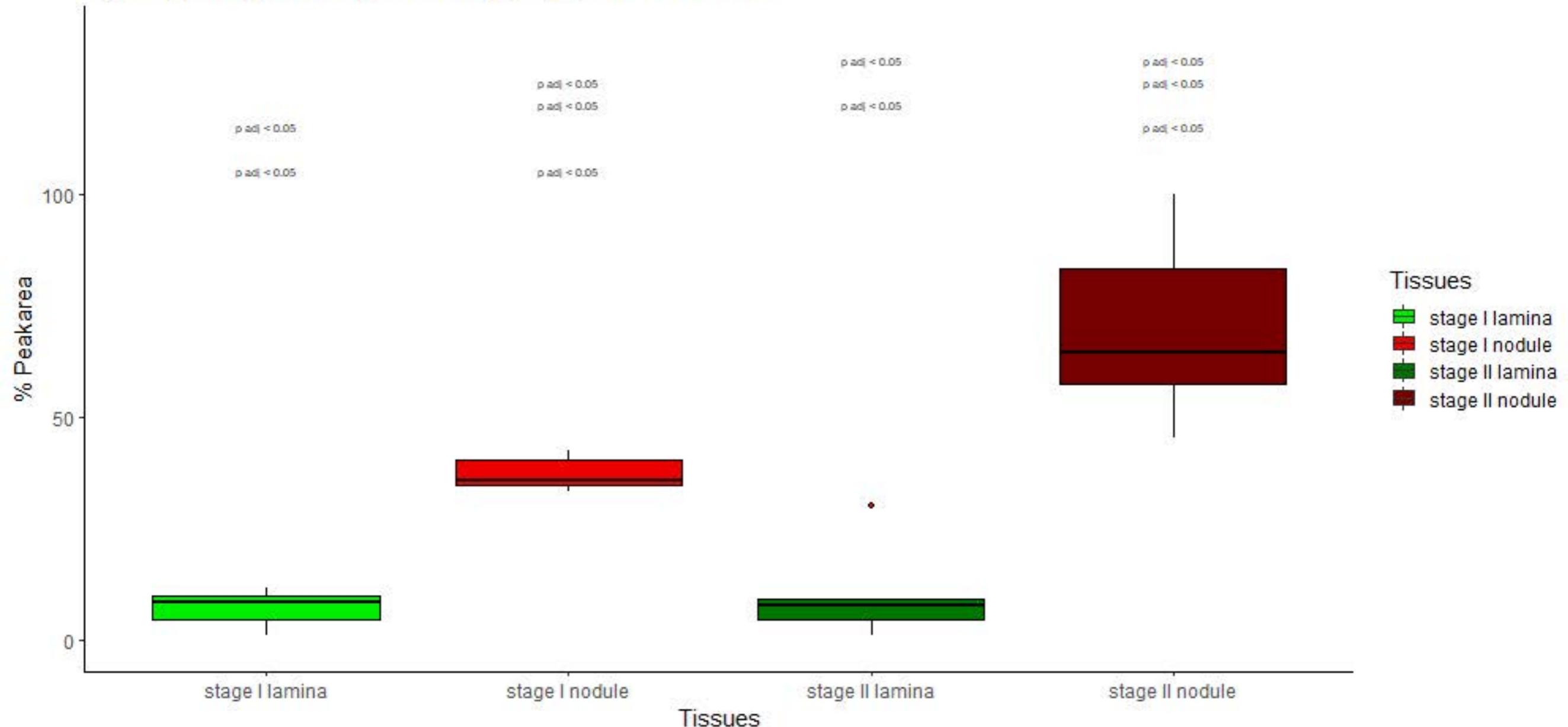
Adenosine_RT:8.09_min_m/z:268.1040



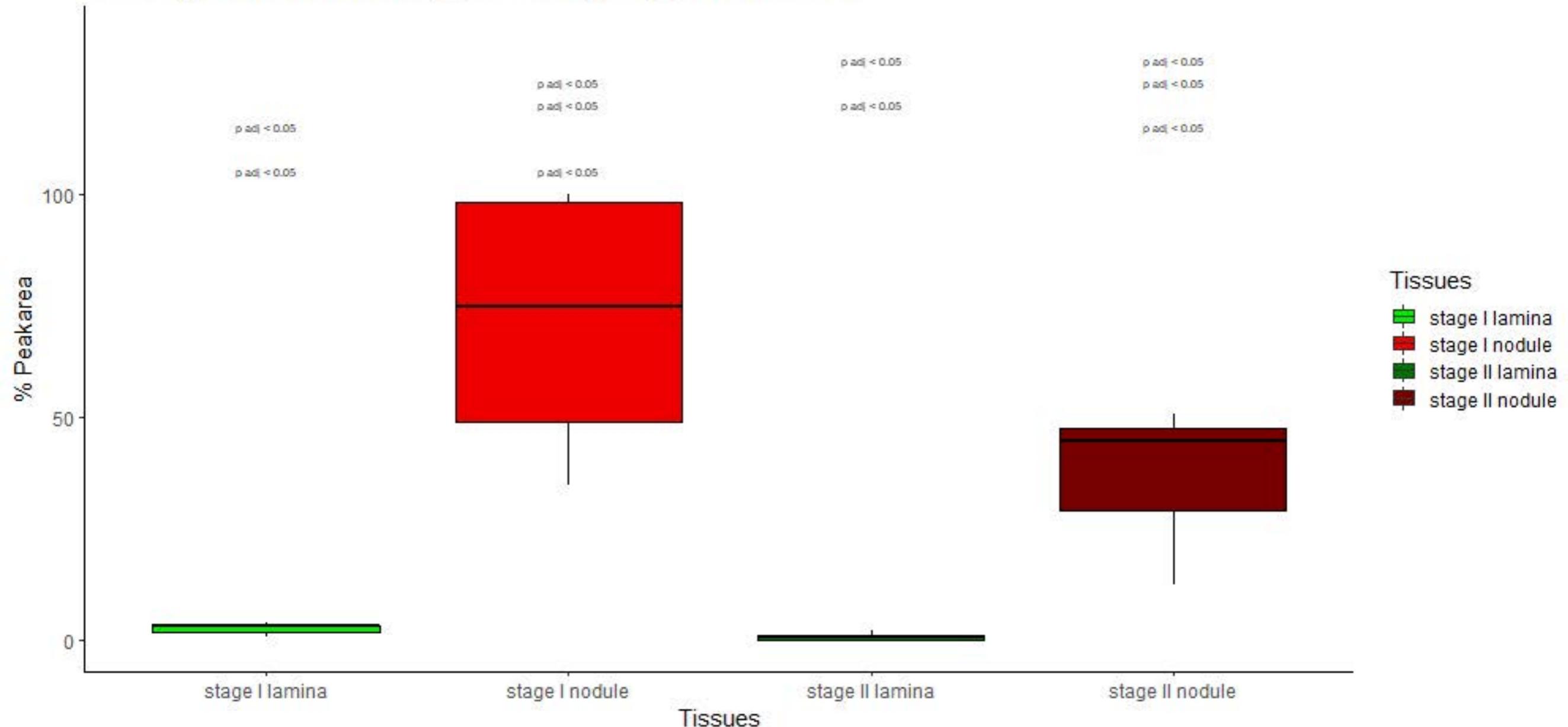
Adenosine_monophosphate_RT:3.30_min_m/z:348.0704



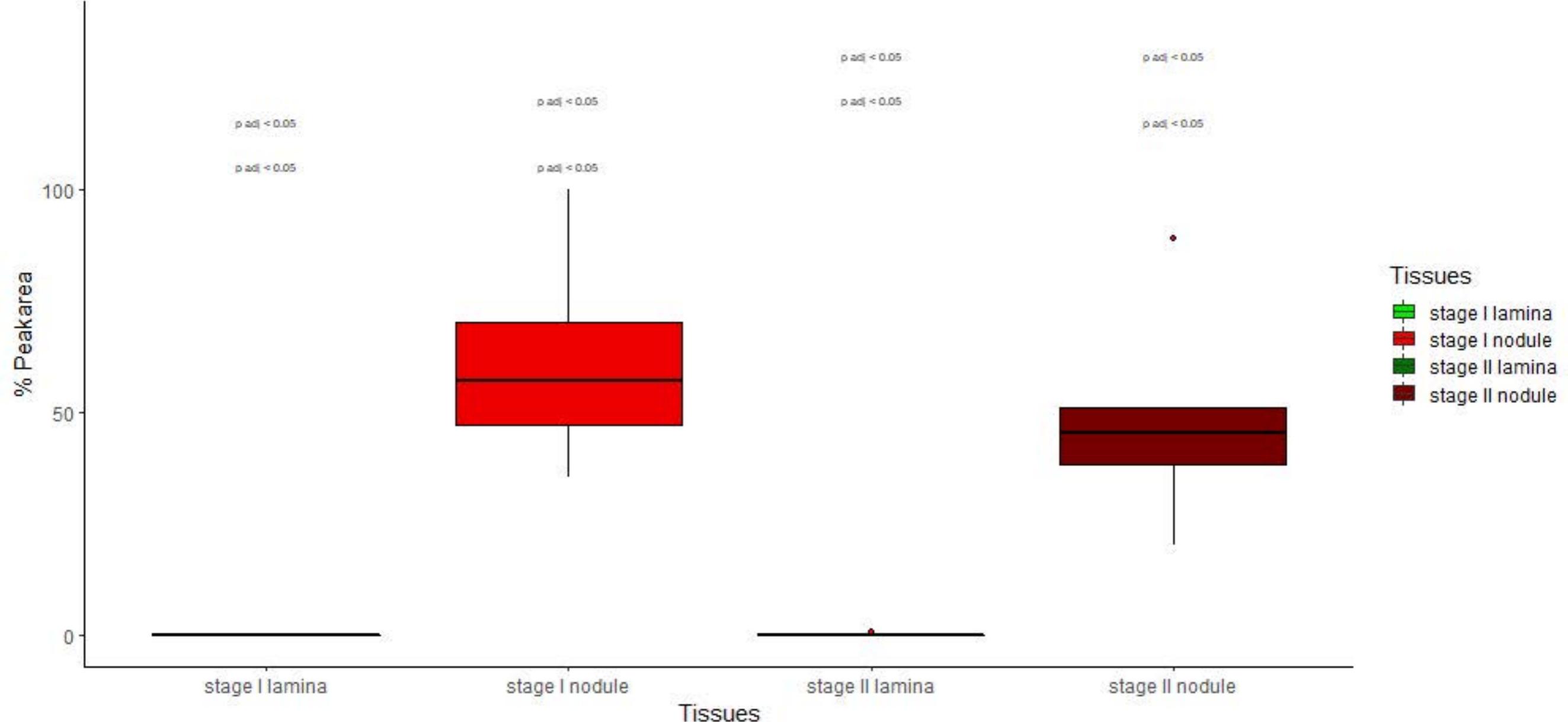
Cyclic_ADPRibose_RT:4.23_min_m/z:542.0680



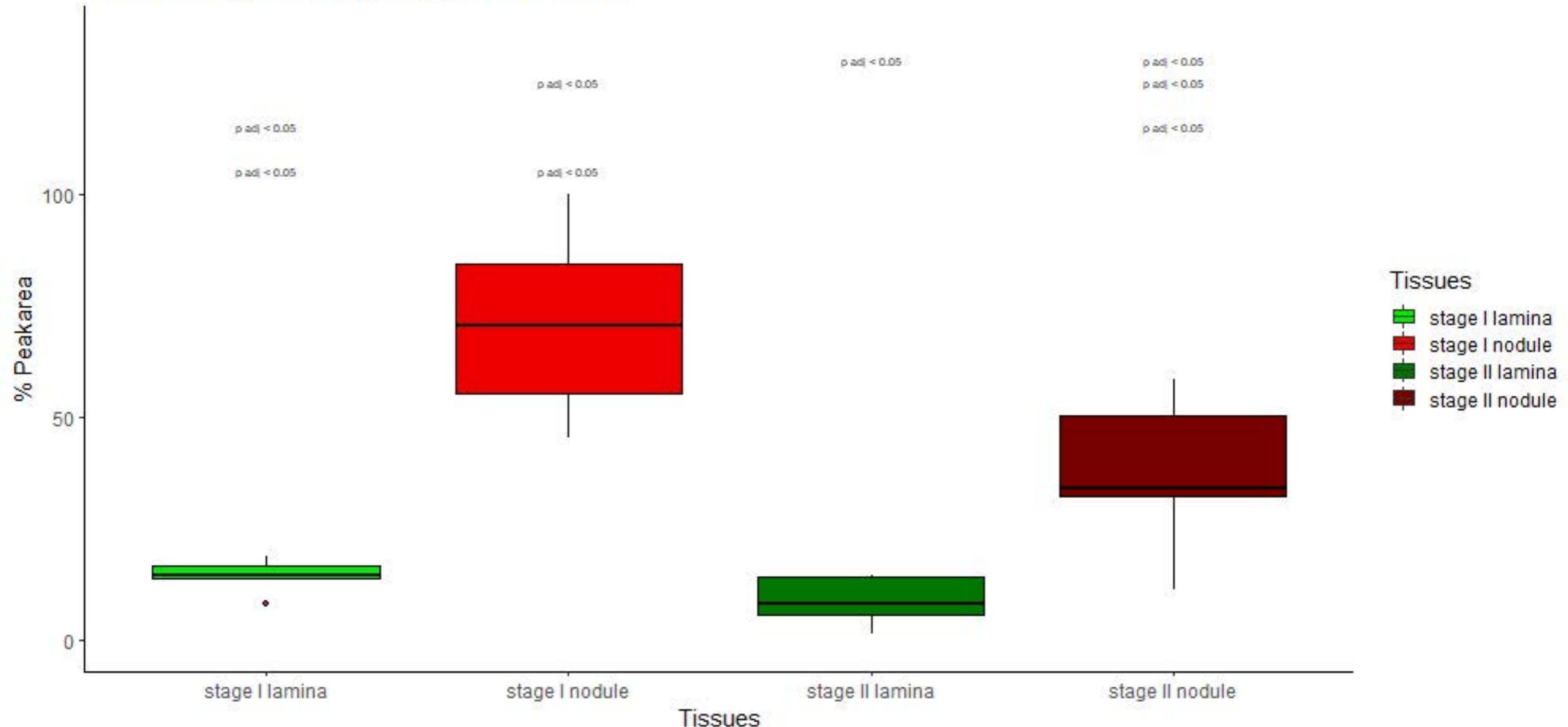
S-methyl-5'-thioadenosine_RT:15.96_min_m/z:298.0968



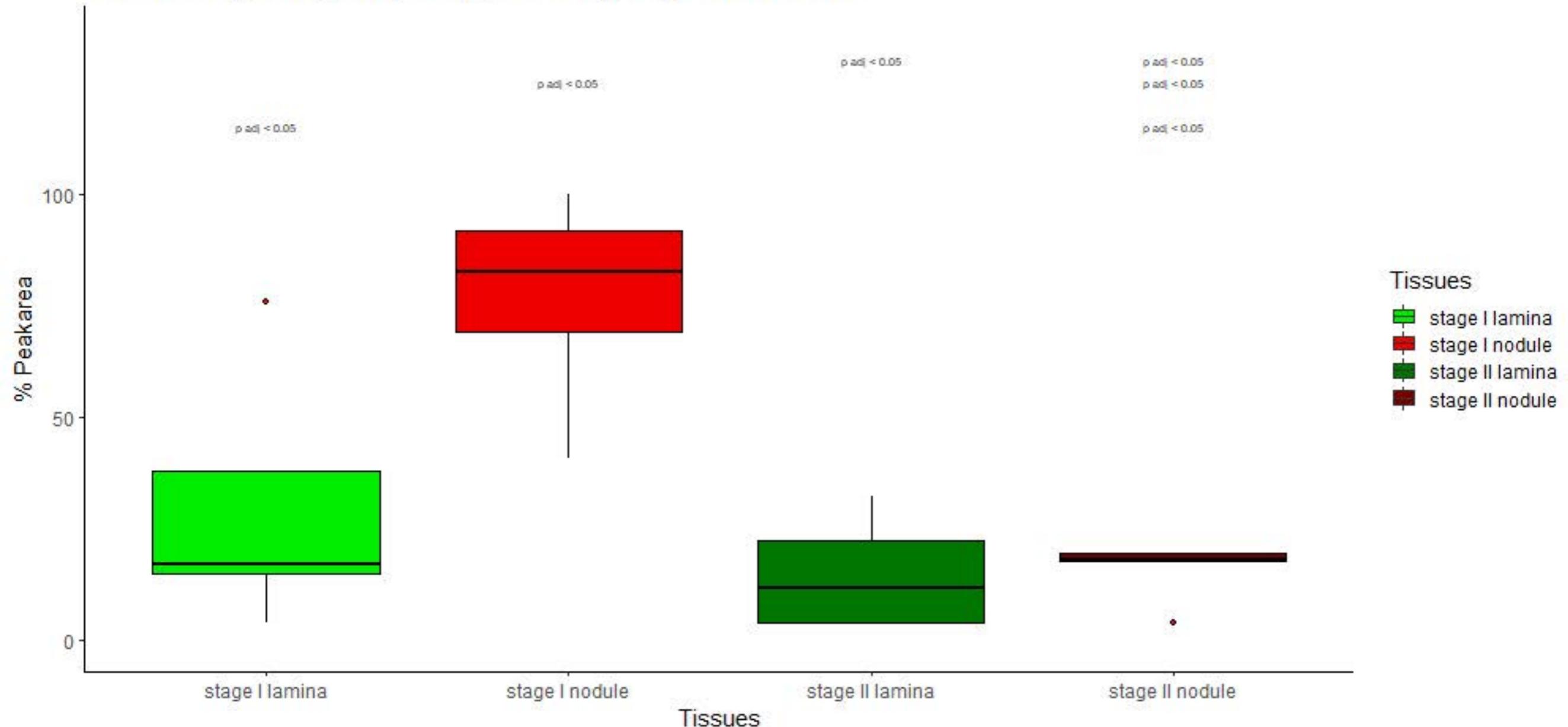
S-methyl-5'-thioadenosine_RT:3.14_min_m/z:298.0968



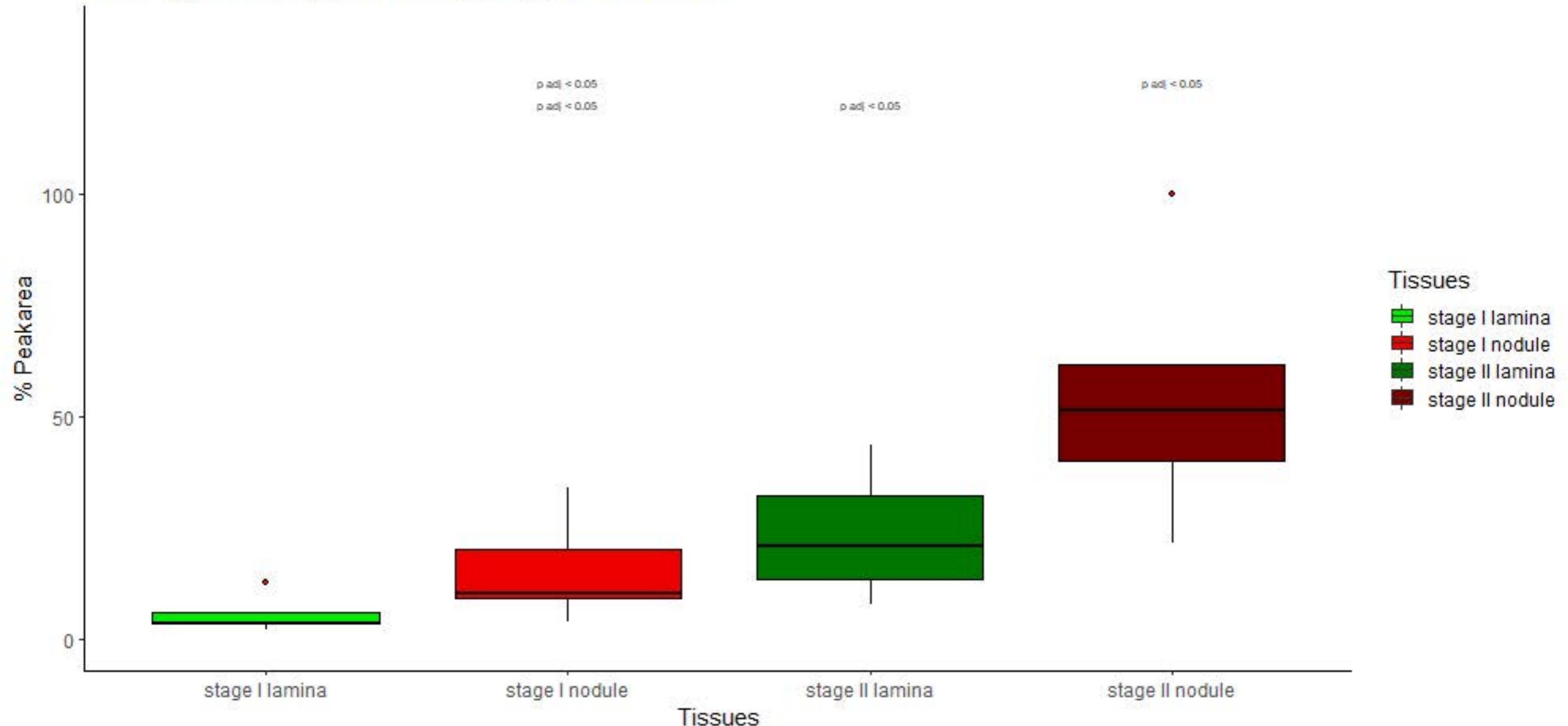
Guanosine_RT:9.92_min_m/z:284.0989



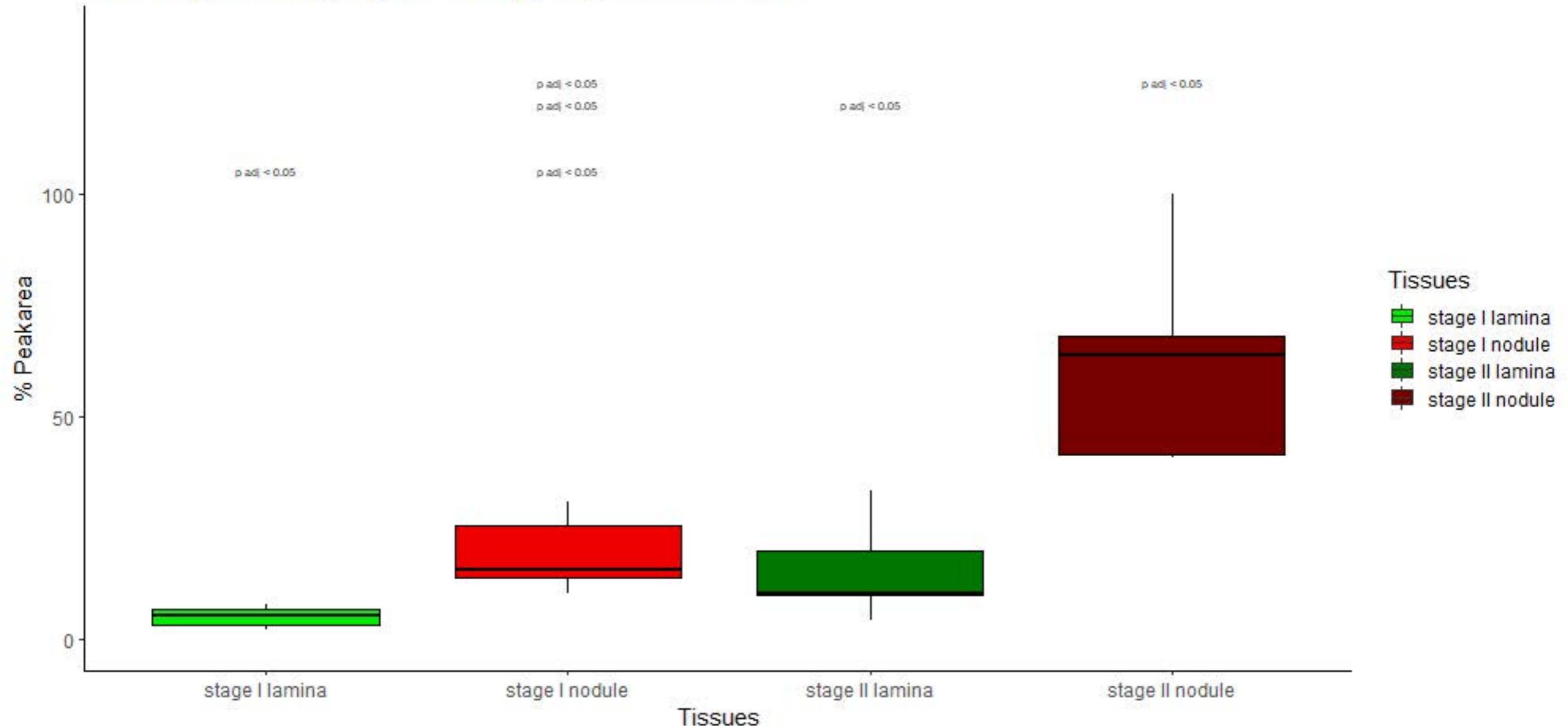
Guanosine_monophosphate_RT:3.43_min_m/z:364.0653



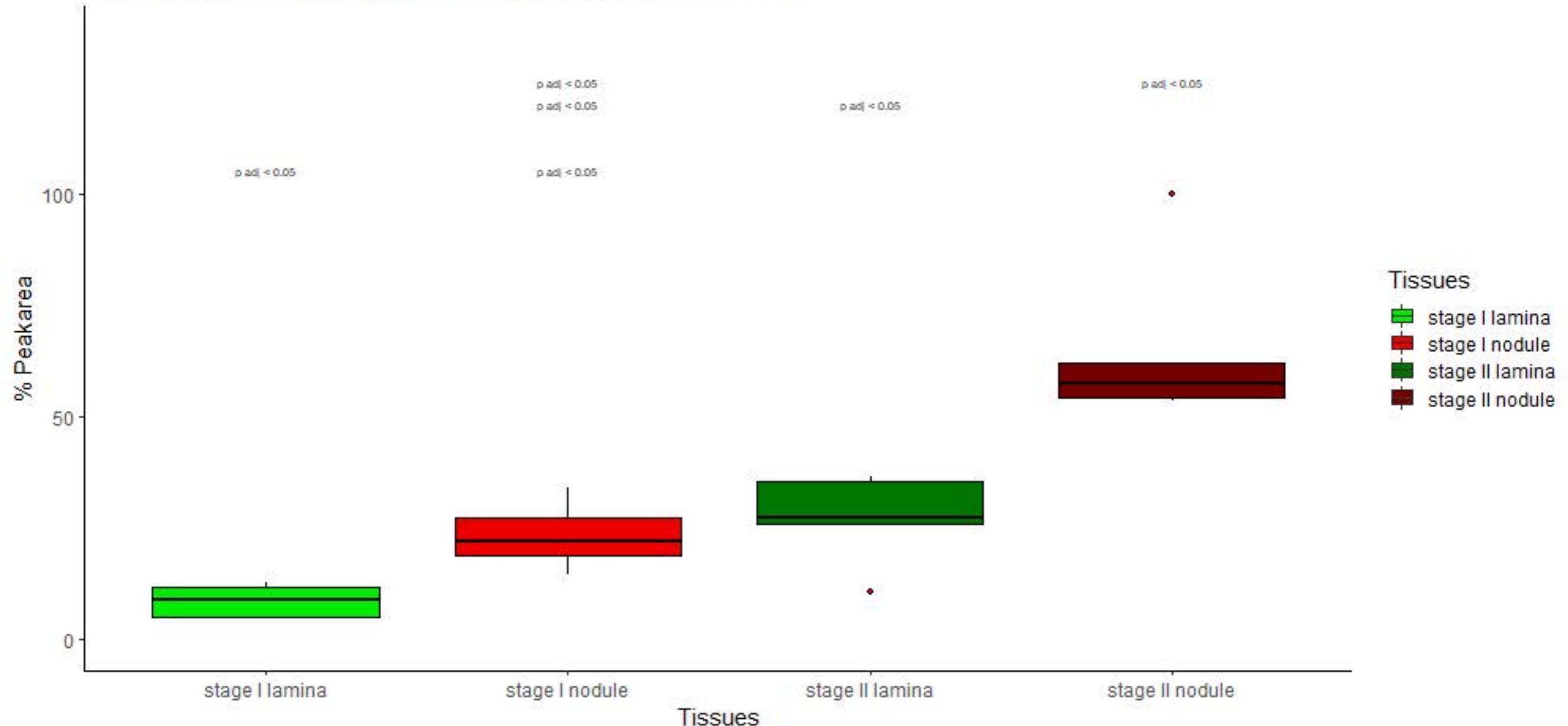
Zeatin glucoside_RT:14.96_min_m/z:382.1721



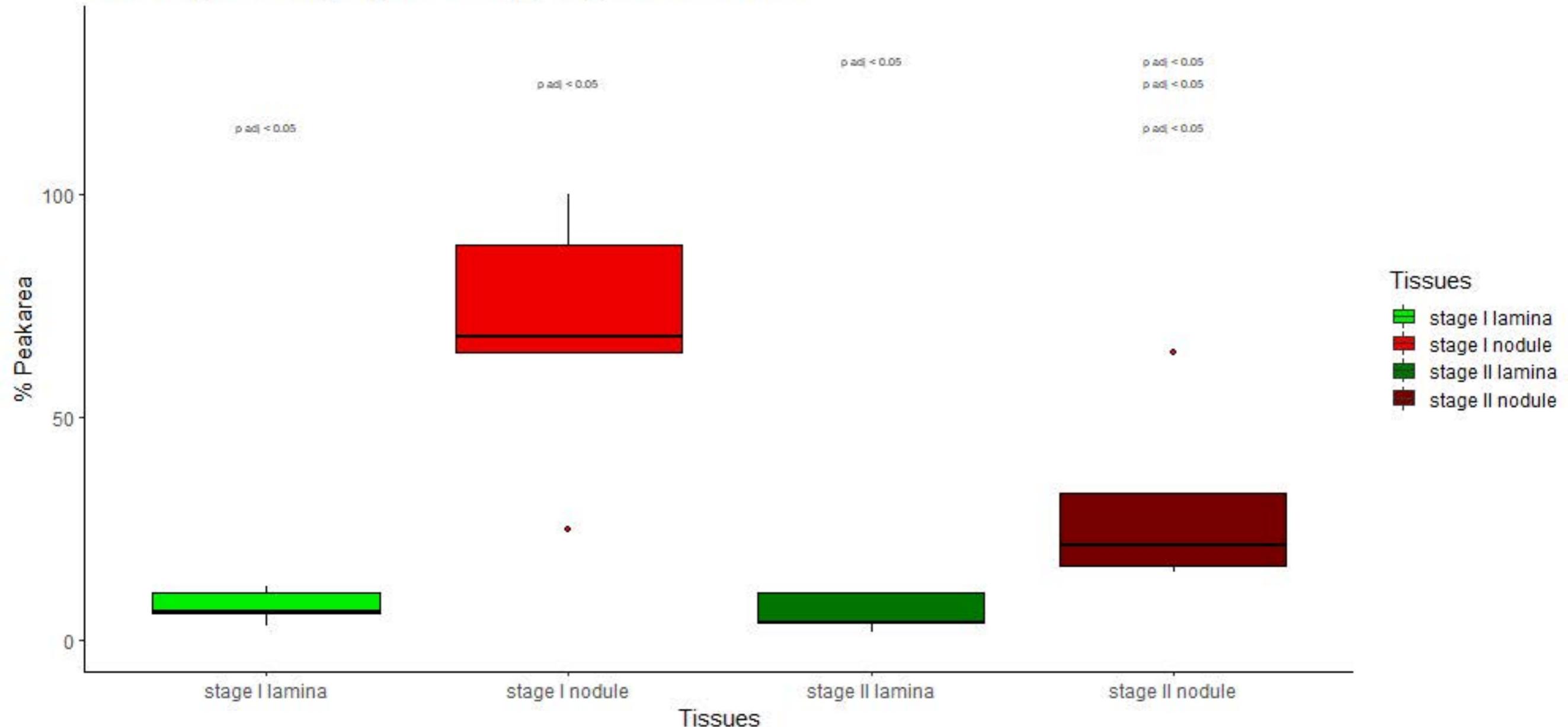
Putative_aminosugar_RT:13.96_min_m/z:647.2878



Putative_aminosugar_RT:14.14_min_m/z:648.2713



Putative_aminosugar_RT:14.38_min_m/z:850.3661



Putative_aminosugar_RT:14.47_min_m/z:851.3517

% Peakarea

100

50

0

Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

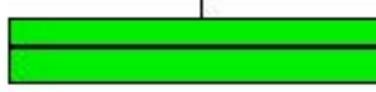
stage I lamina

stage I nodule

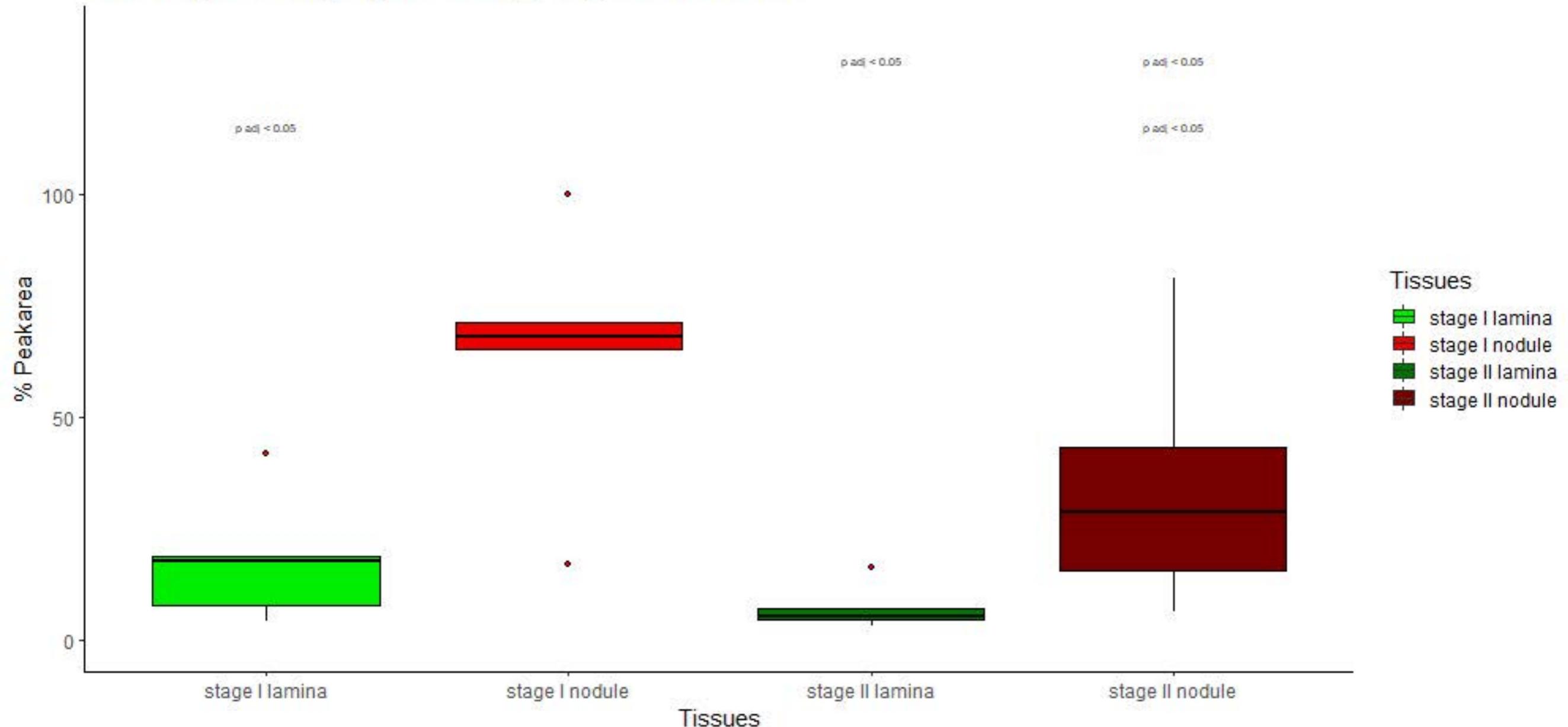
stage II lamina

stage II nodule

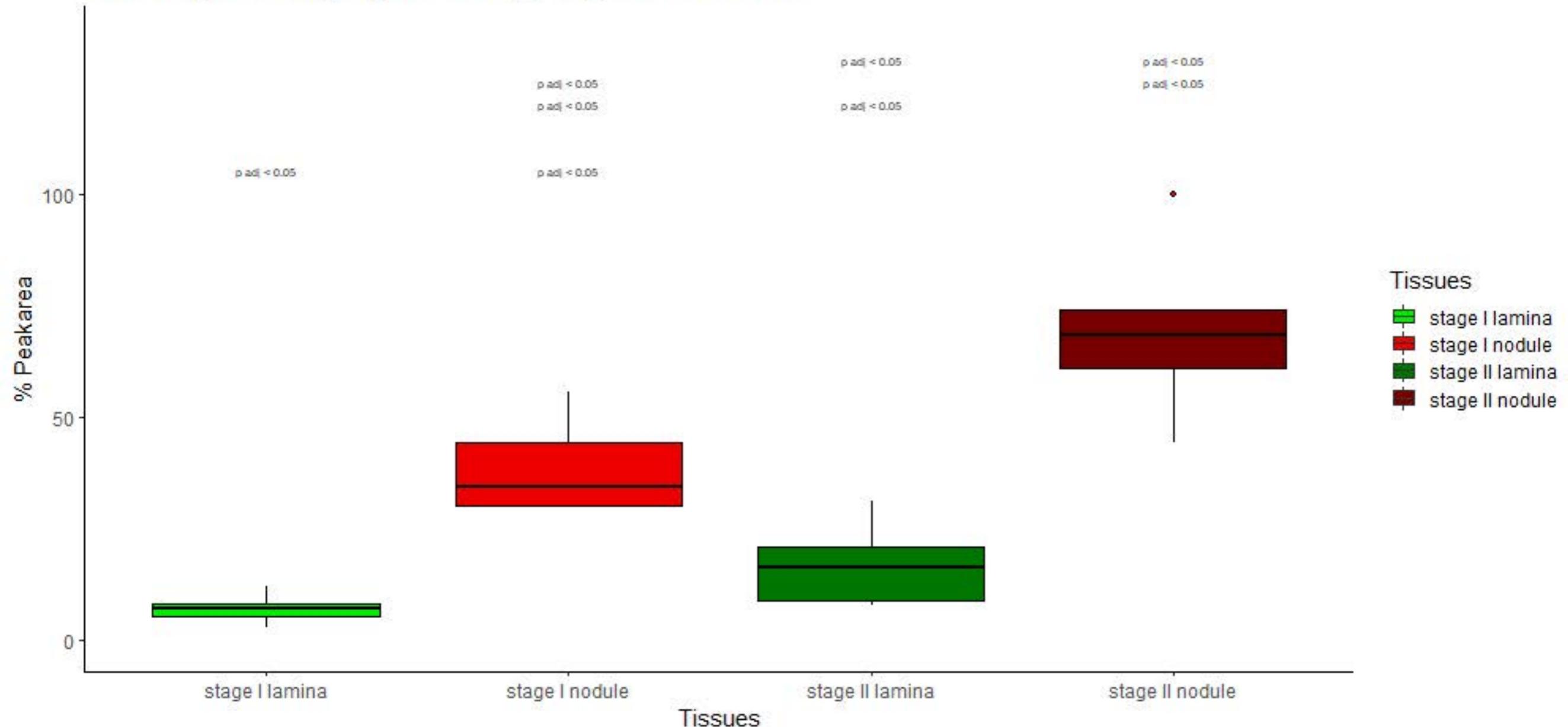
Tissues



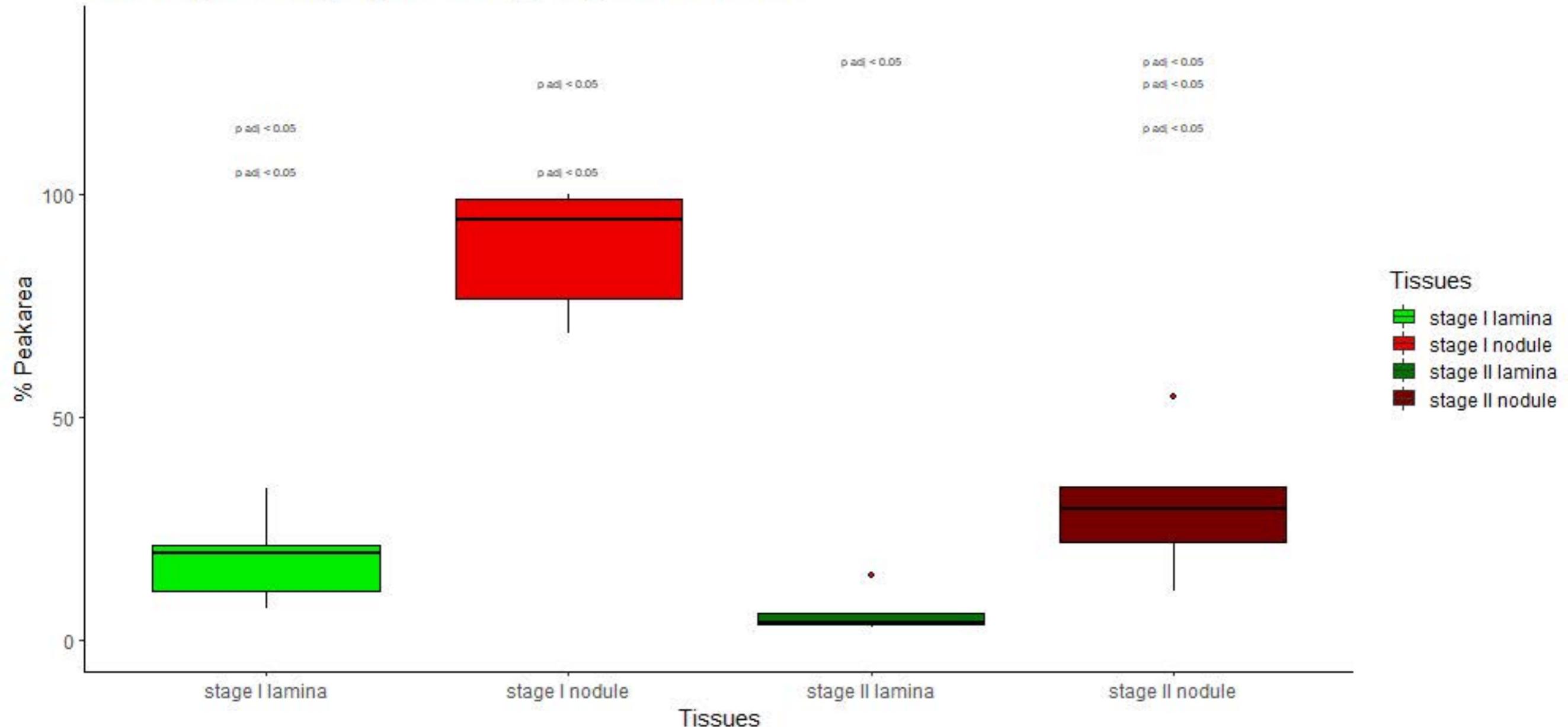
Putative_aminosugar_RT:15.24_min_m/z:689.2983



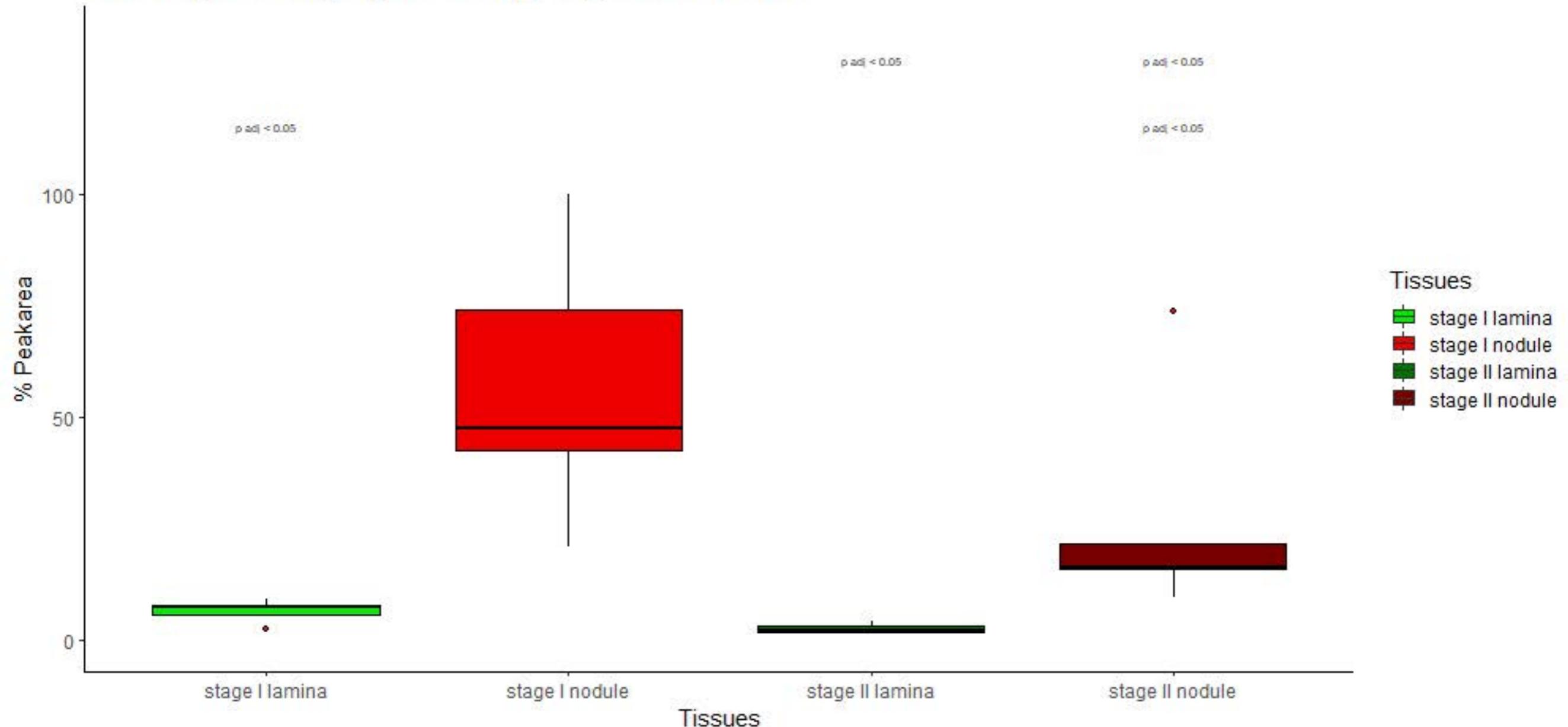
Putative_aminosugar_RT:15.31_min_m/z:719.3095



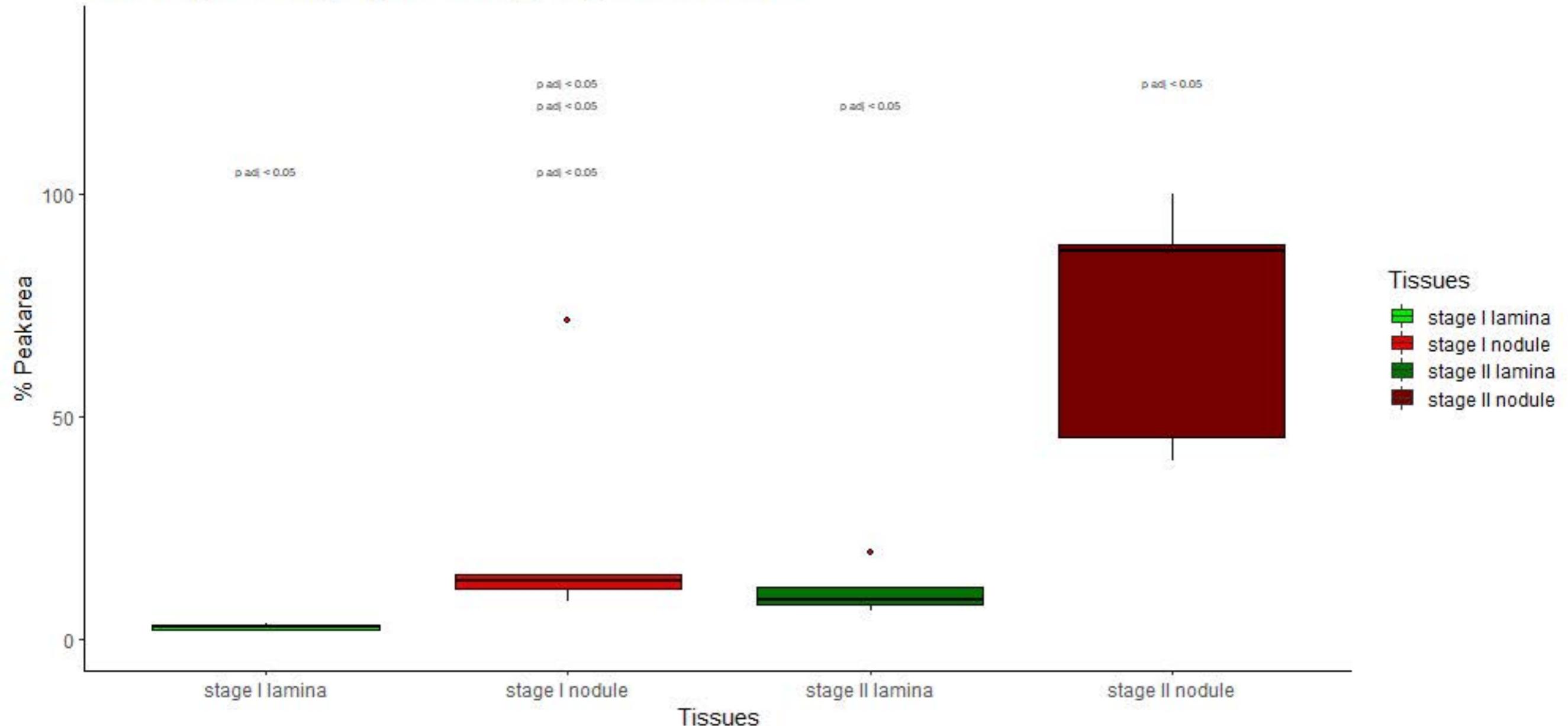
Putative_aminosugar_RT:15.31_min_m/z:922.3883



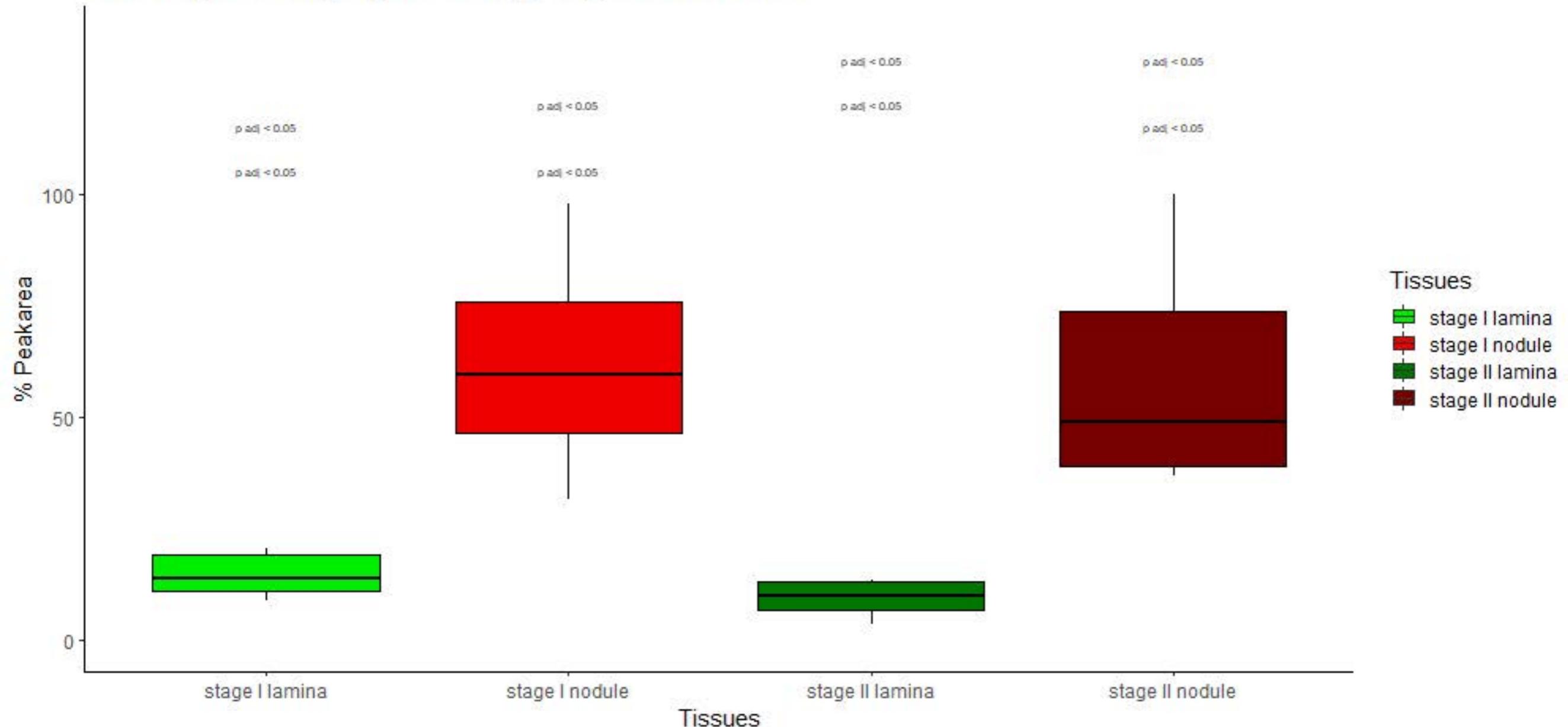
Putative_aminosugar_RT:15.56_min_m/z:892.3788



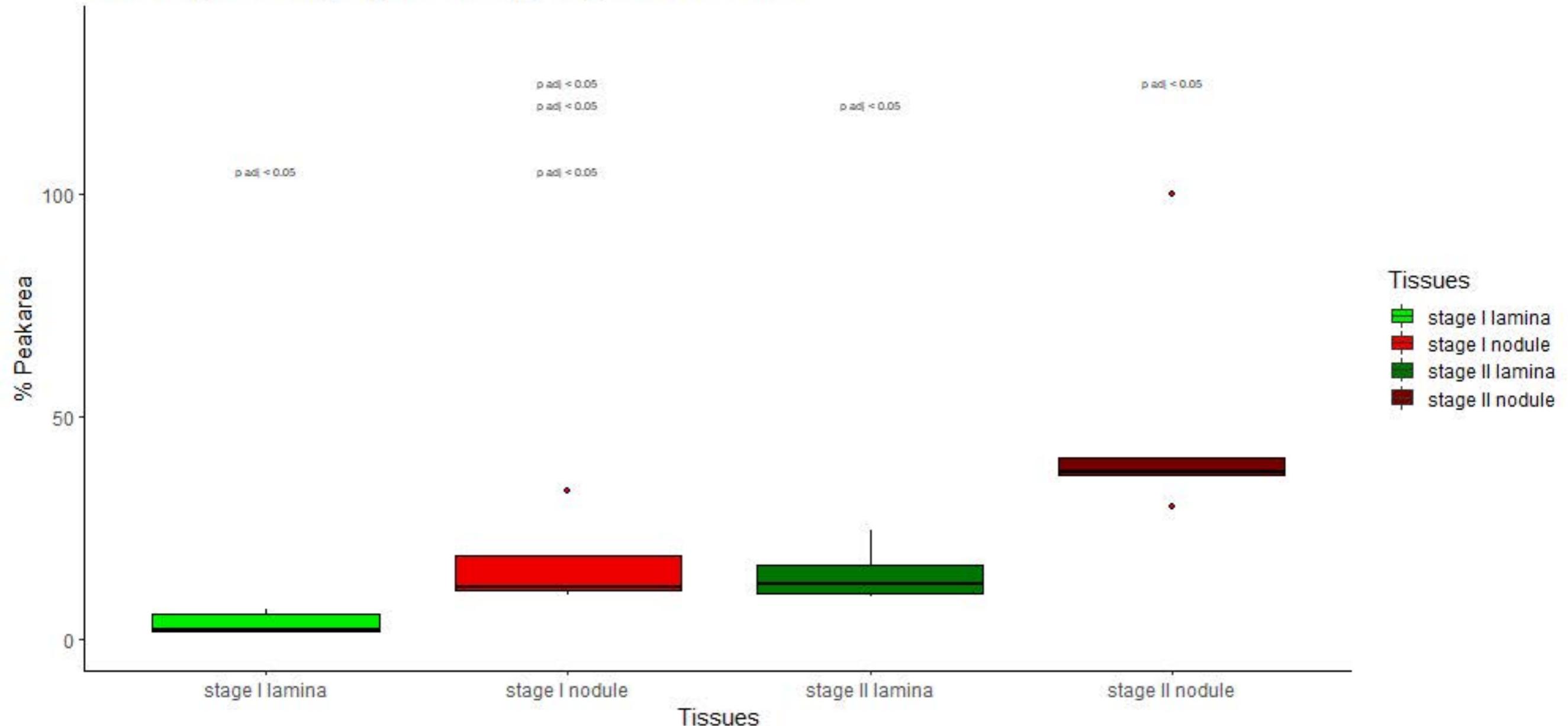
Putative_aminosugar_RT:15.74_min_m/z:790.3464



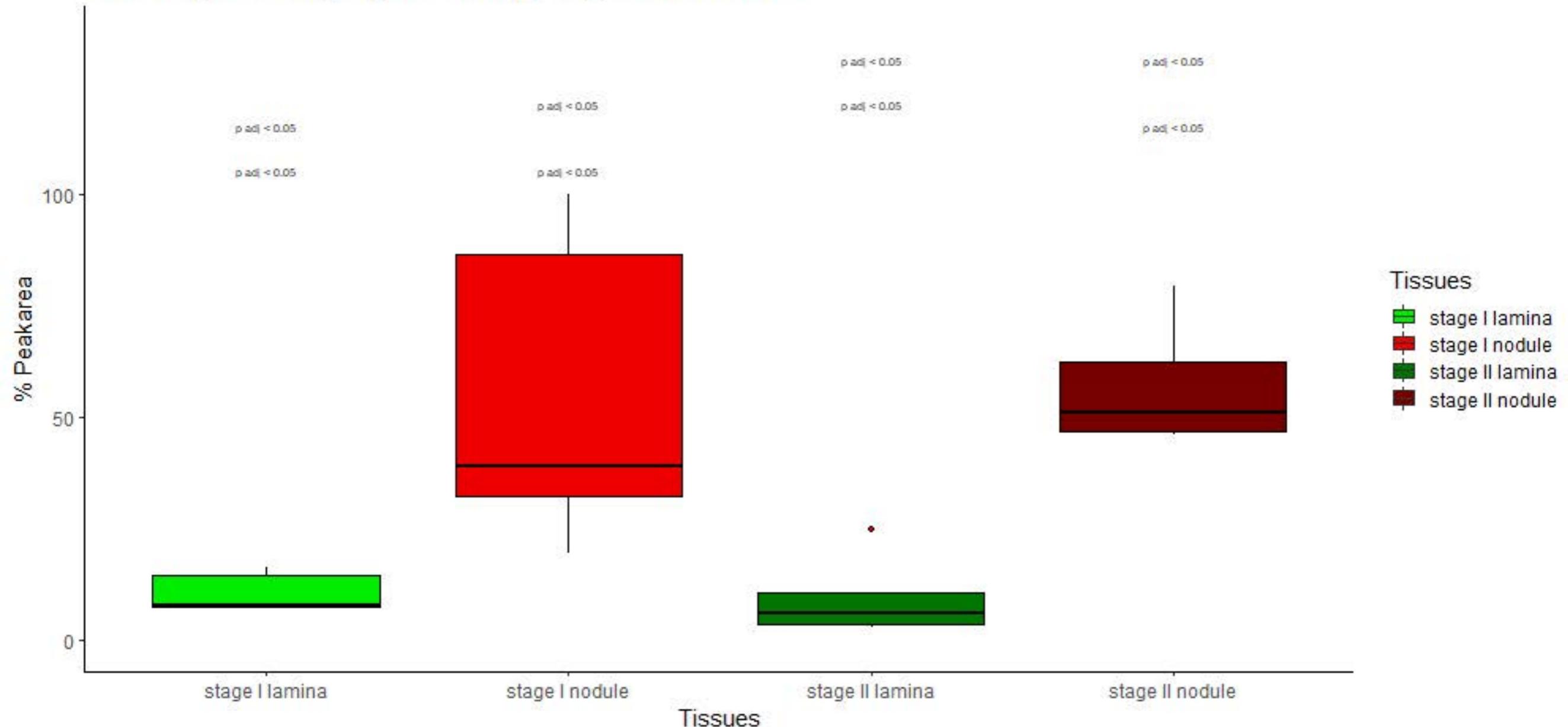
Putative_aminosugar_RT:15.83_min_m/z:993.4261



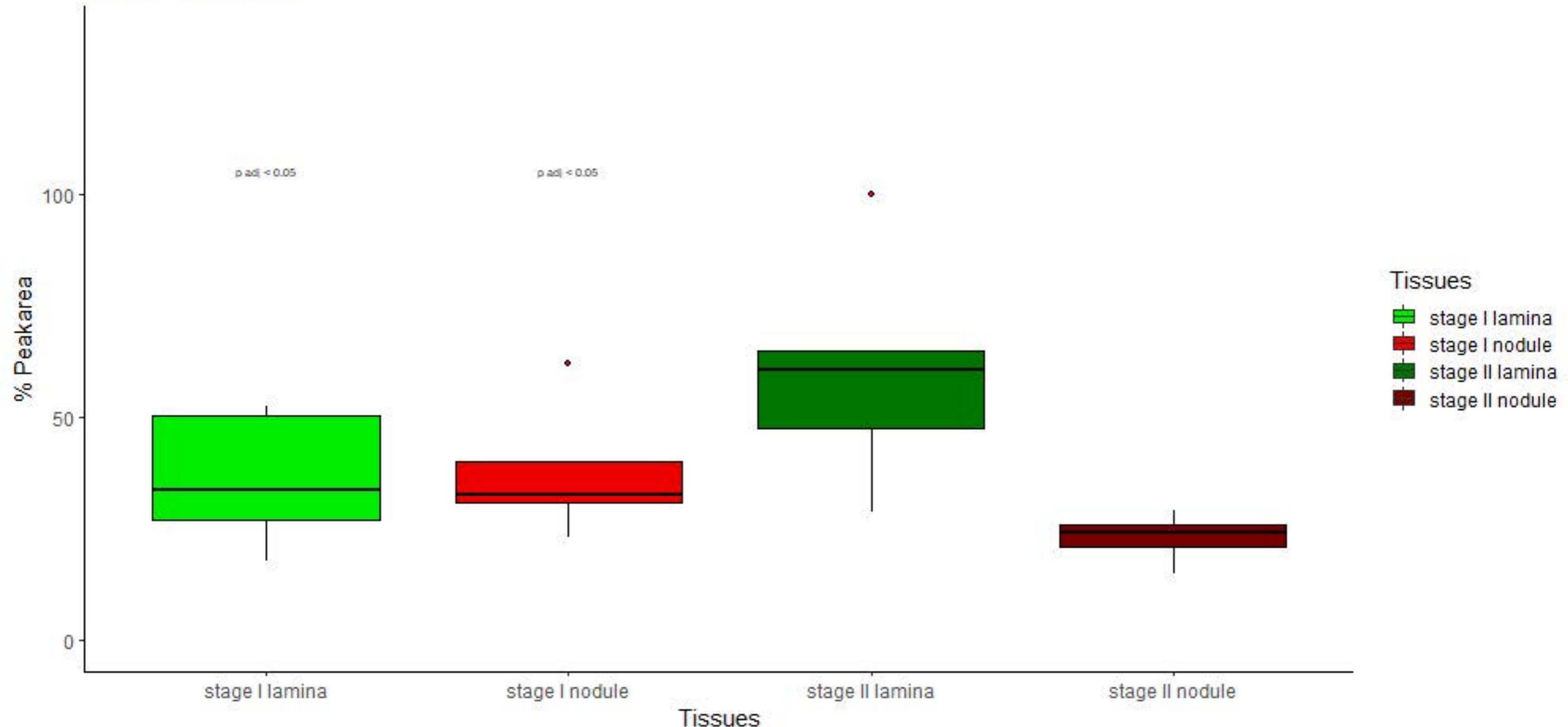
Putative_aminosugar_RT:16.29_min_m/z:476.1871



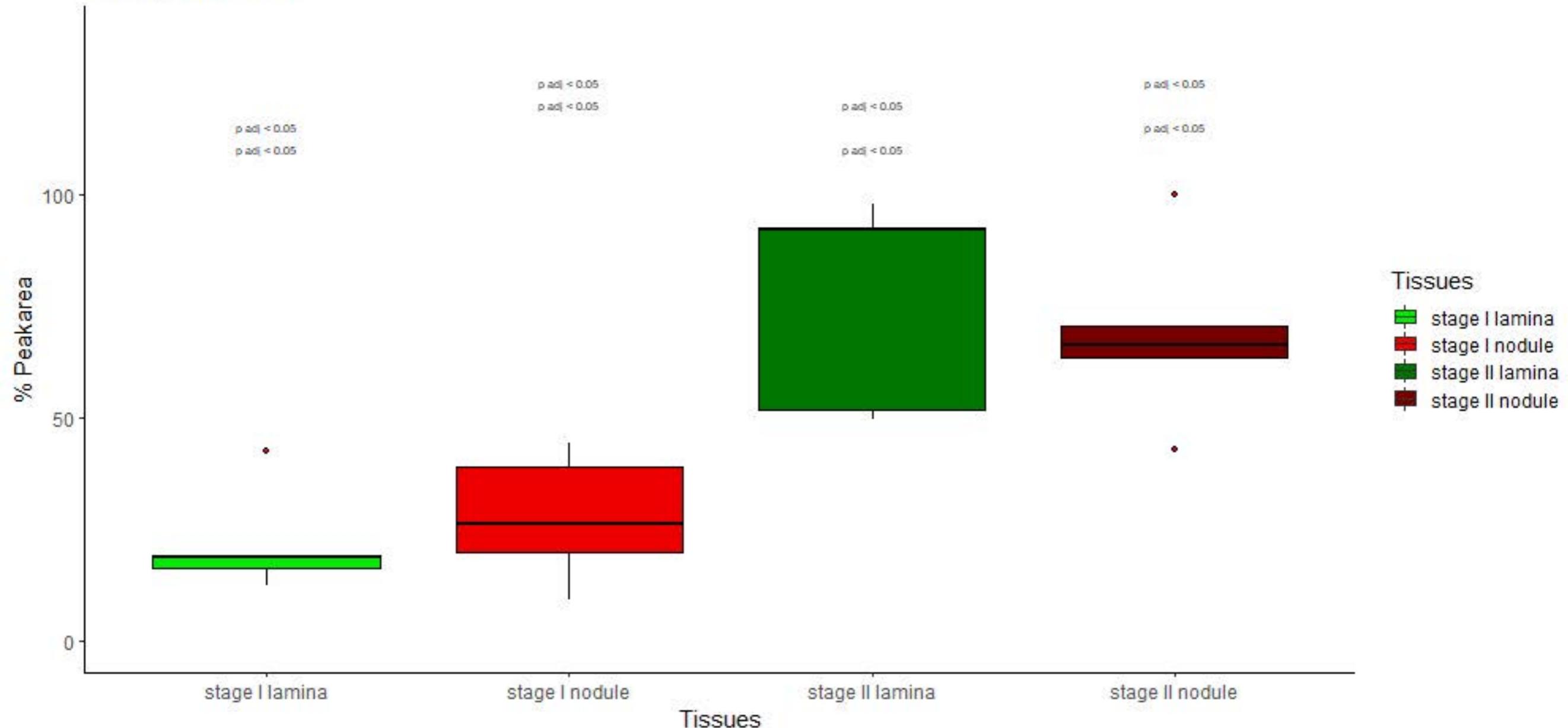
Putative_aminosugar_RT:16.36_min_m/z:679.2664



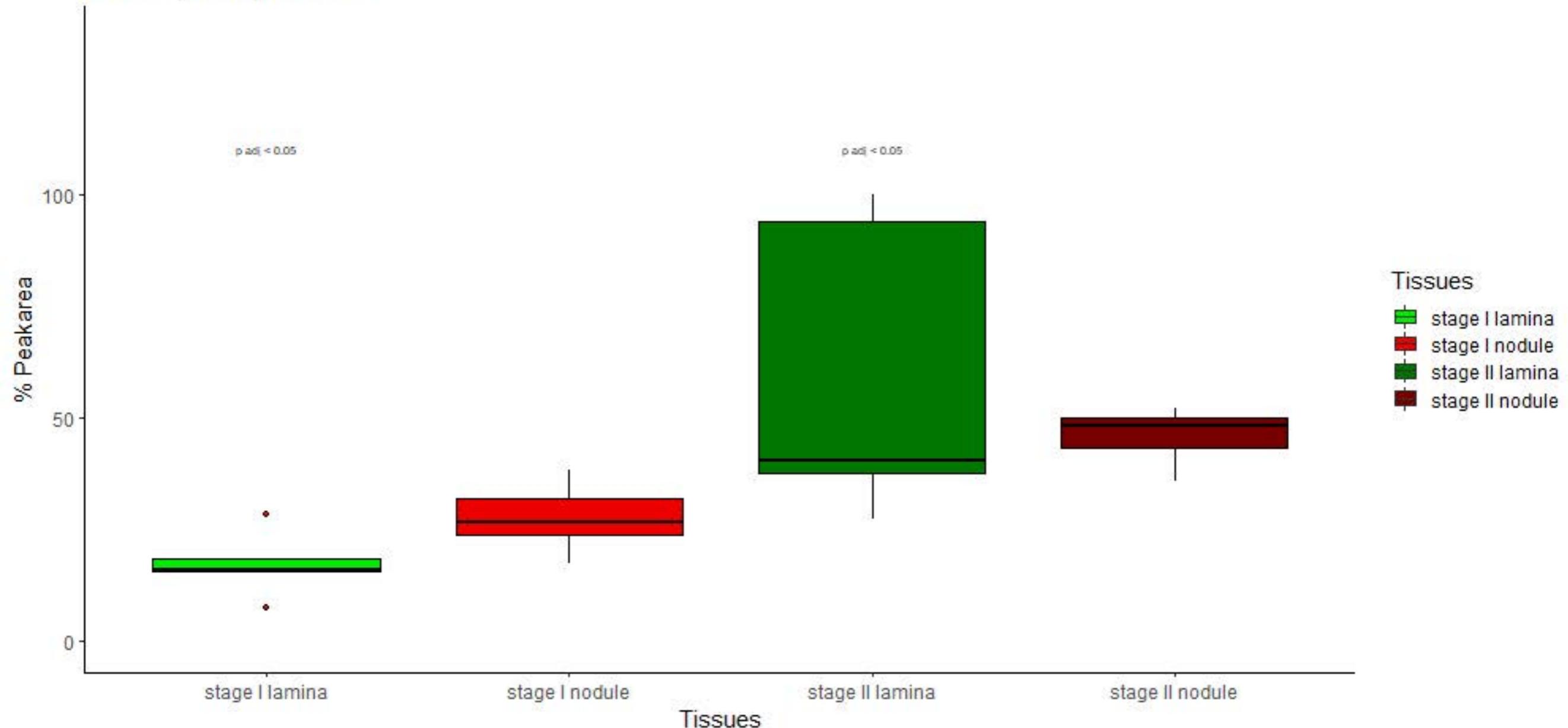
ART Boric-acid



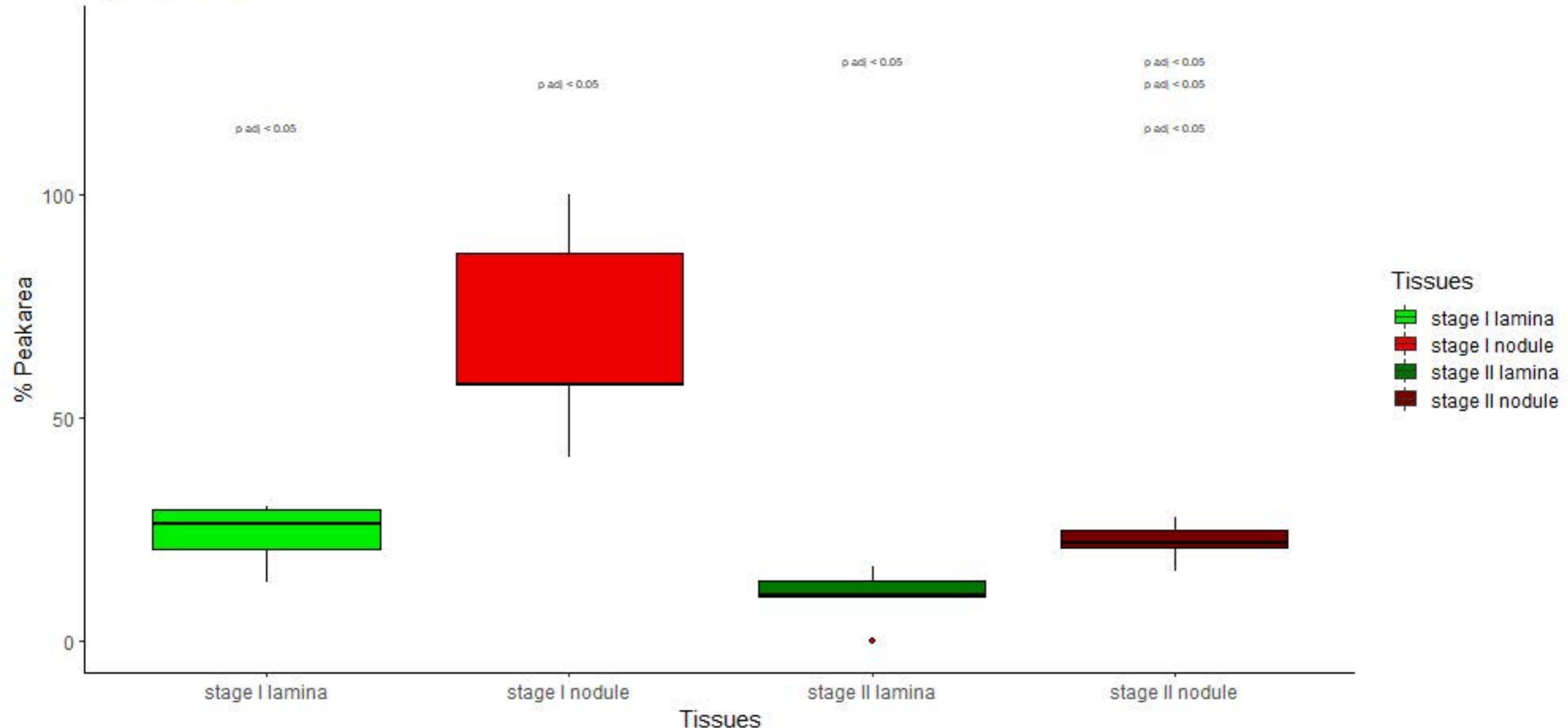
Phosphoric acid



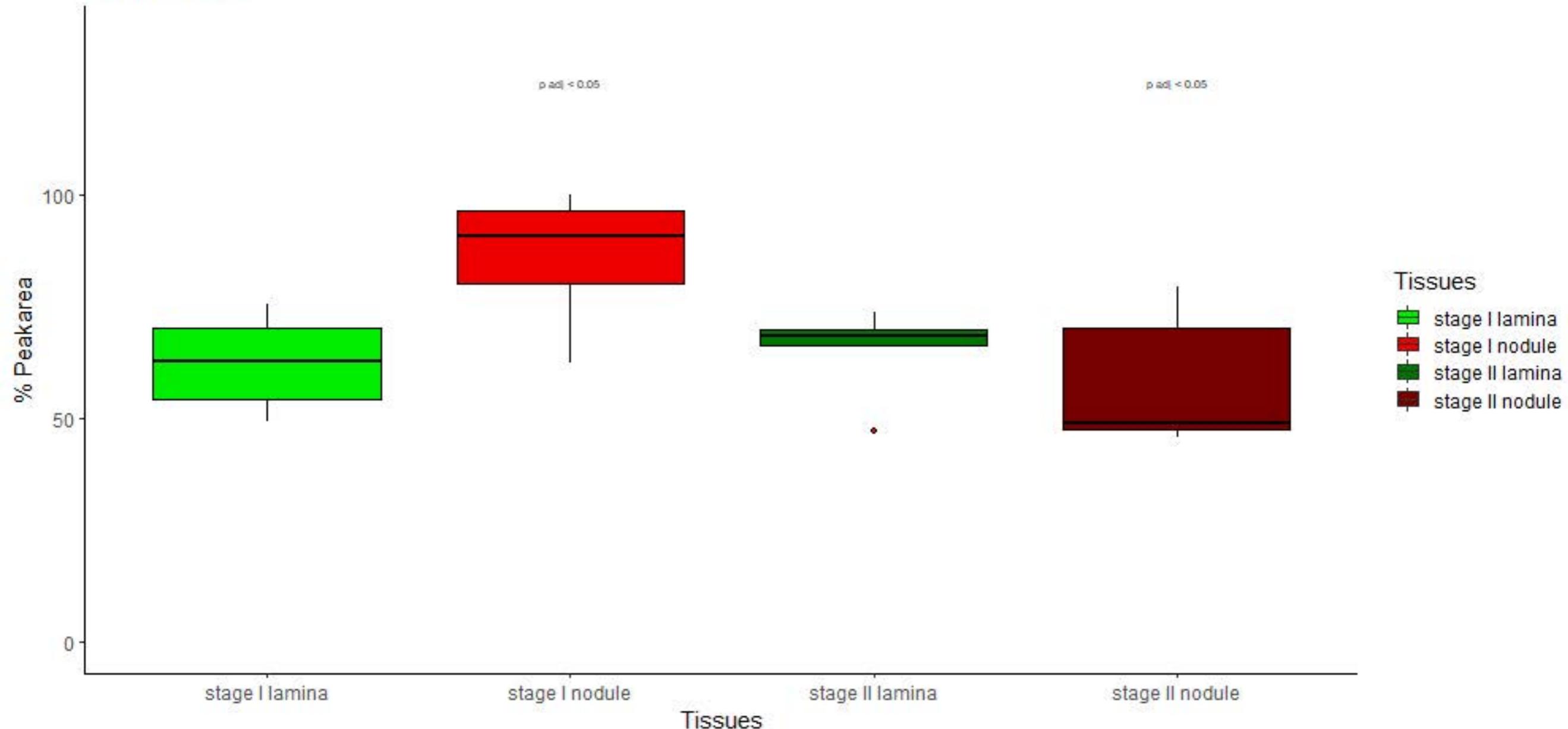
ART Hydroxylamine



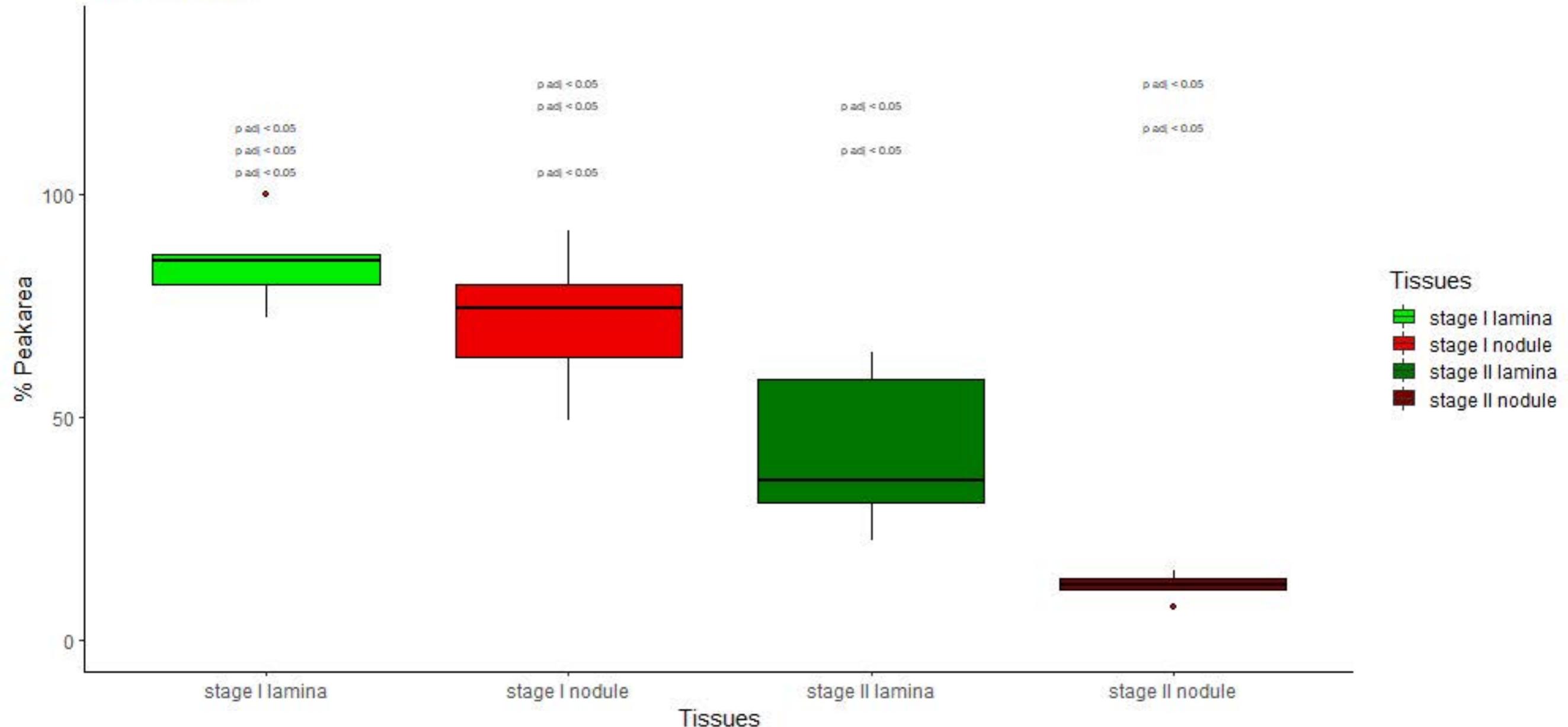
Pyruvic acid



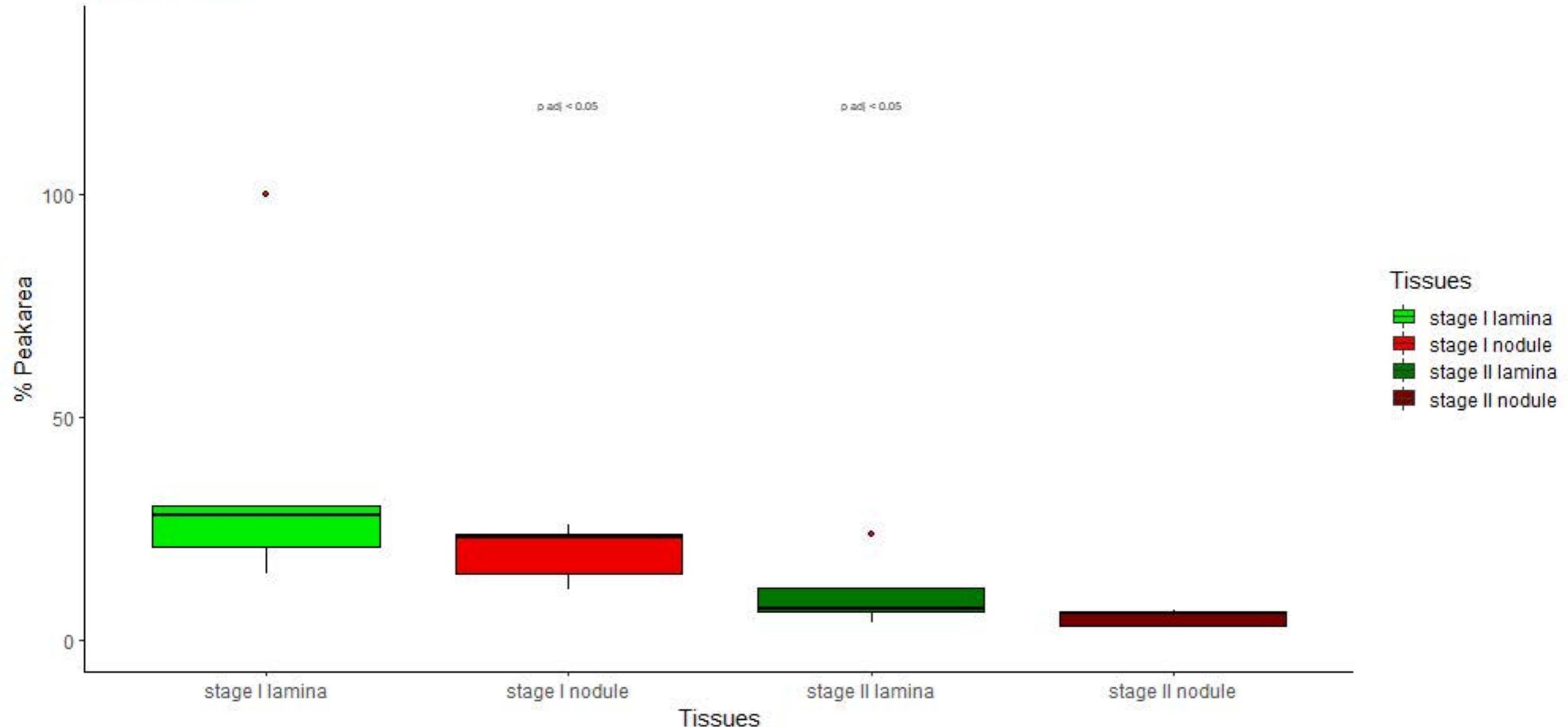
Lactic acid



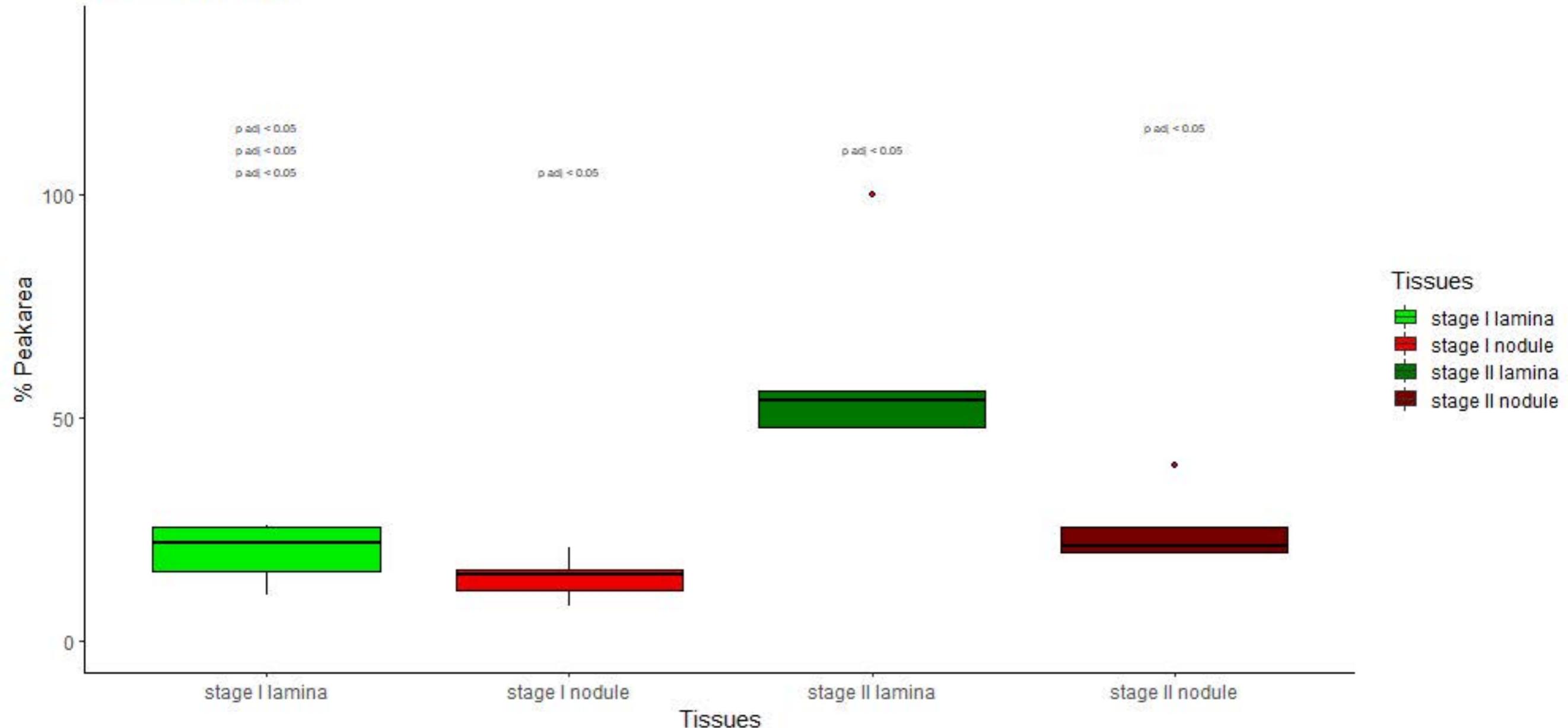
Succinic acid



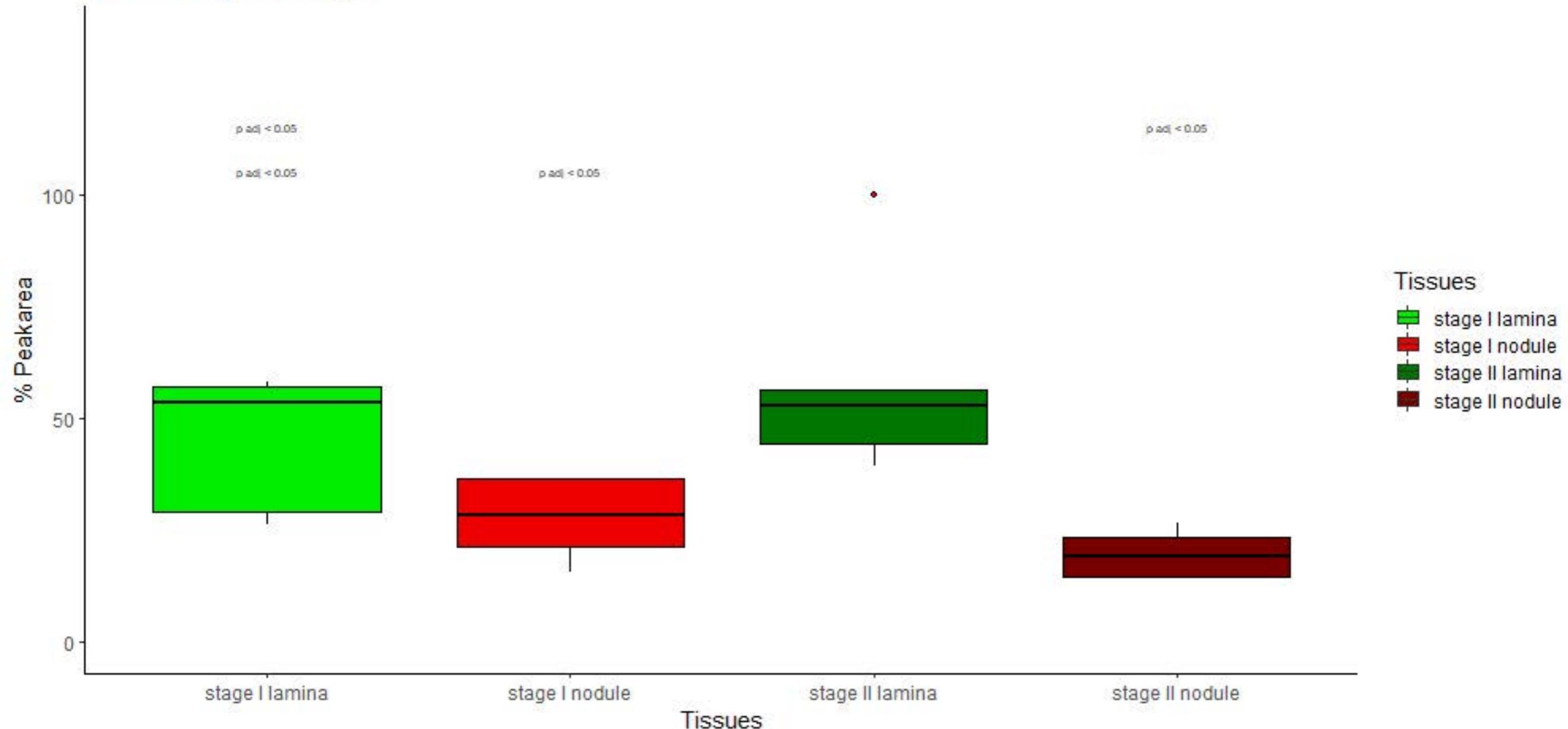
Maleic acid



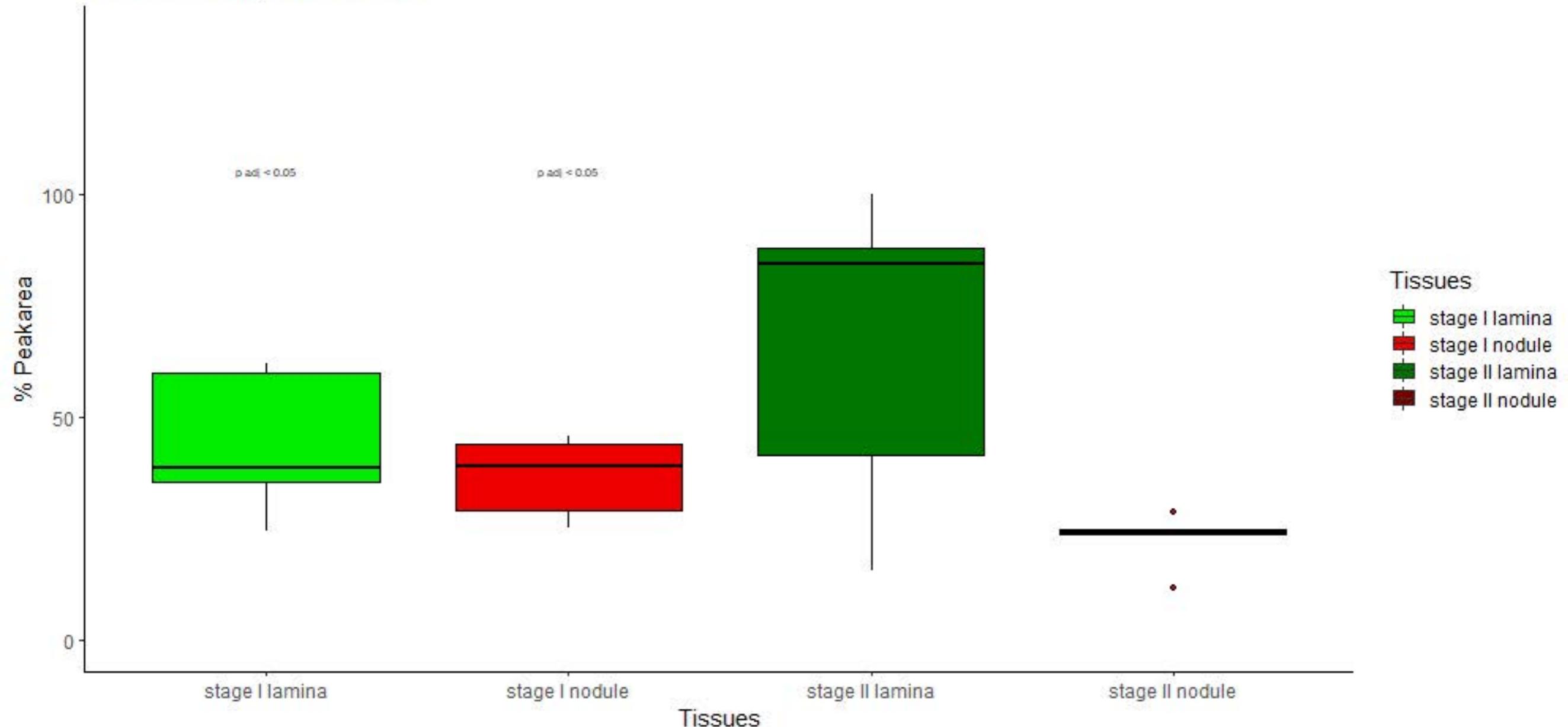
Malic acid S50



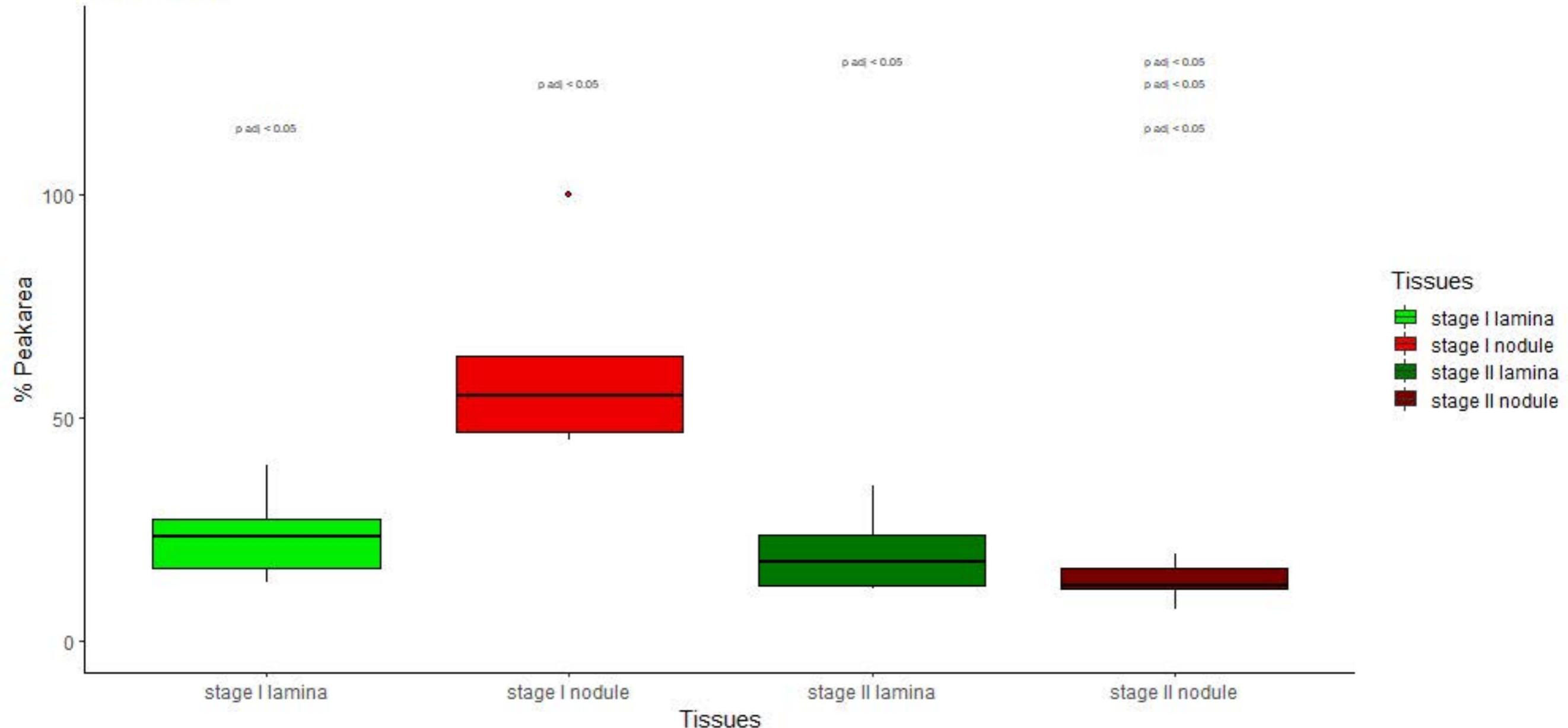
Malic acid, 2-methyl-



Glutaric acid, 2-oxo- MP



Citric acid



Ascorbic acid

% Peakarea

100

50

0

Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

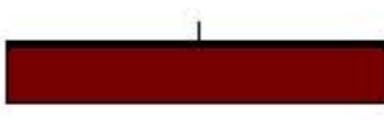
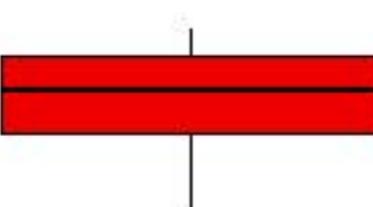
stage I lamina

stage I nodule

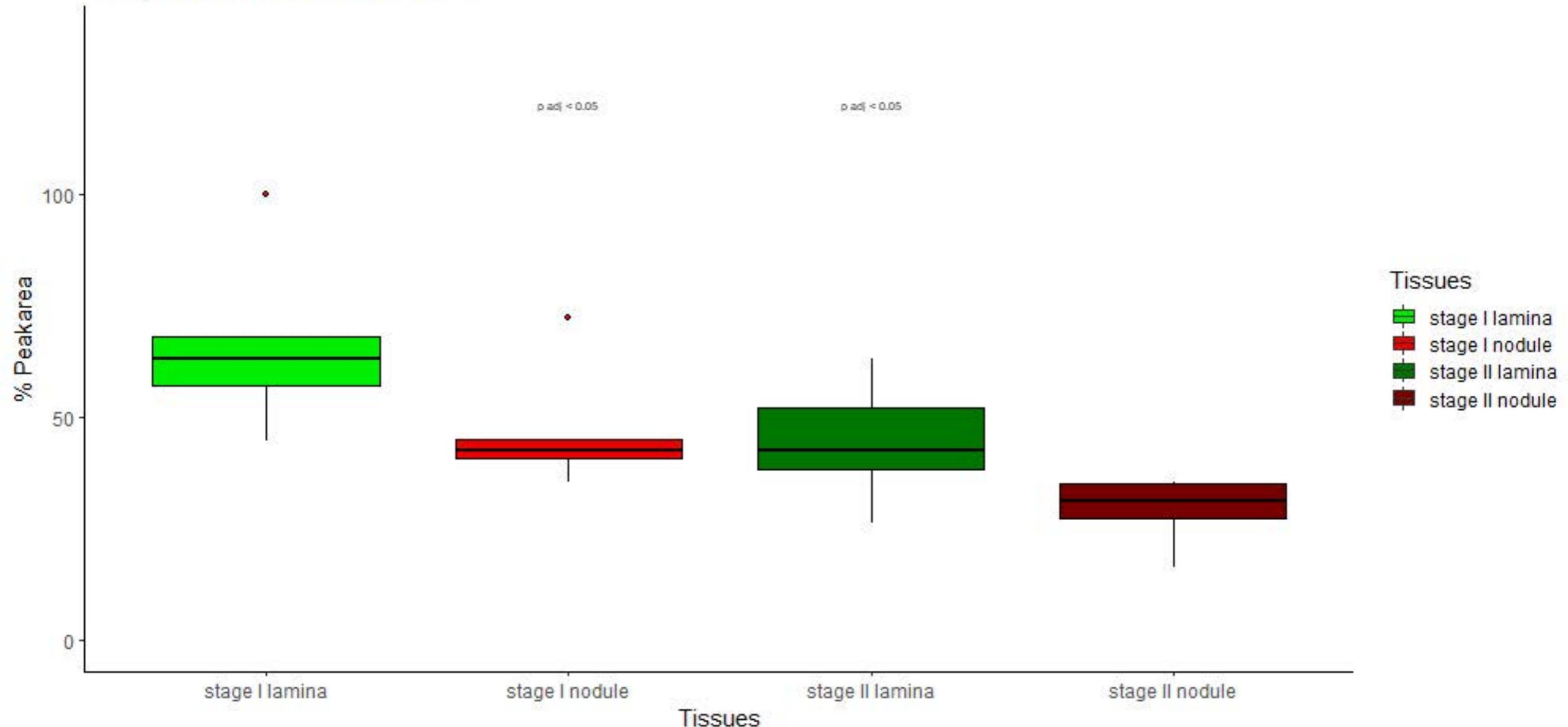
stage II lamina

stage II nodule

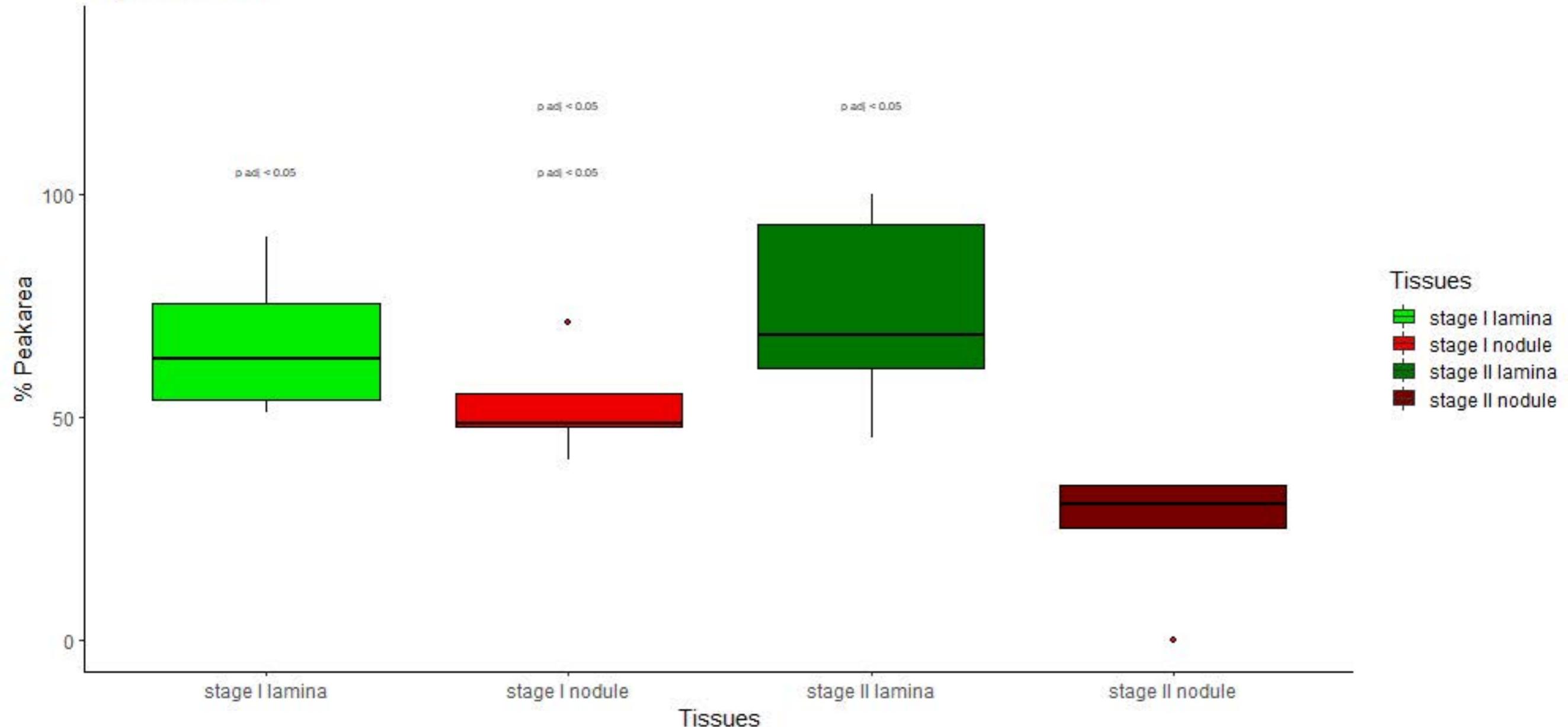
Tissues



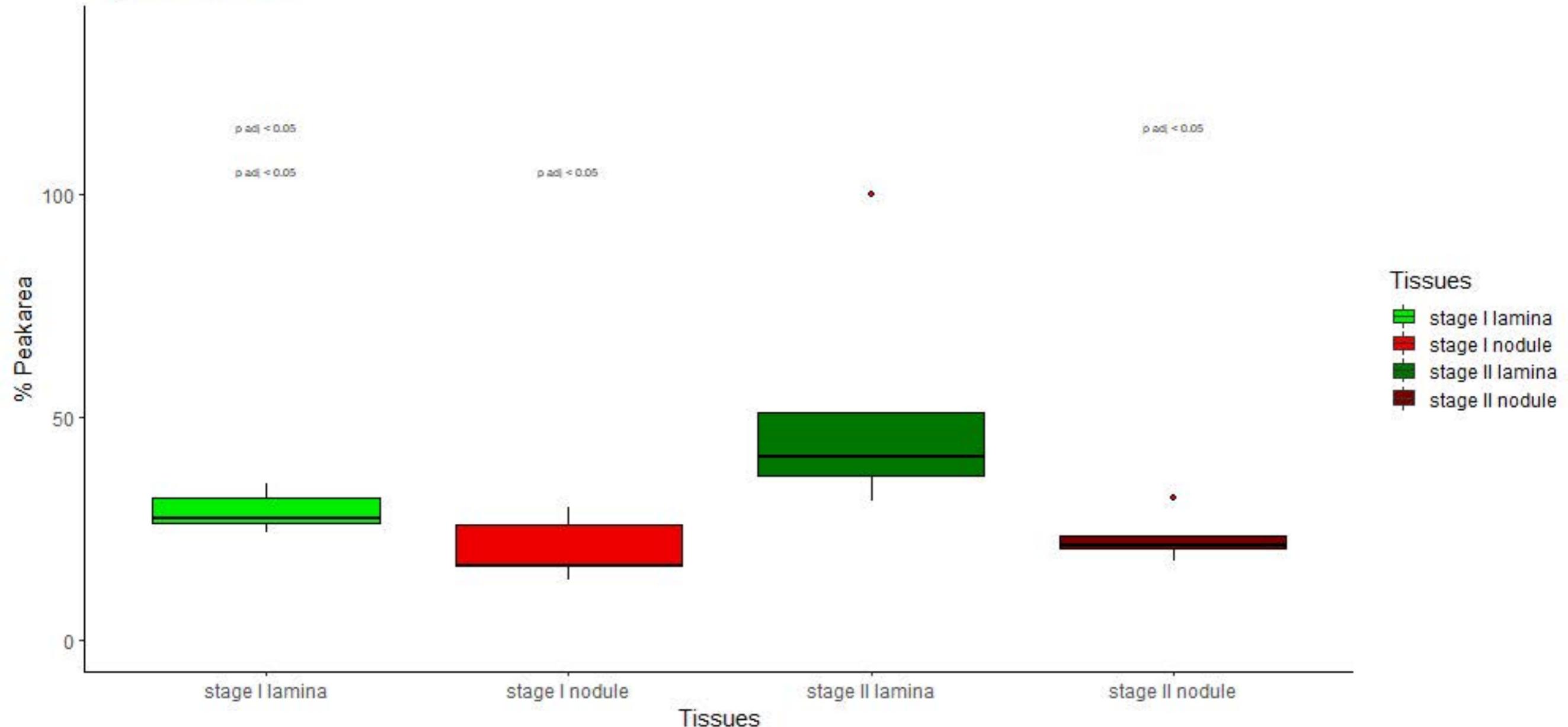
Dehydroascorbic acid dimer



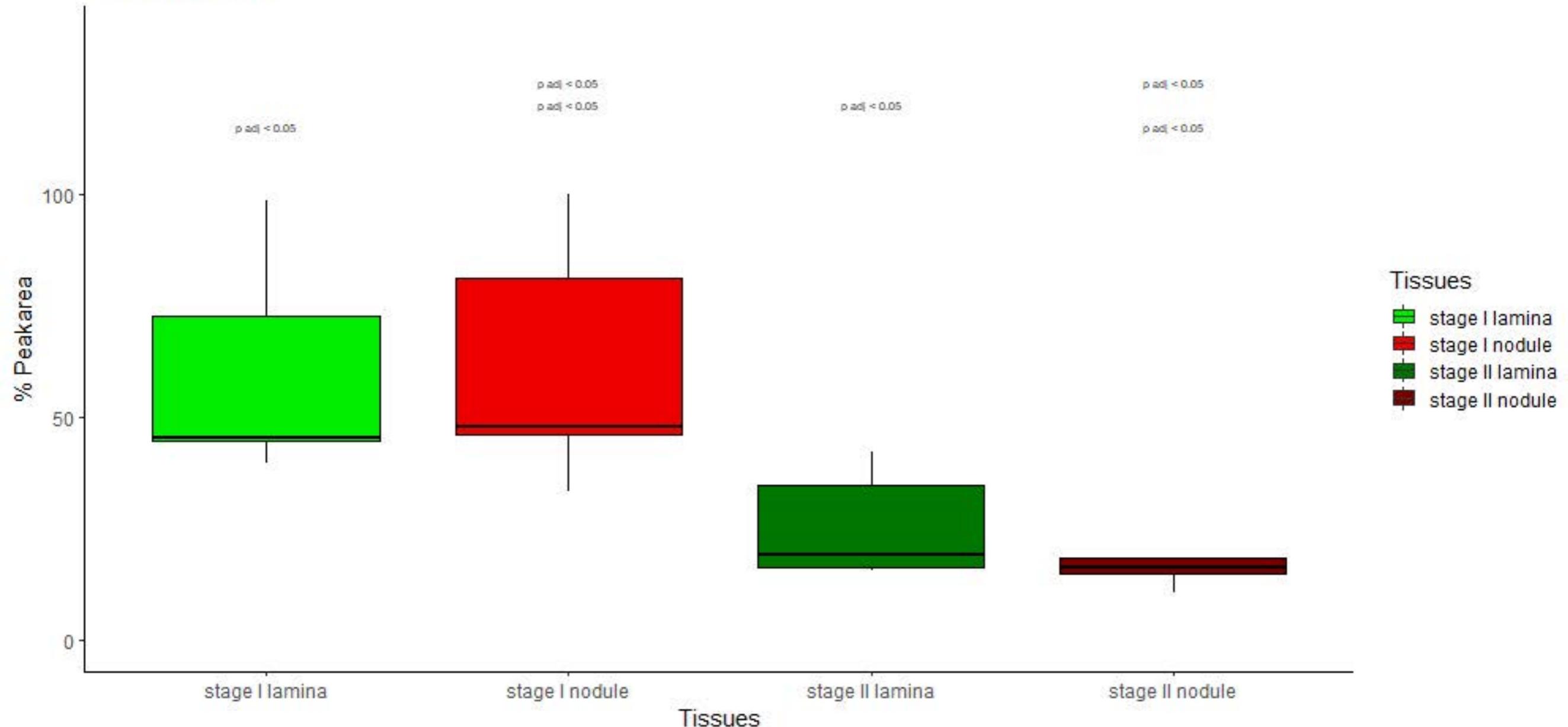
Glyceric acid



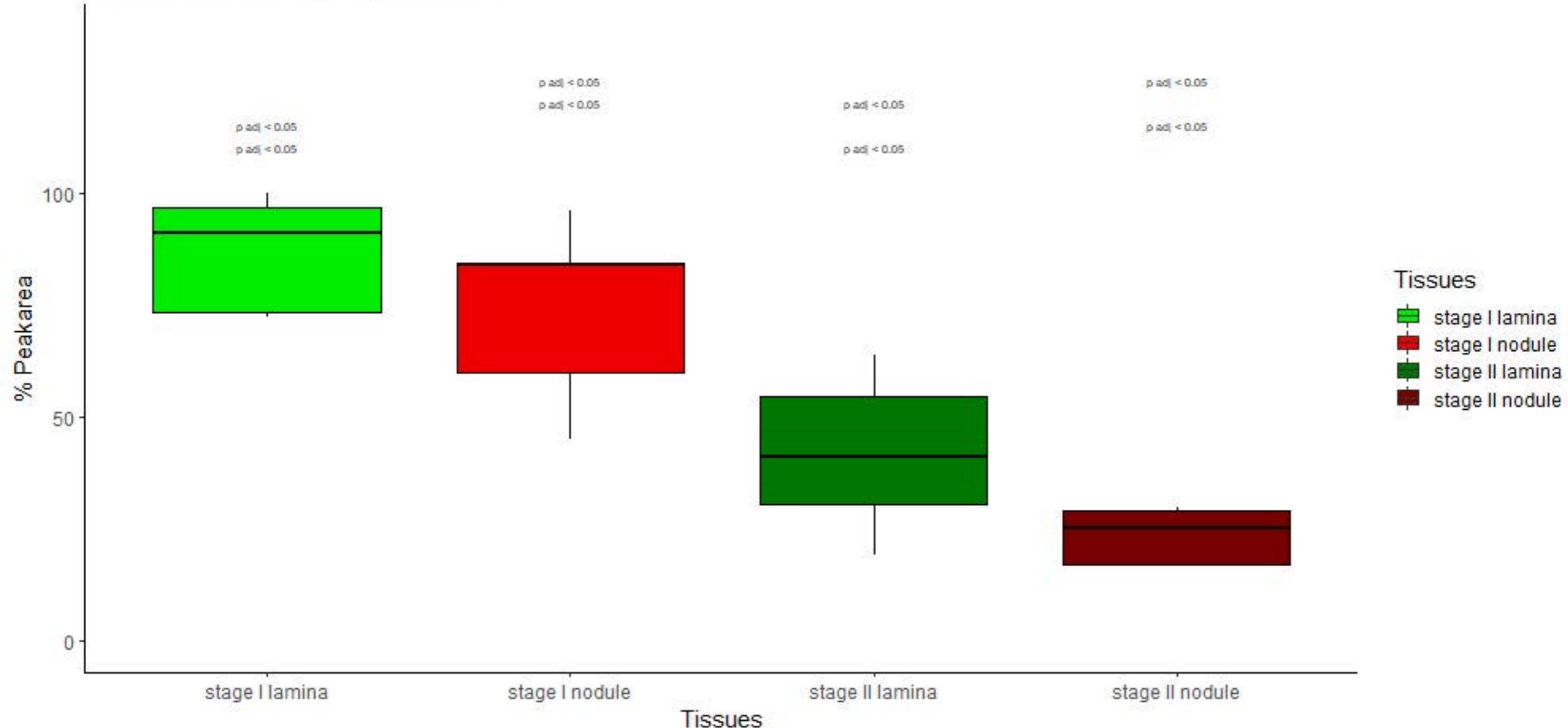
Erythronic acid



Threonic acid



ART Threonic acid-1,4-lactone



ART Gluconic acid-1,5-lactone

% Peakarea

100

50

0

Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

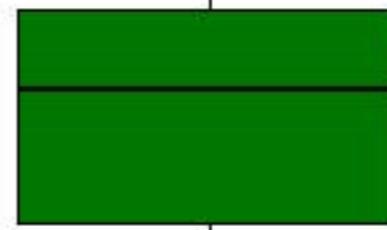
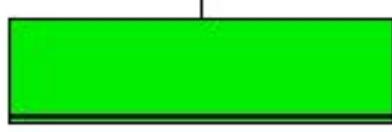
stage I lamina

stage I nodule

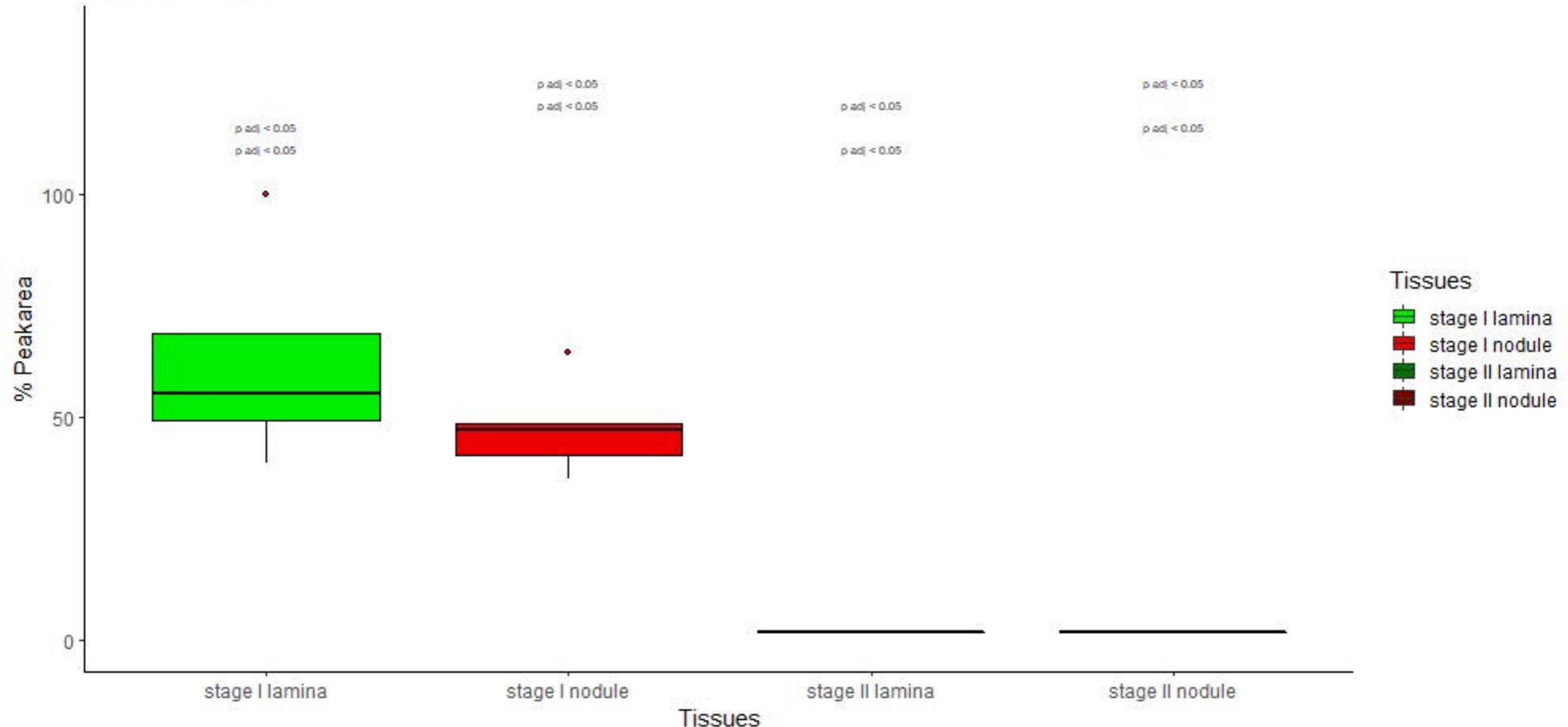
stage II lamina

stage II nodule

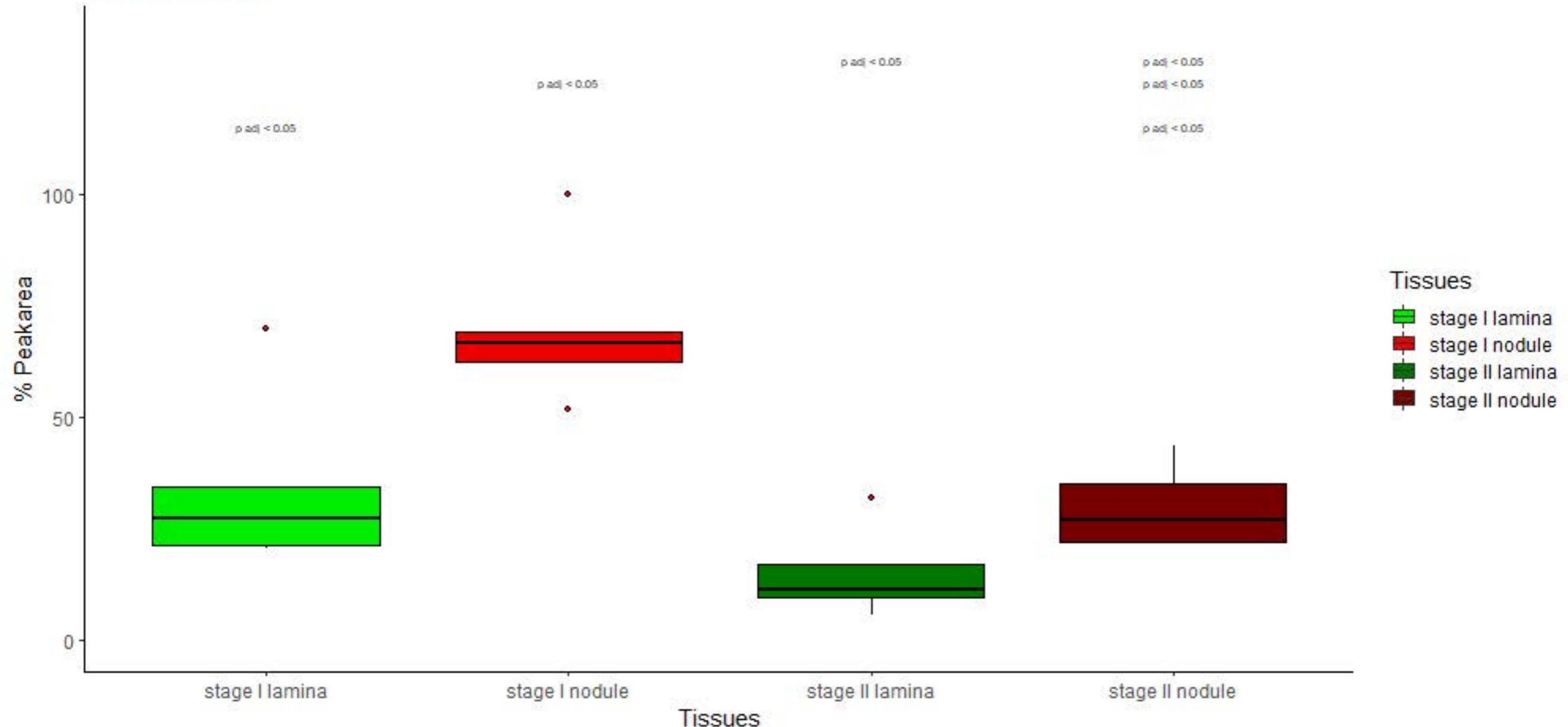
Tissues



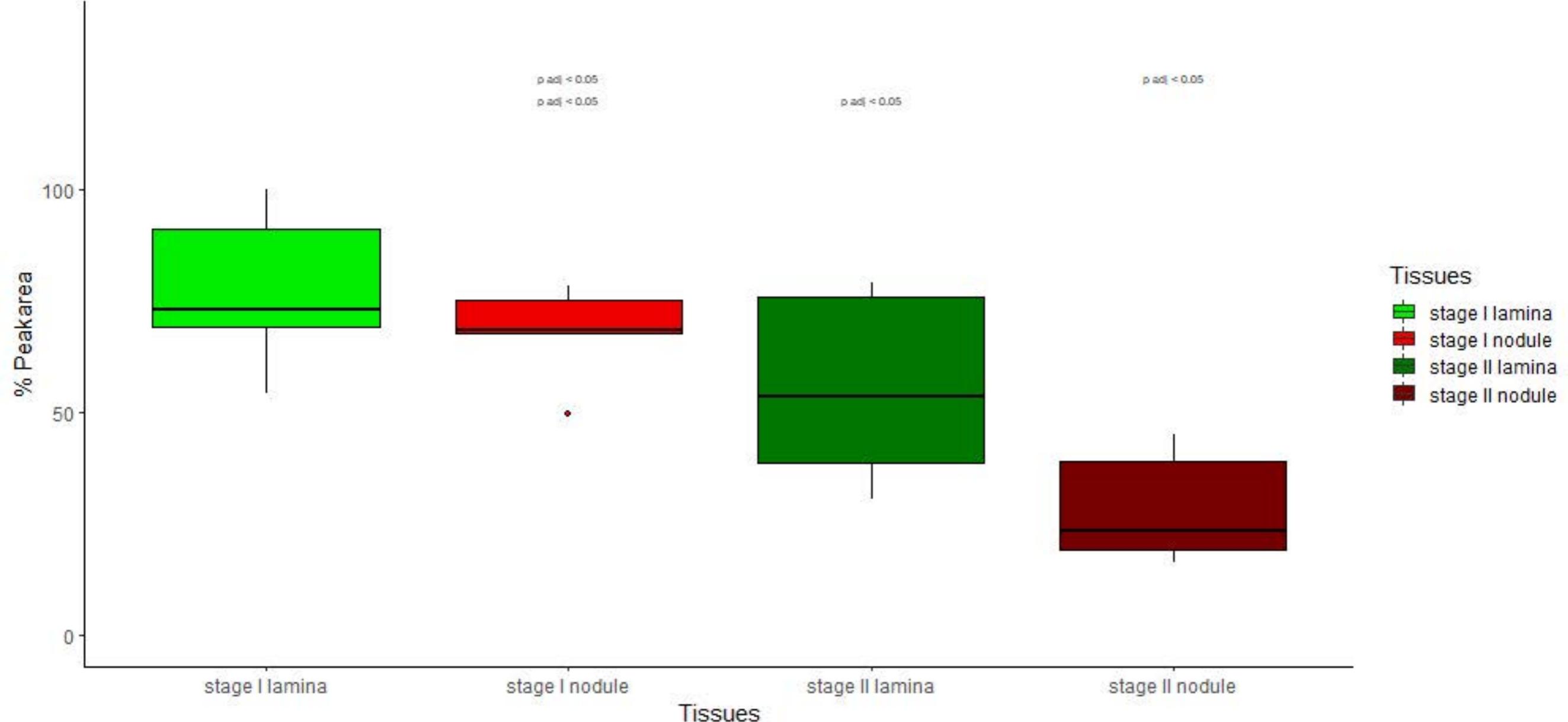
Hexonic acid 1



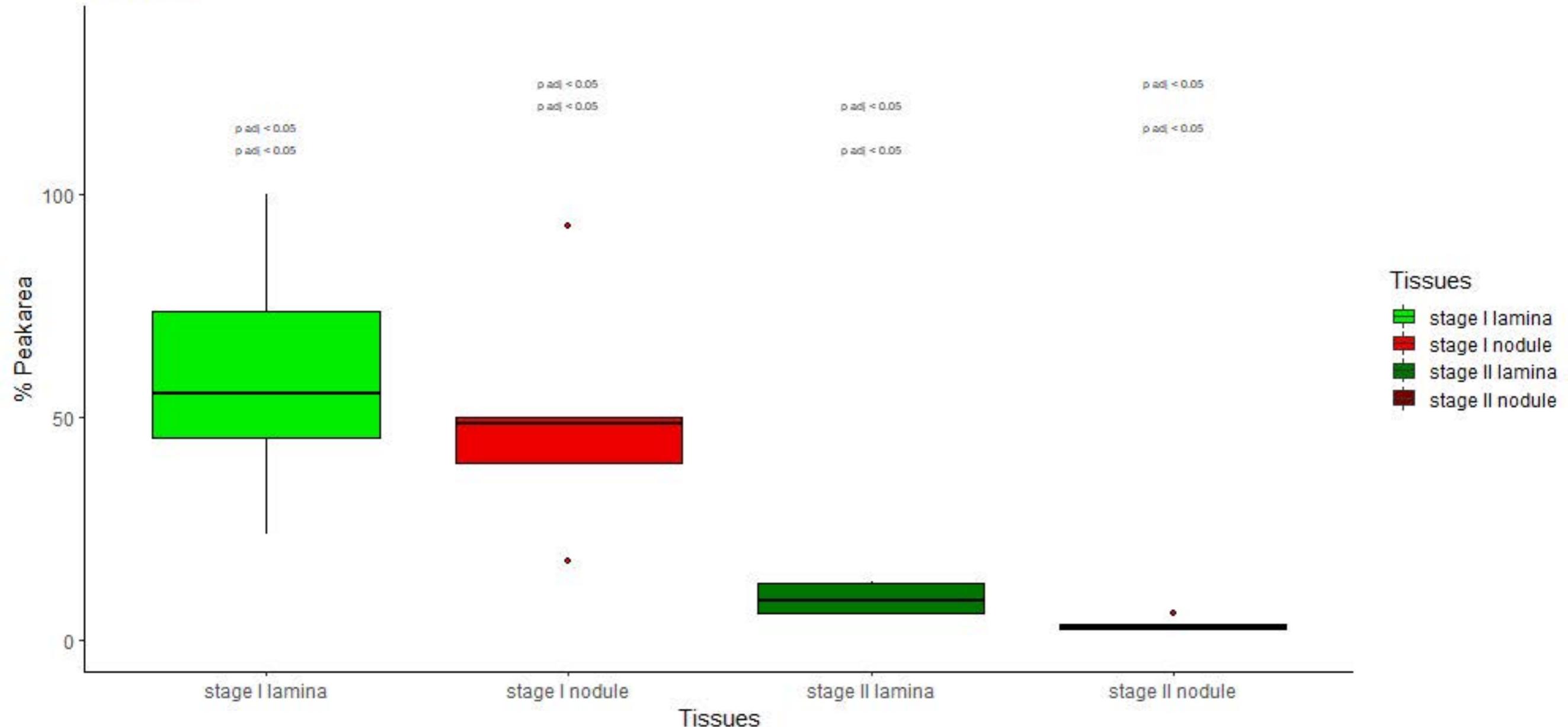
Hexonic acid 2



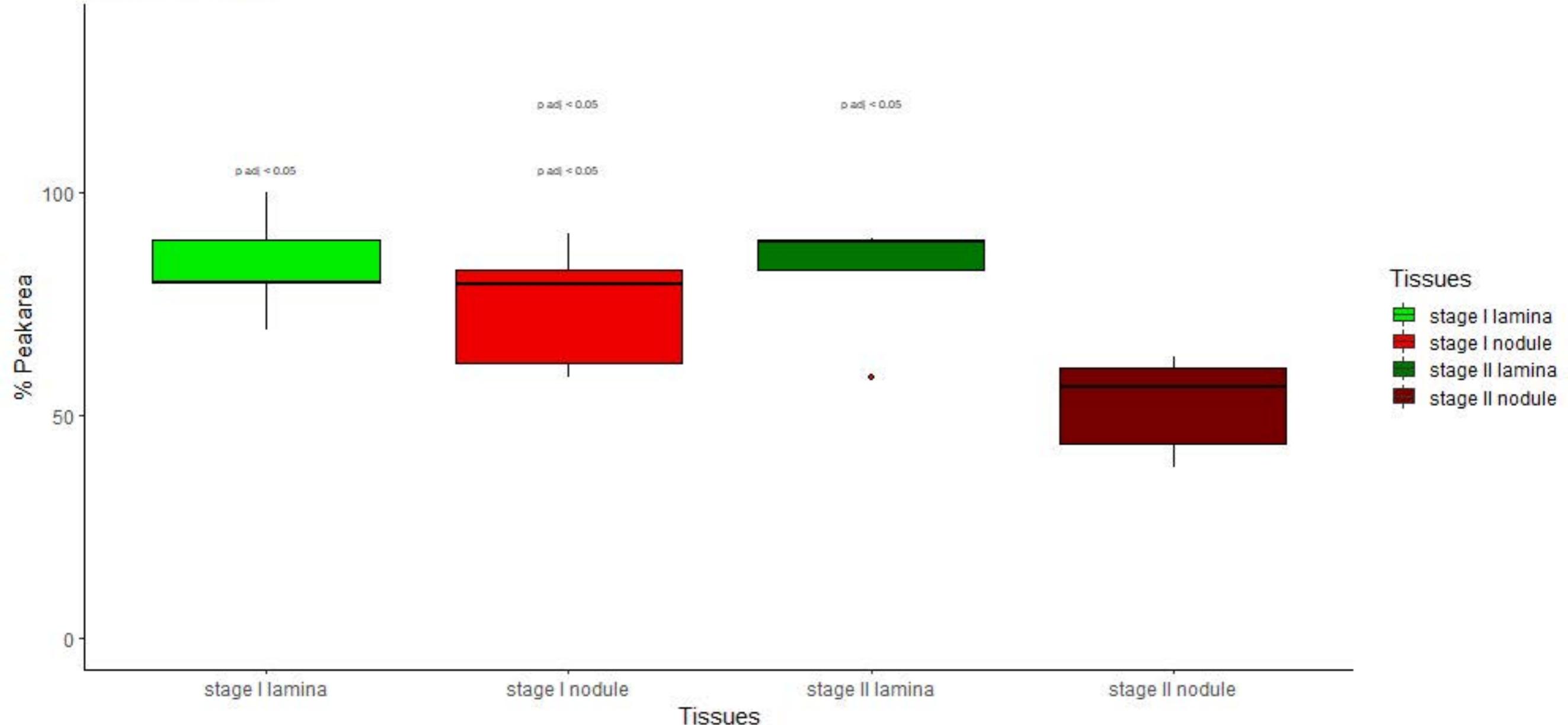
Fructose



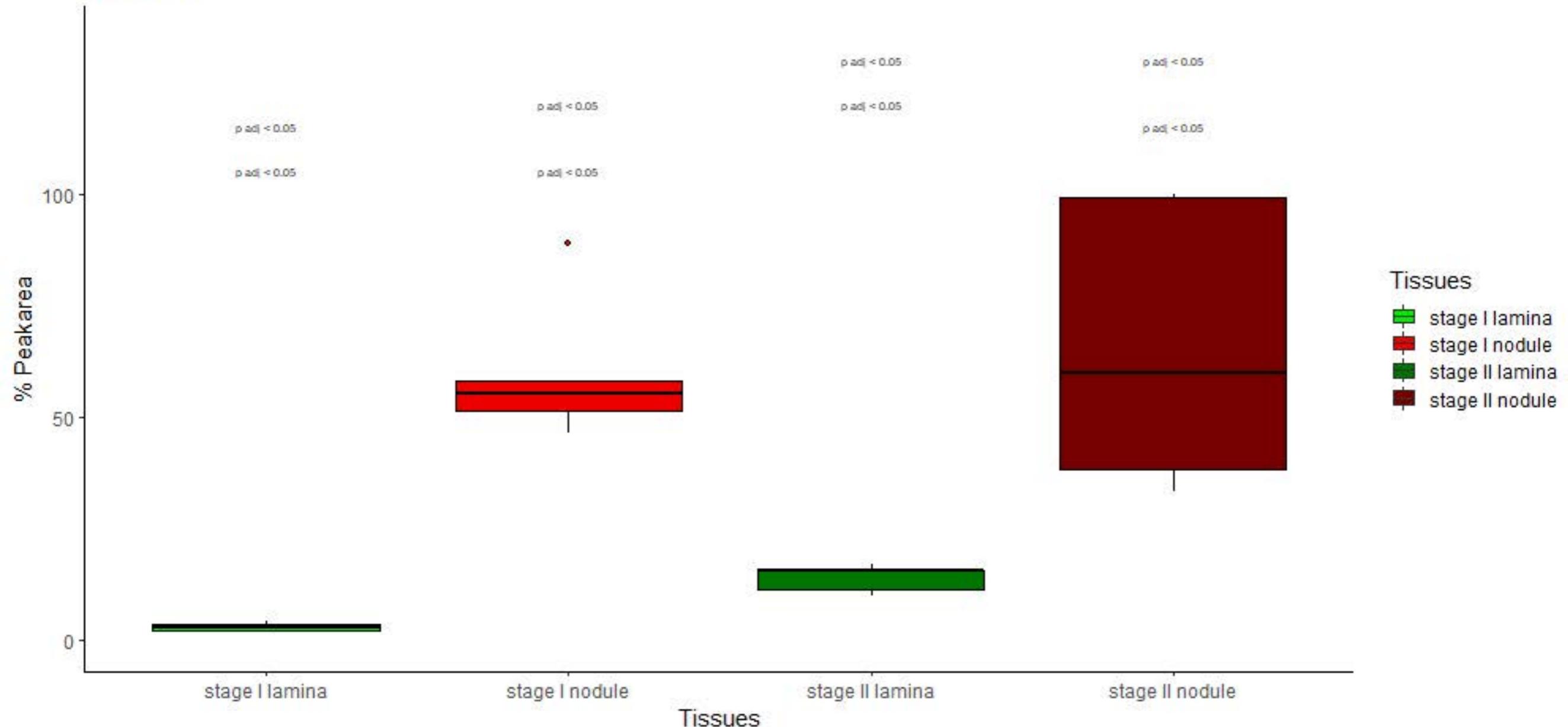
Glucose



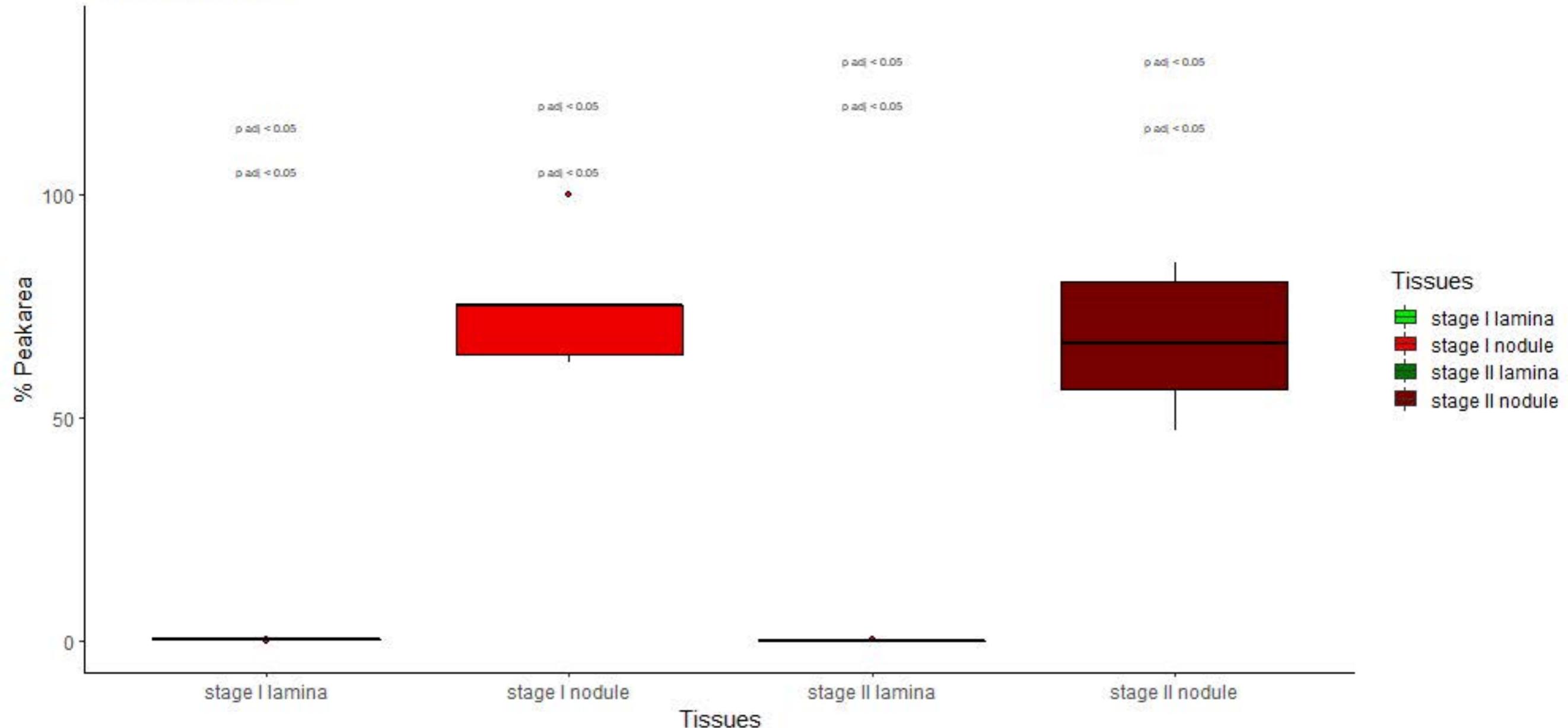
Sucrose S50



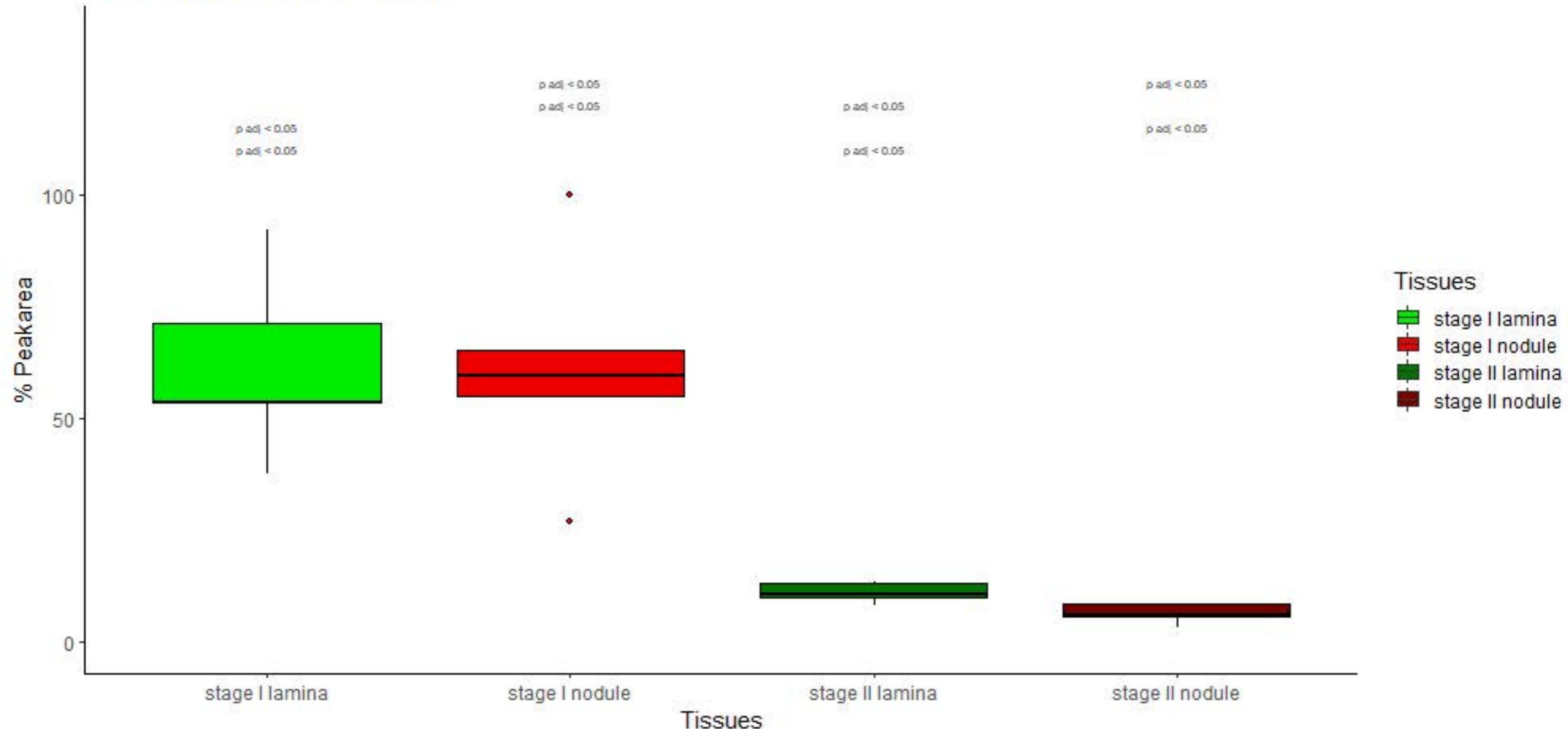
Maltose



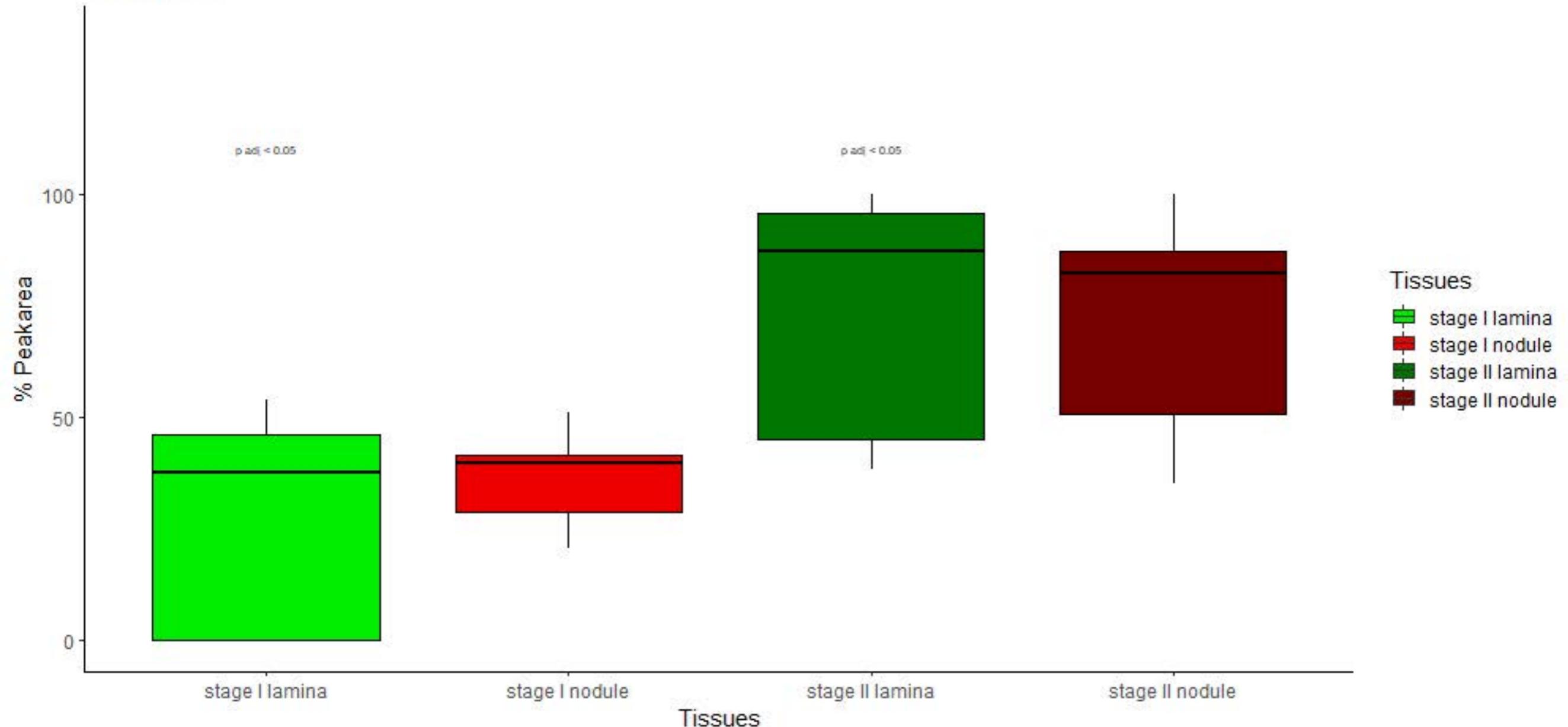
Trehalose S50



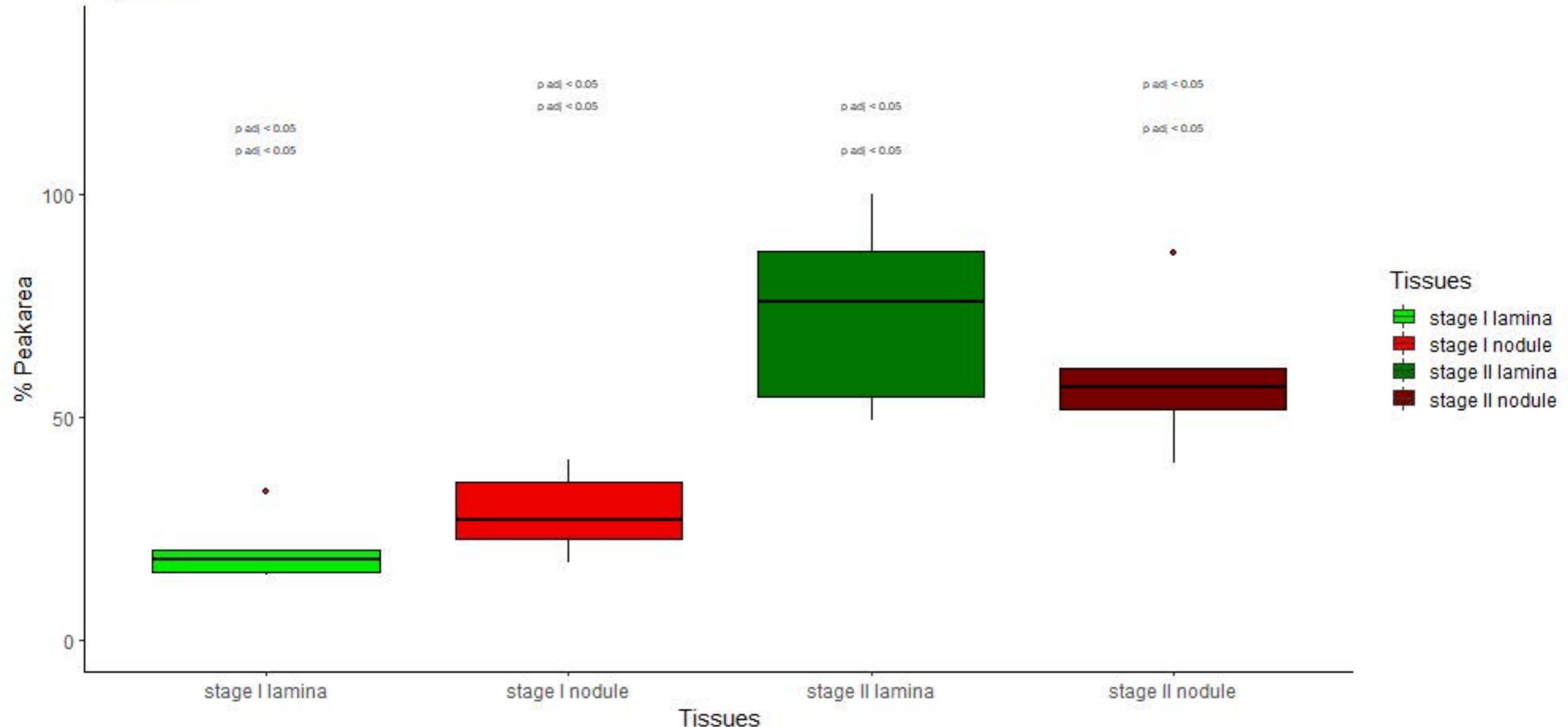
Rhamnose/Fucose Product



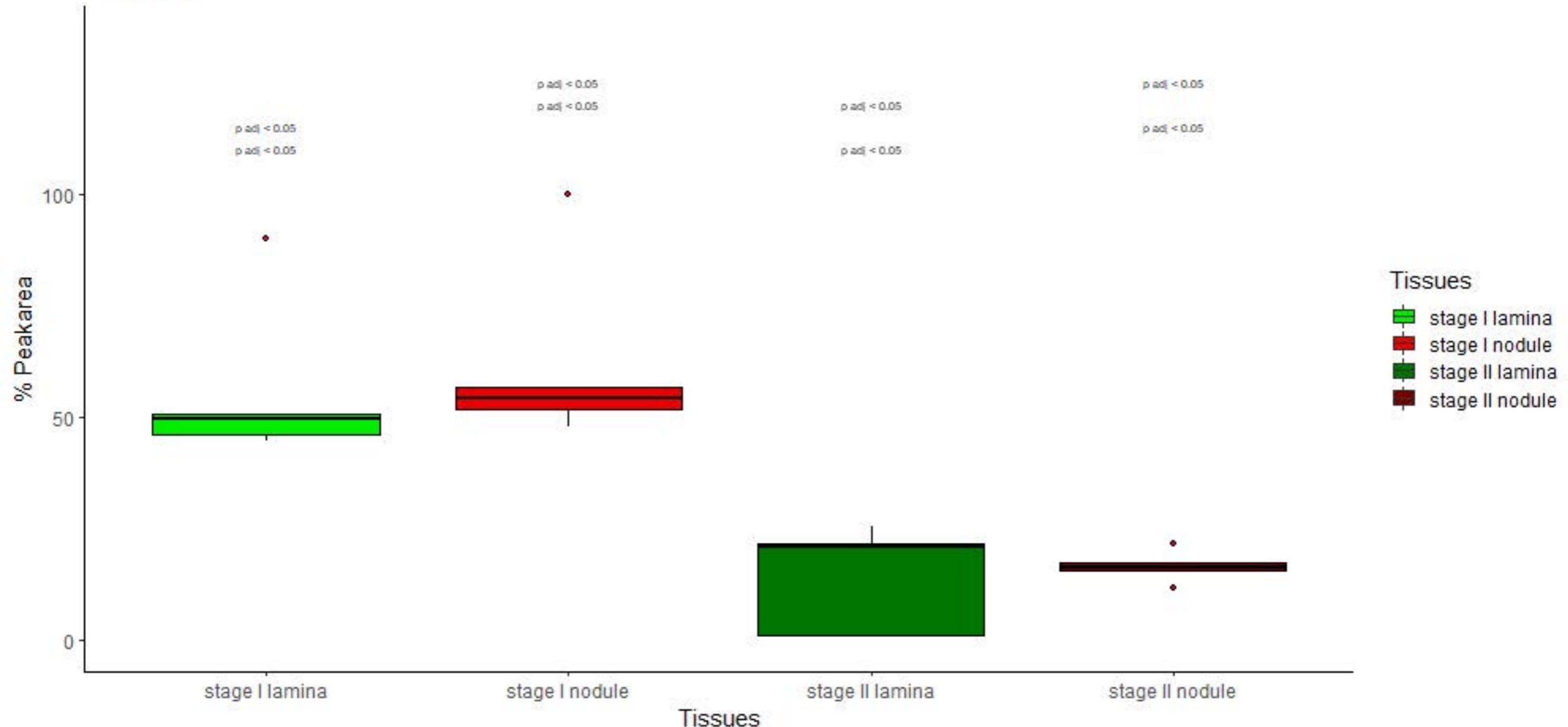
Raffinose



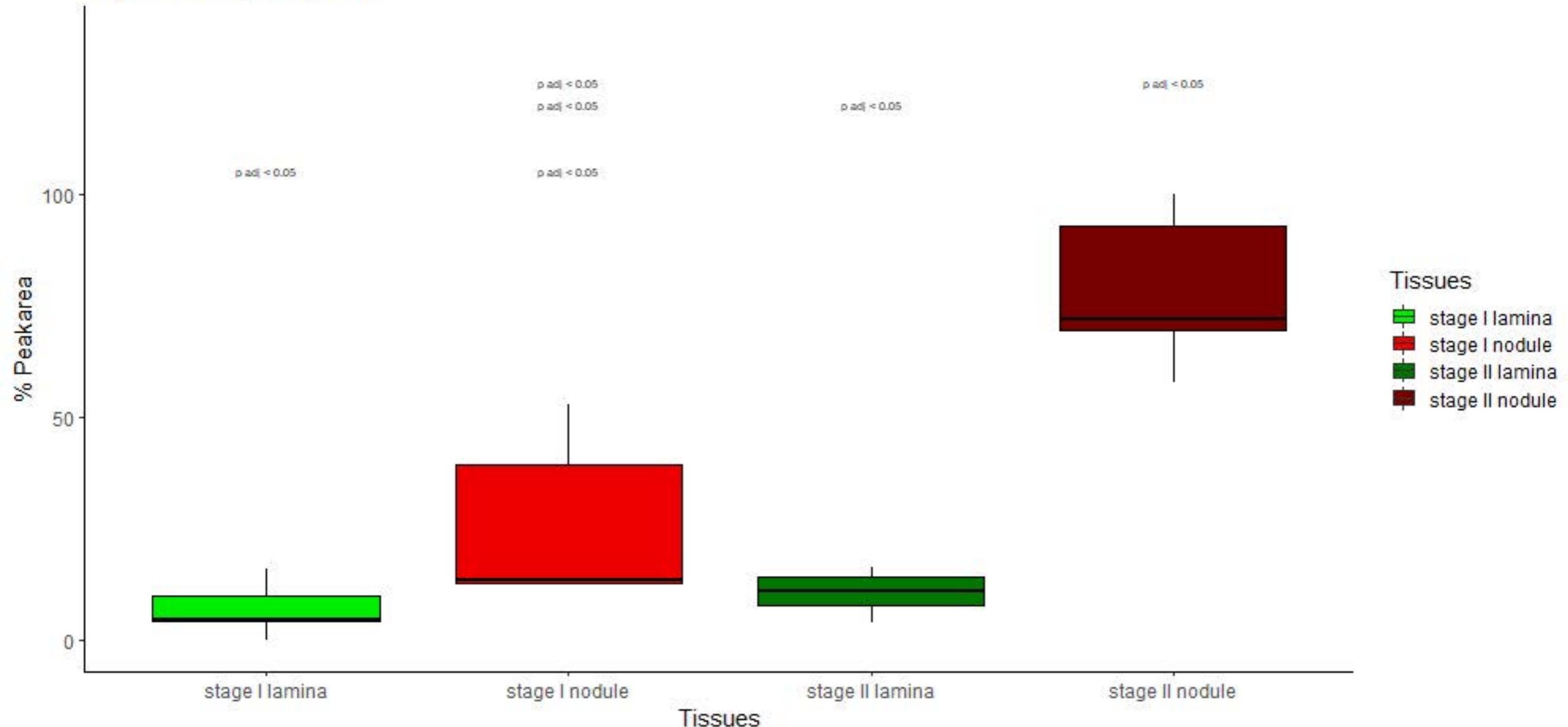
Glycerol



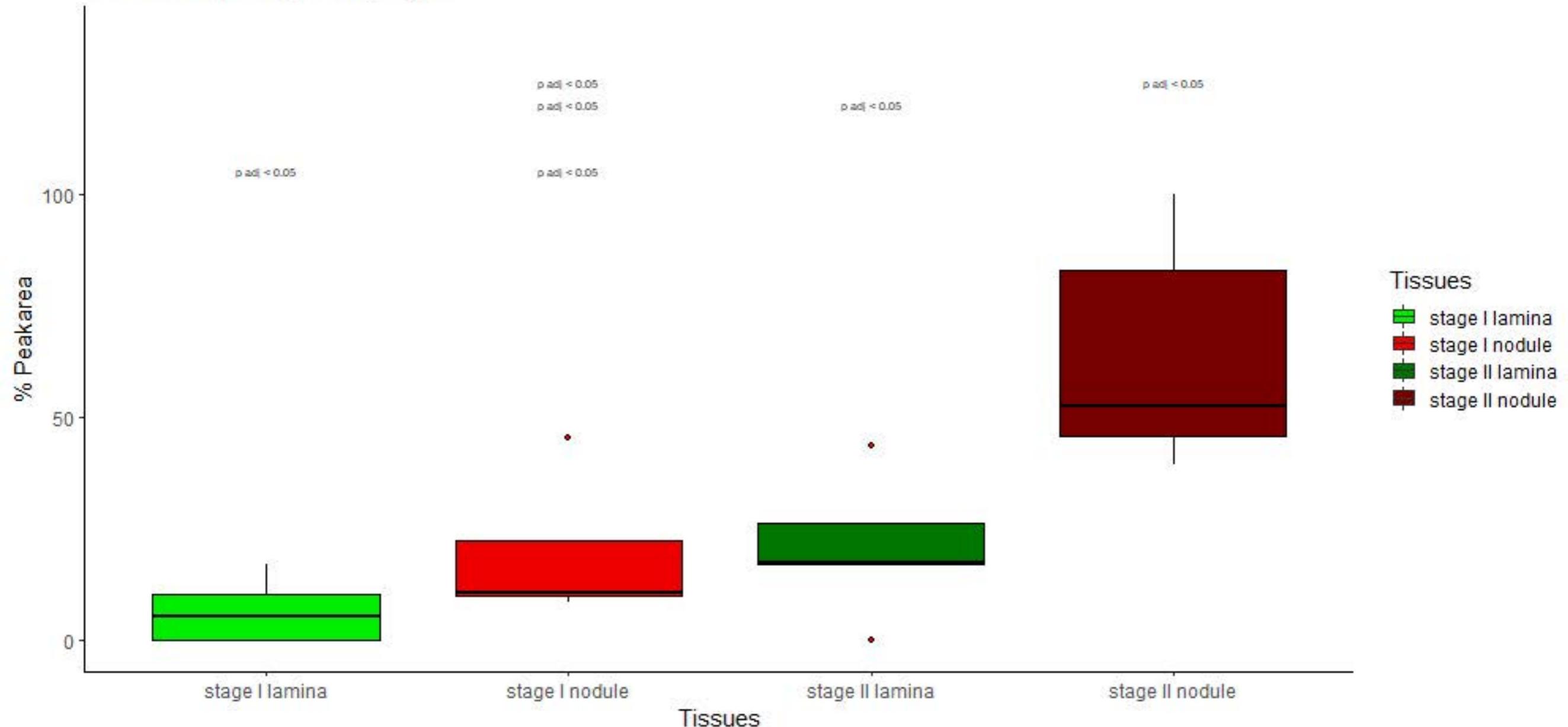
Threitol



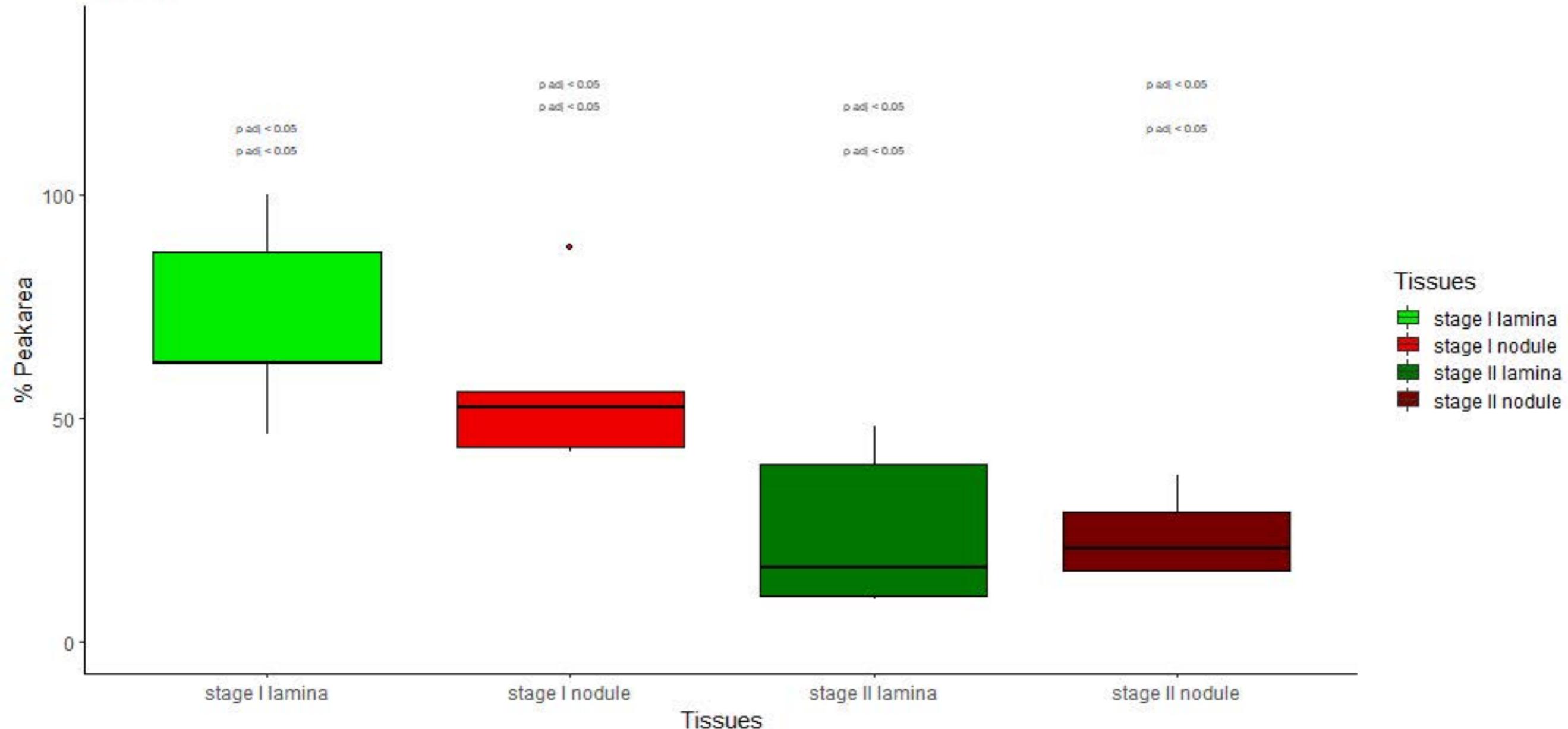
Glycerol-3-phosphate



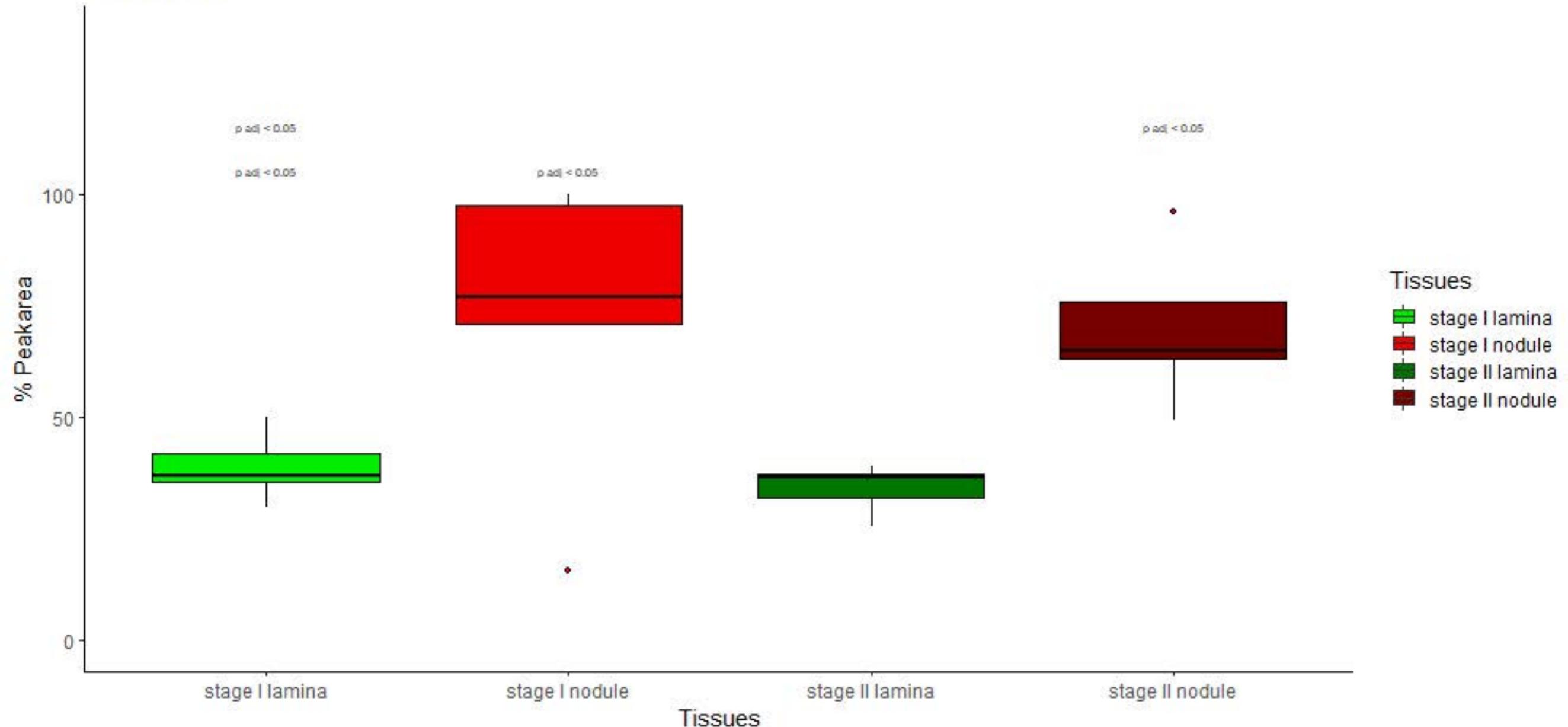
Inositol-2-phosphate, myo-



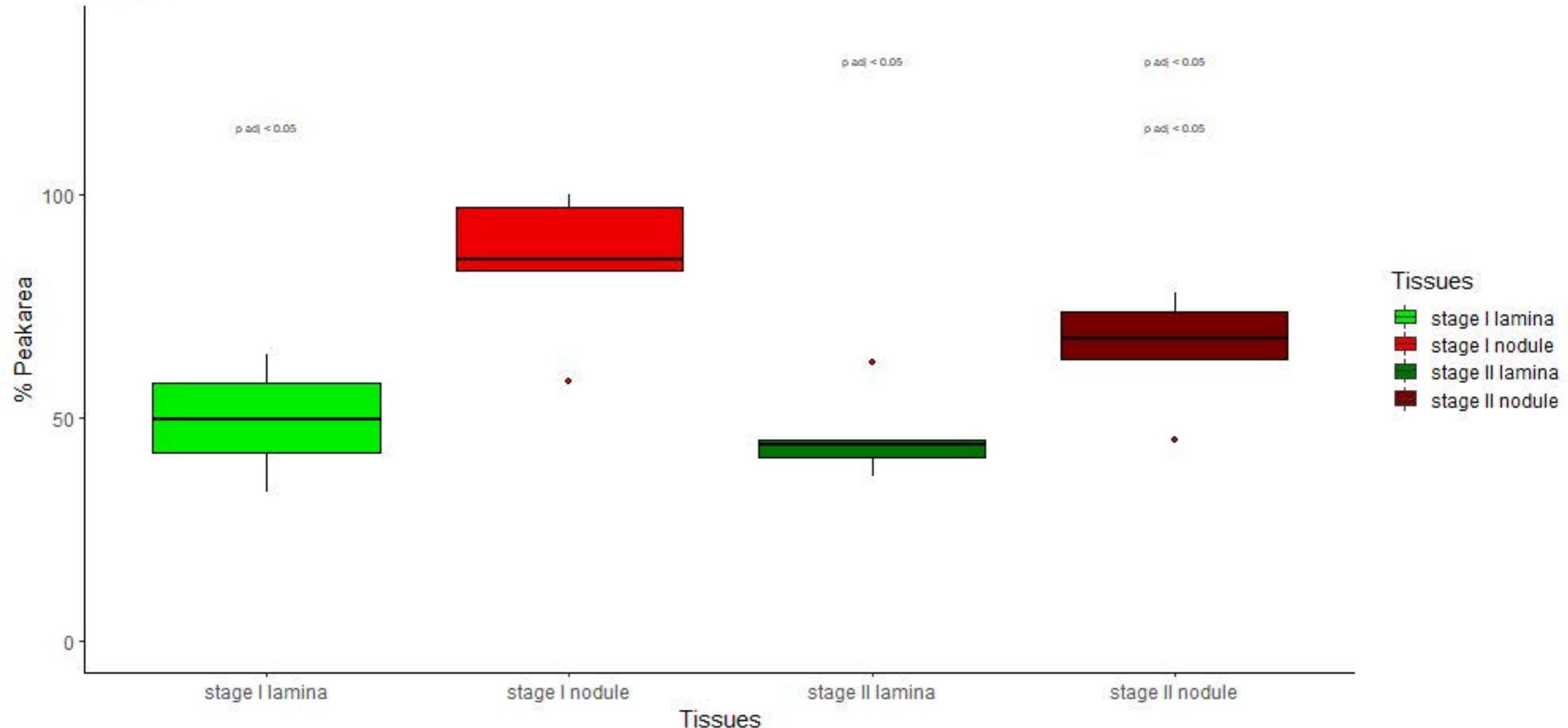
Serine



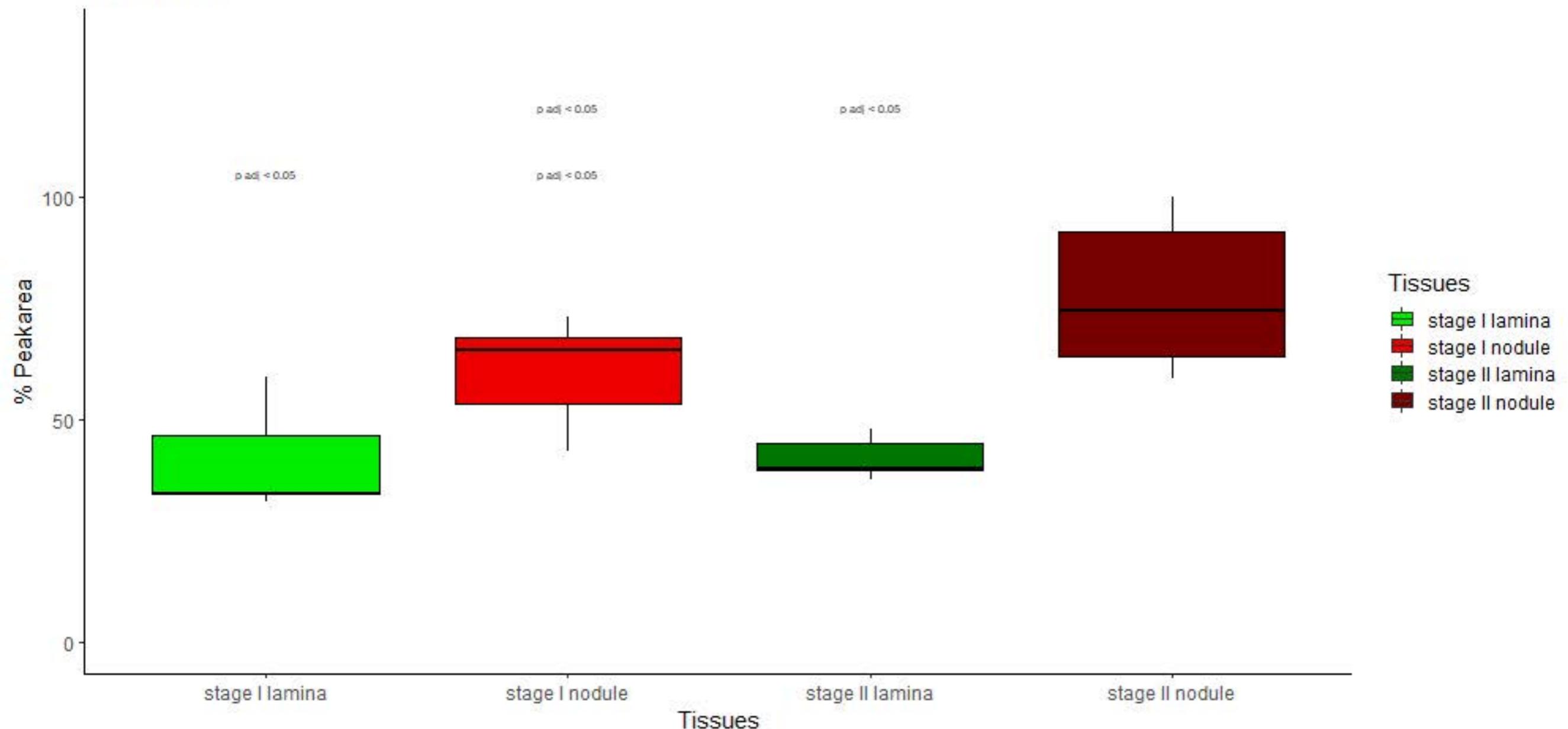
Threonine



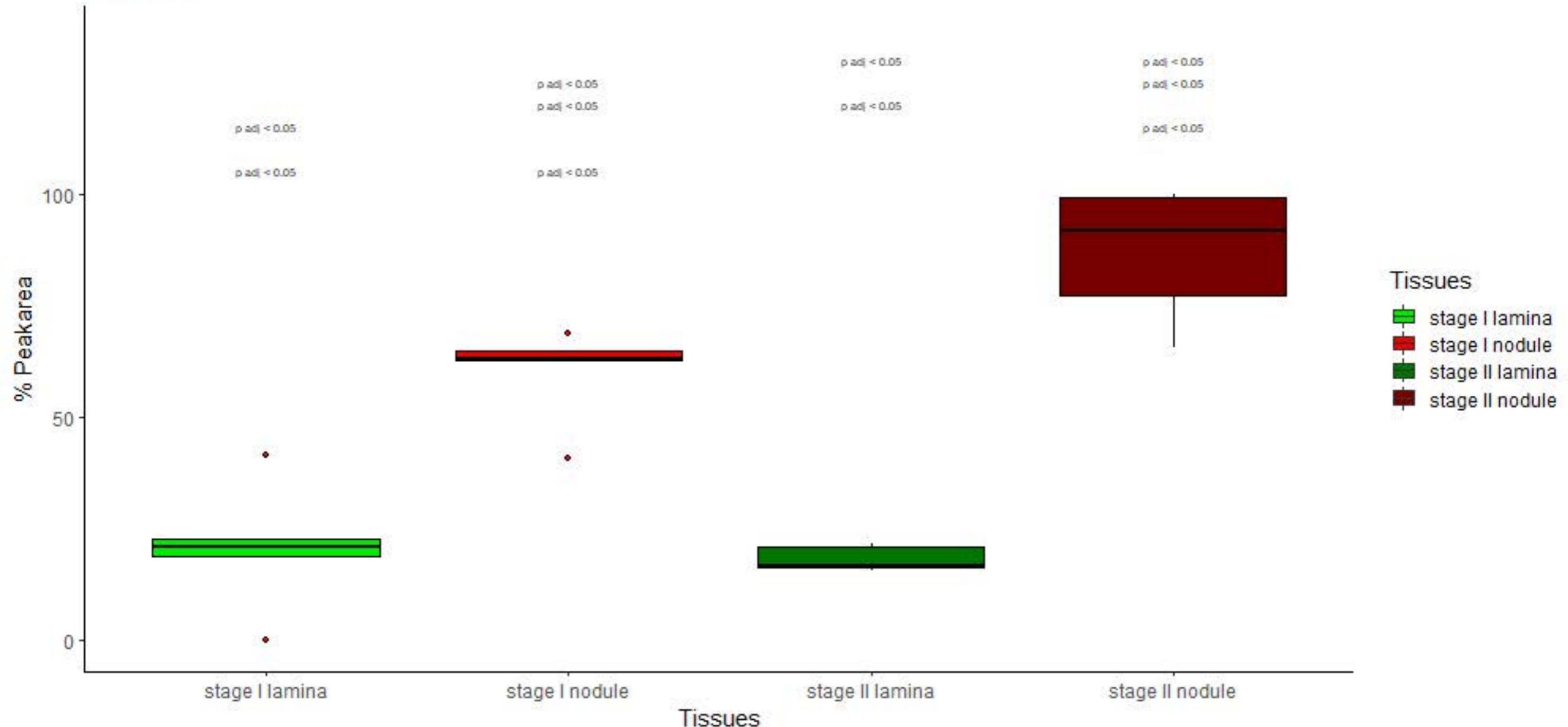
Valine



Isoleucine

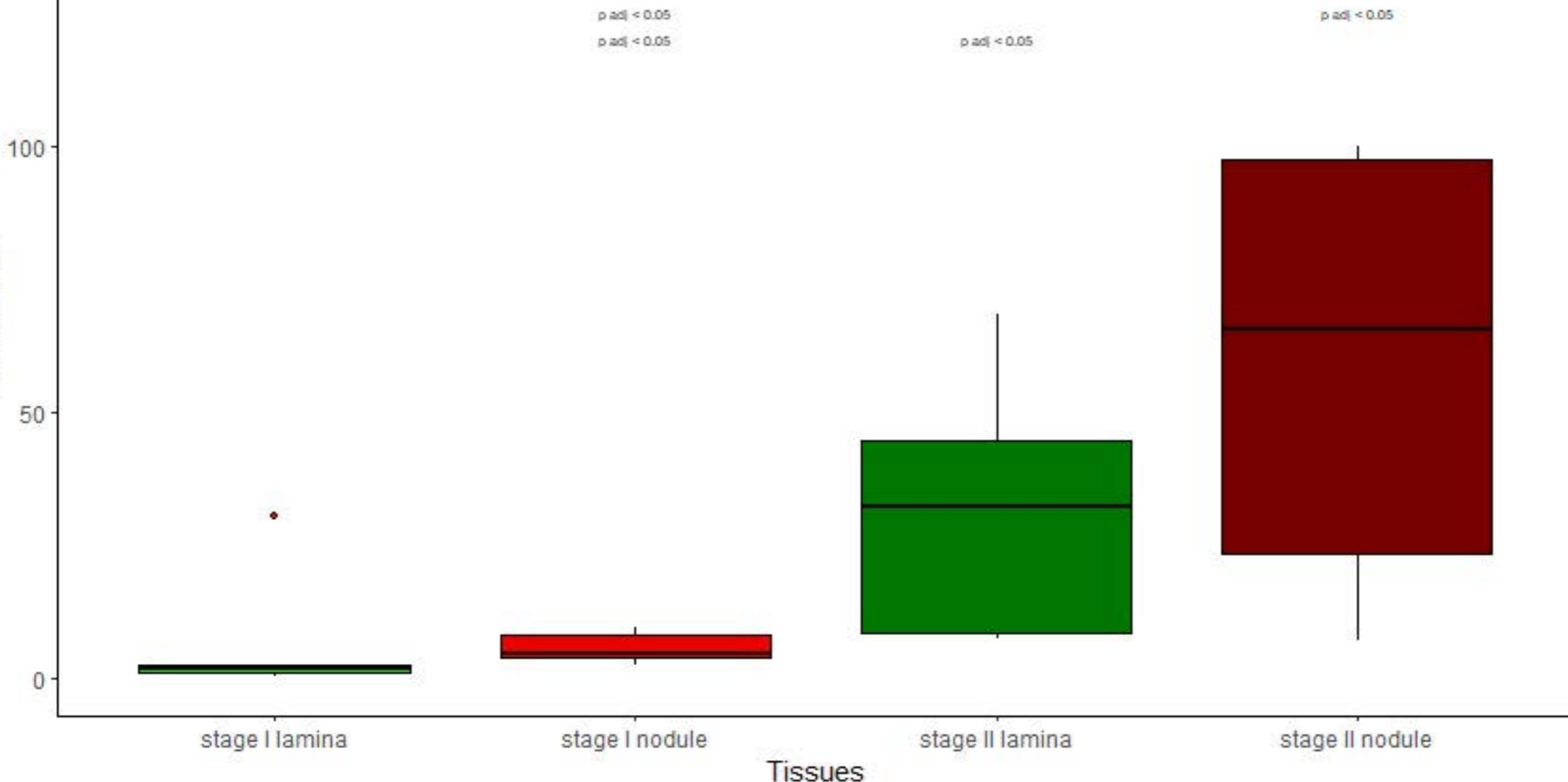


Leucine



Proline

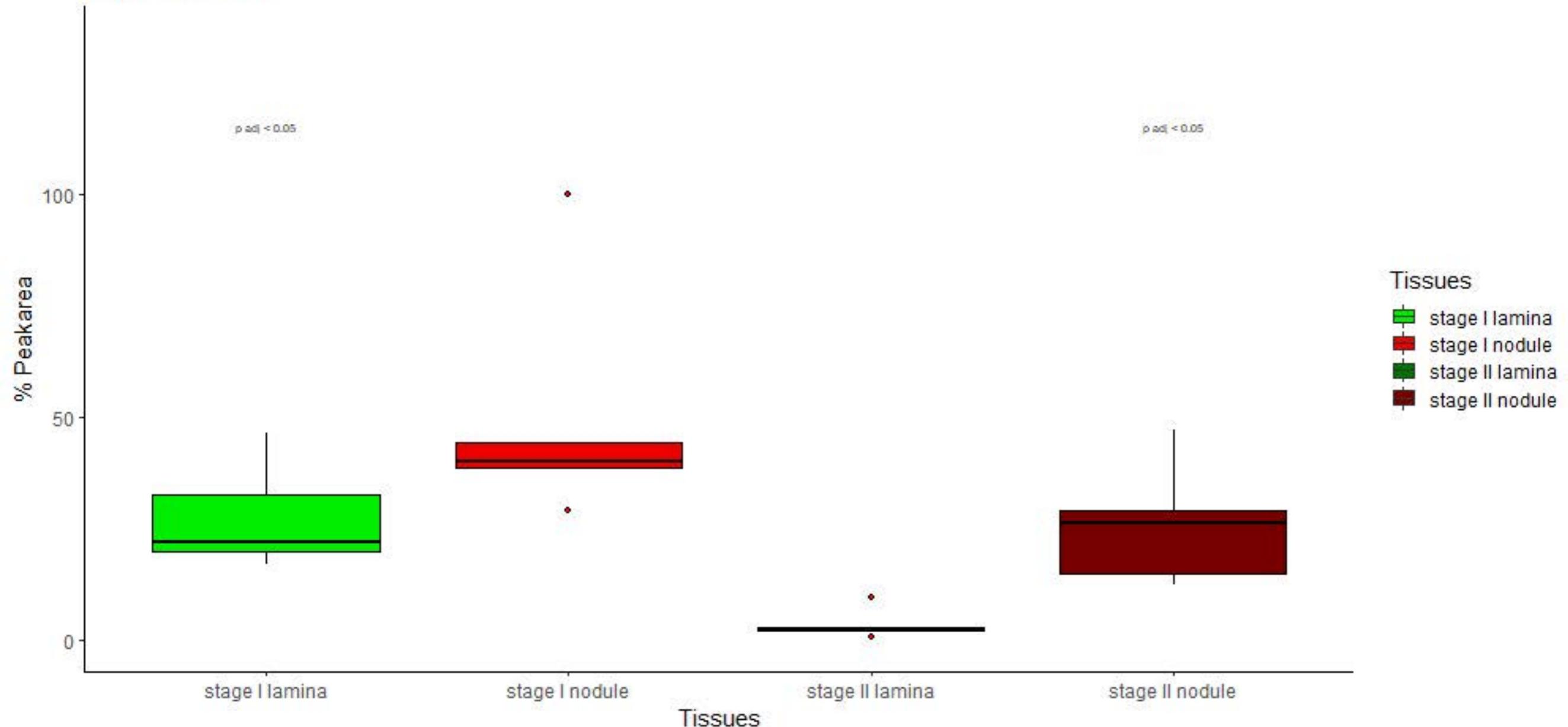
% Peakarea



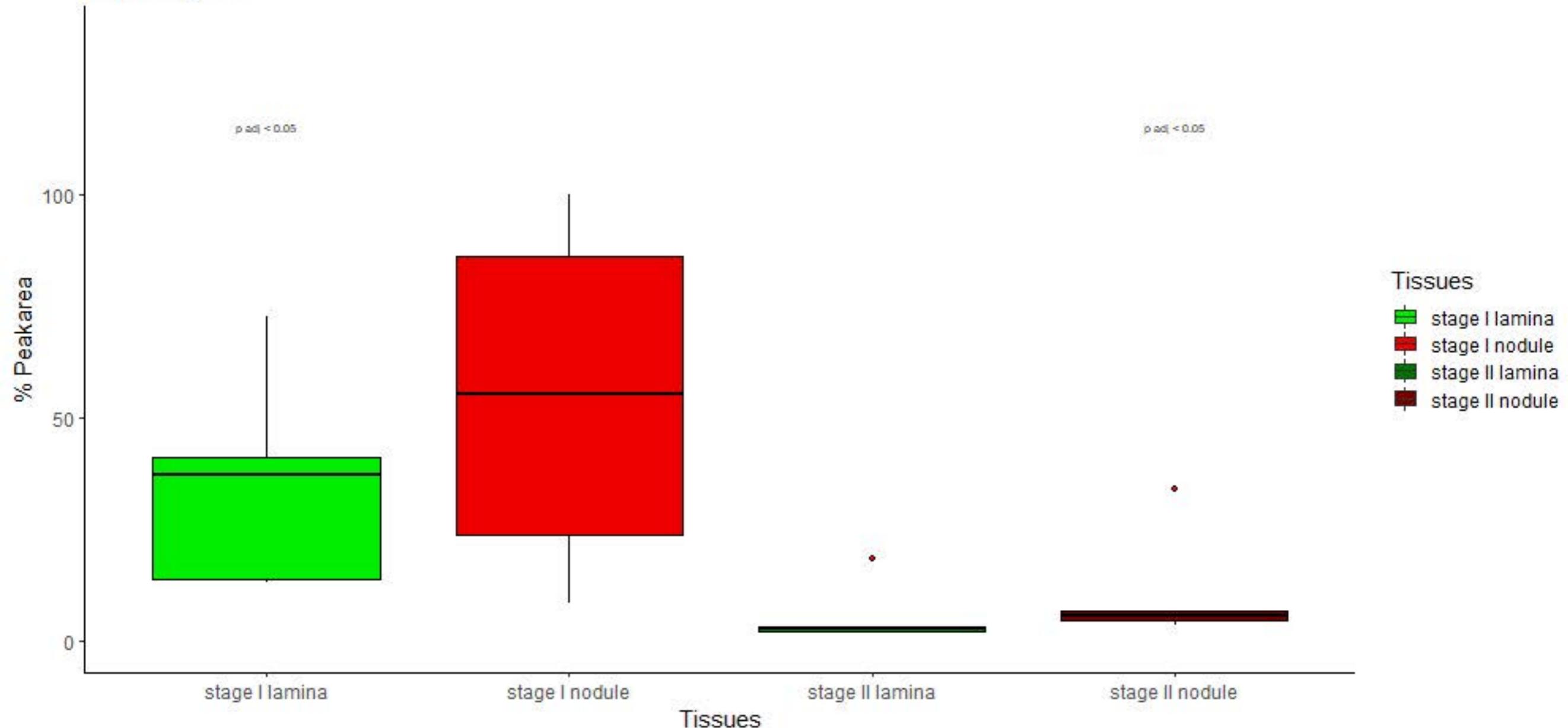
Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

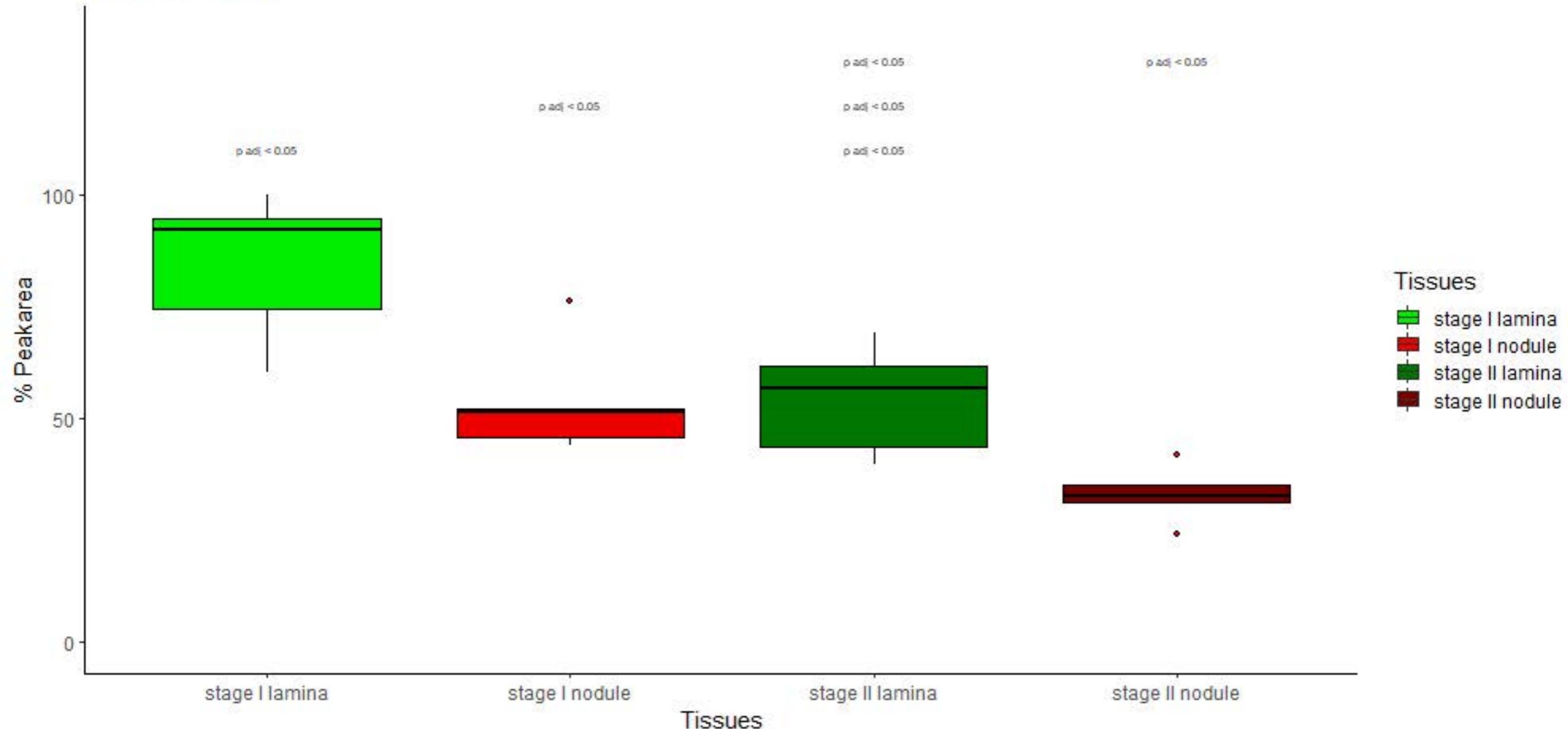
Aspartic acid



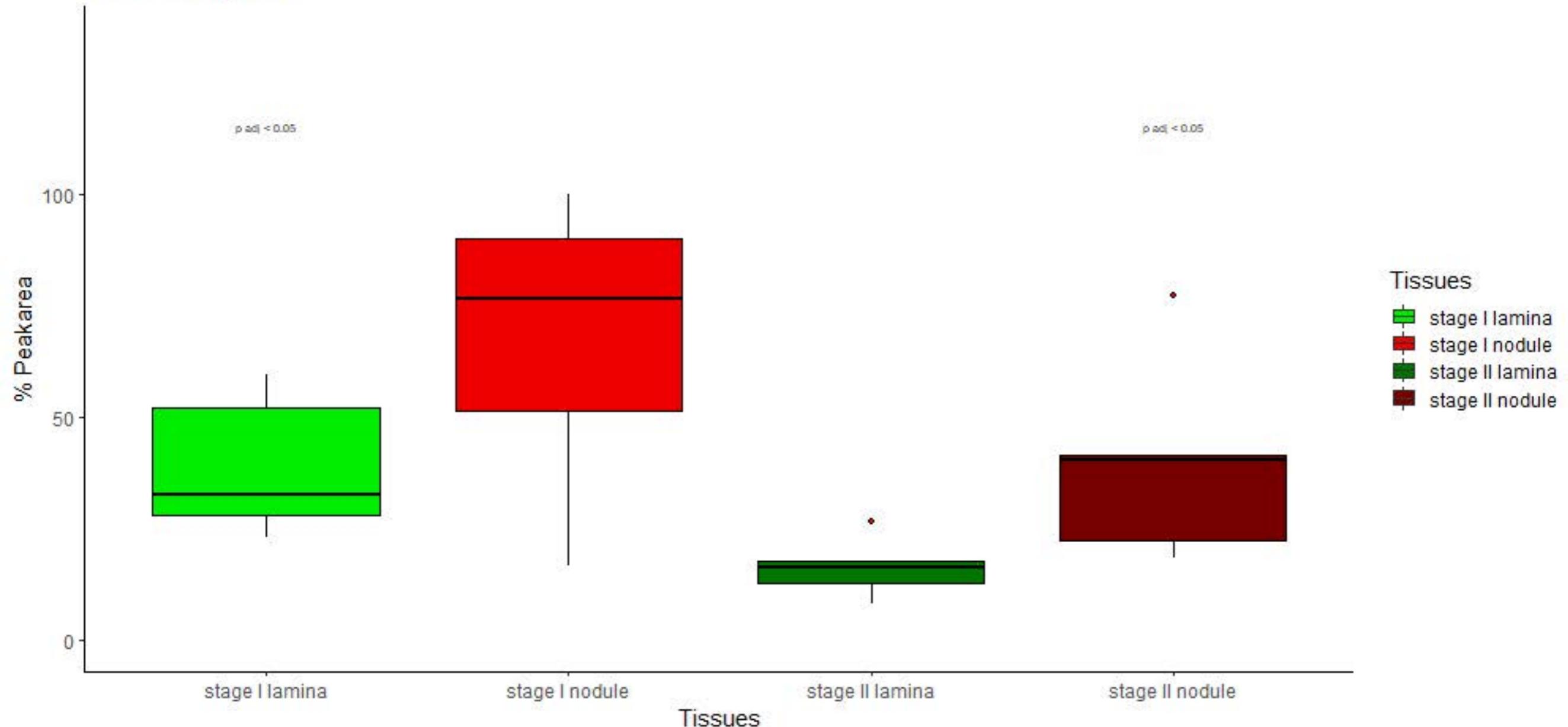
Asparagine



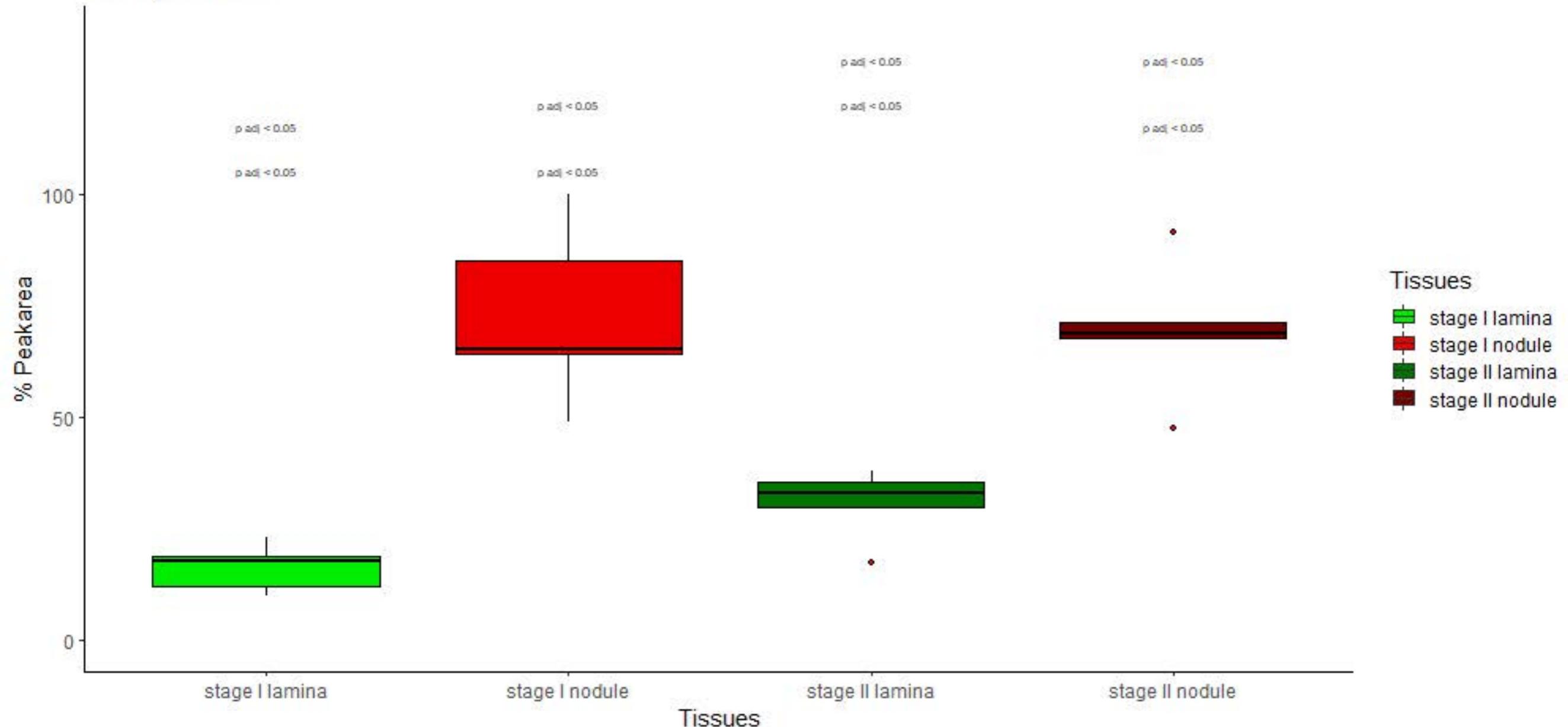
Glutamic acid



Glutamine, DL-



Phenylalanine



Tryptophan

% Peakarea

100

50

0

p adj < 0.05

p adj < 0.05

stage I lamina

stage I nodule

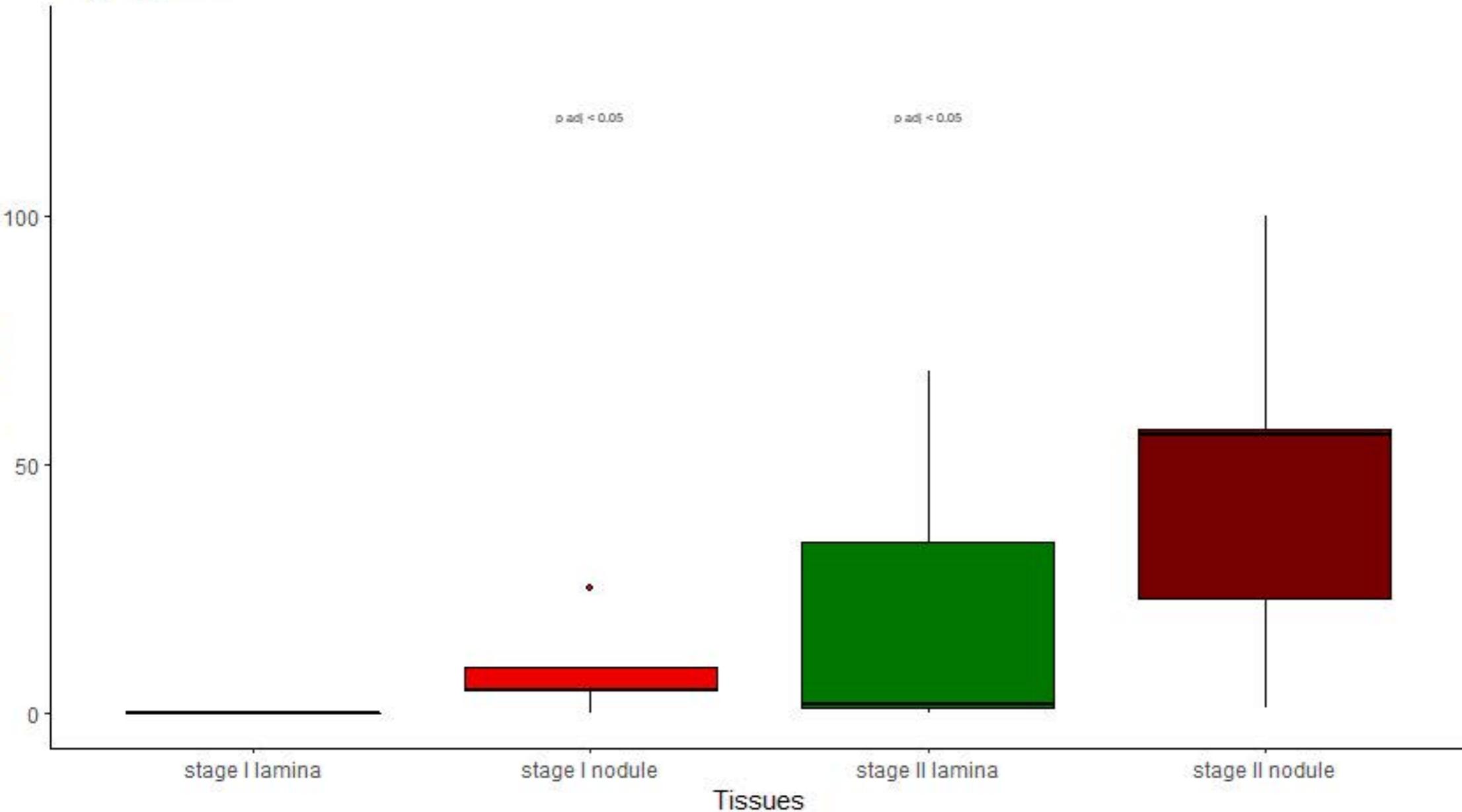
stage II lamina

stage II nodule

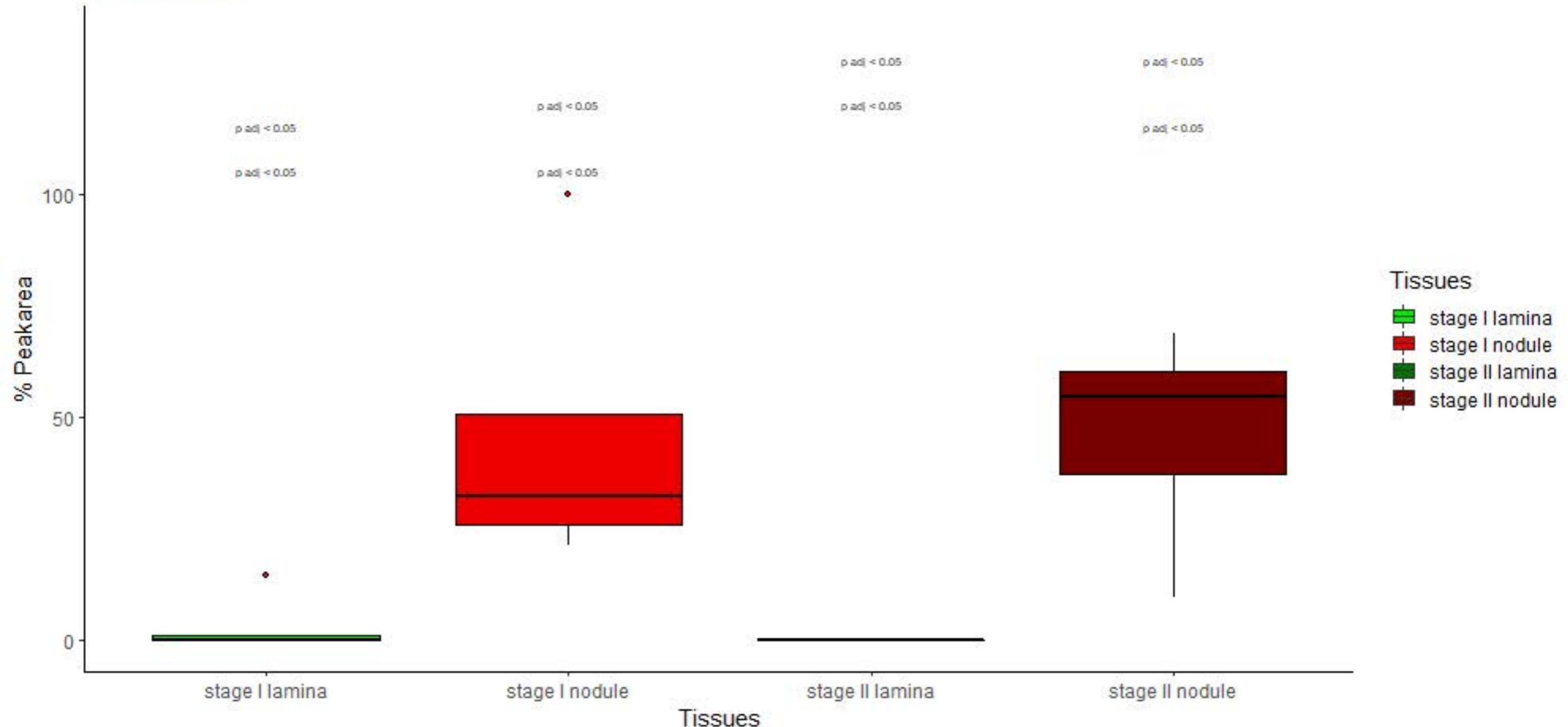
Tissues

Tissues

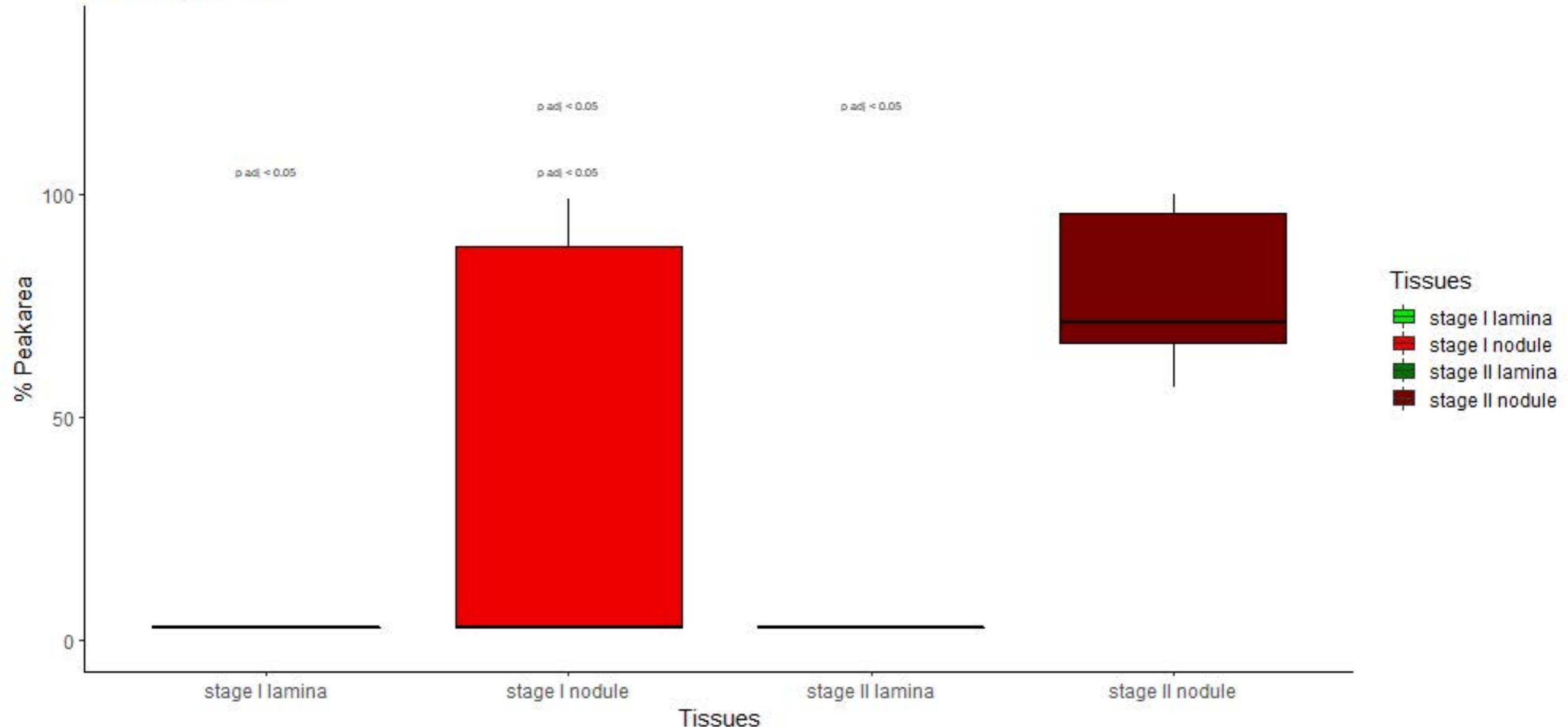
- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule



Methionine



ART Cysteine?



Butanoic acid, 4-amino-

% Peakarea

100

50

0

stage I lamina

stage I nodule

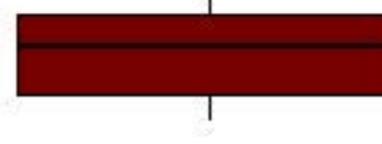
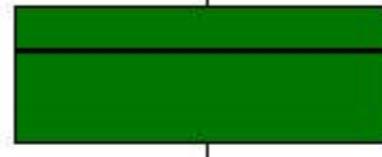
stage II lamina

stage II nodule

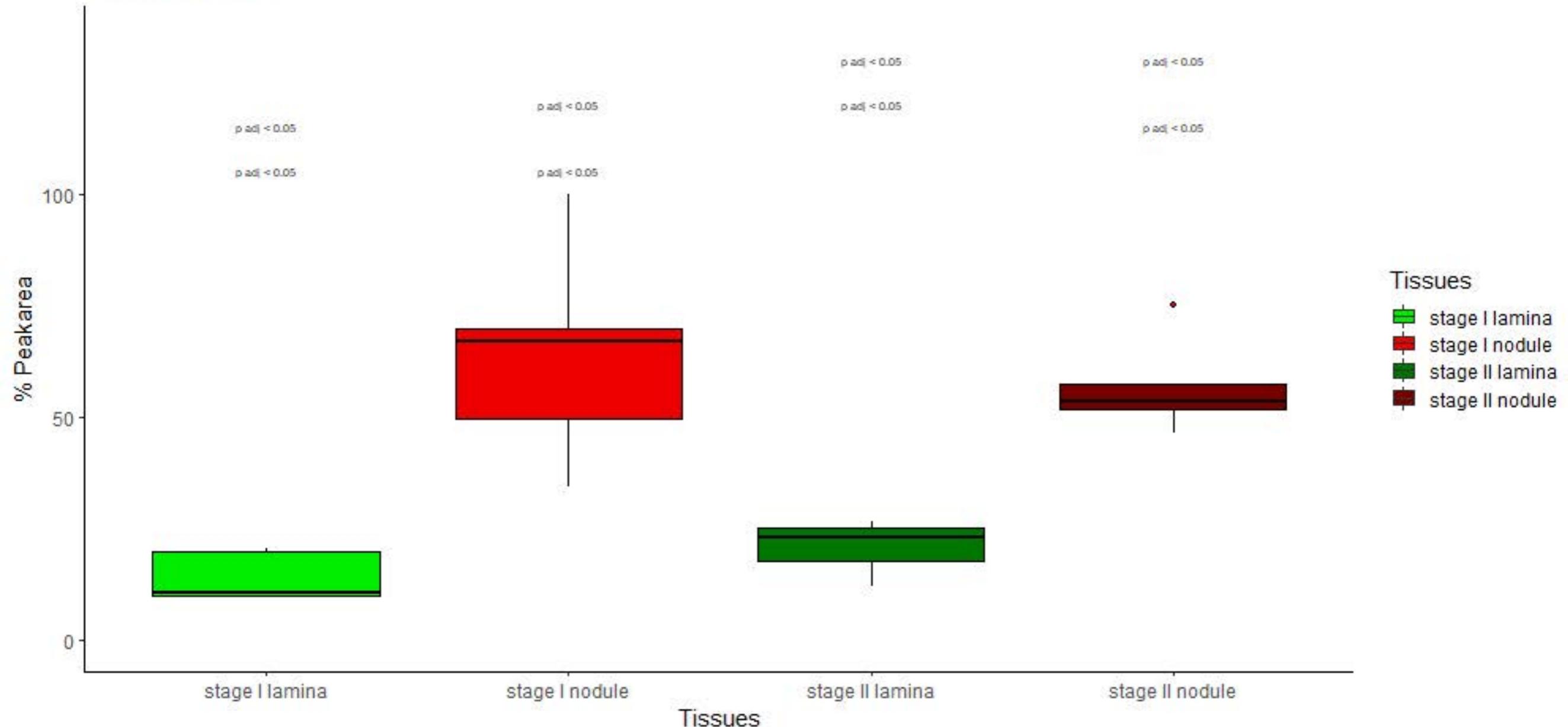
Tissues

Tissues

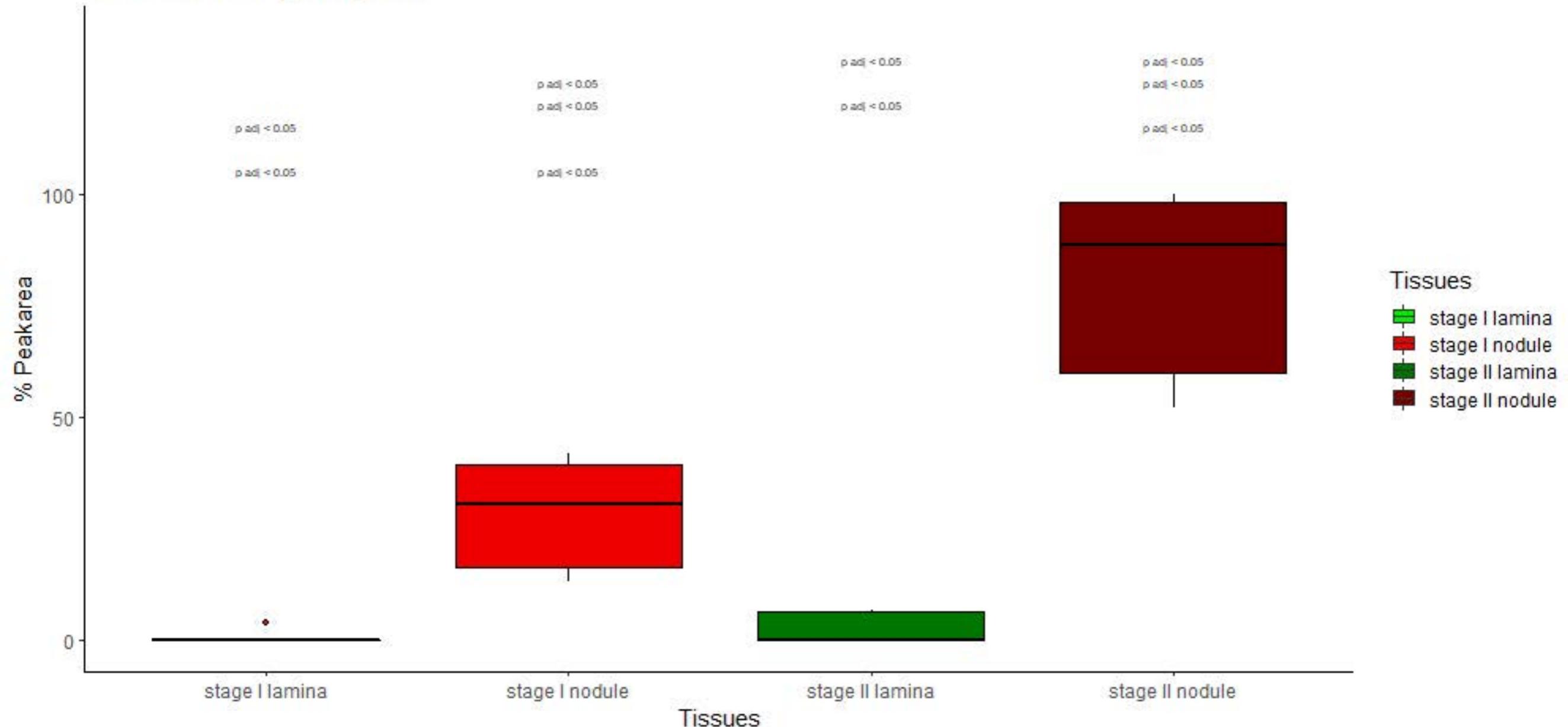
- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule



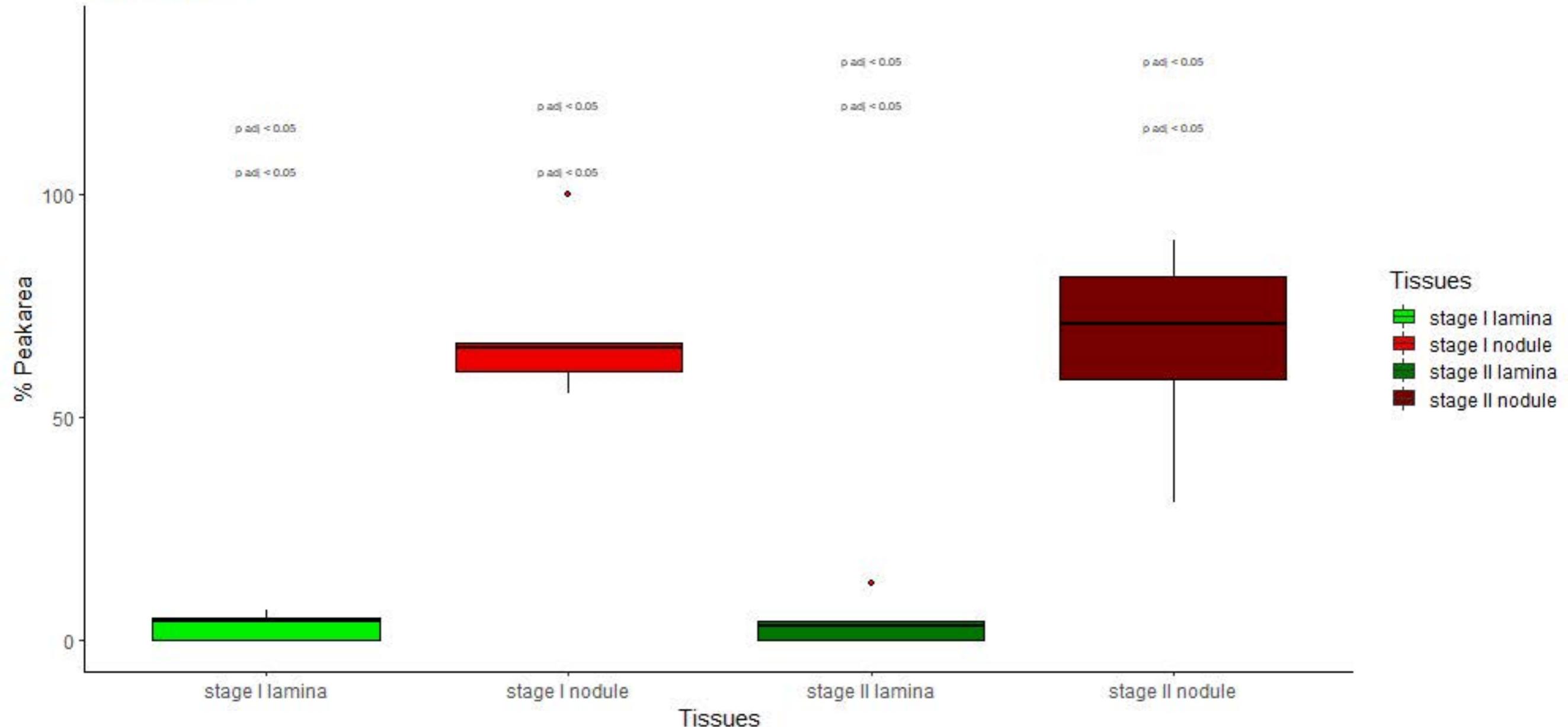
Ethanolamine



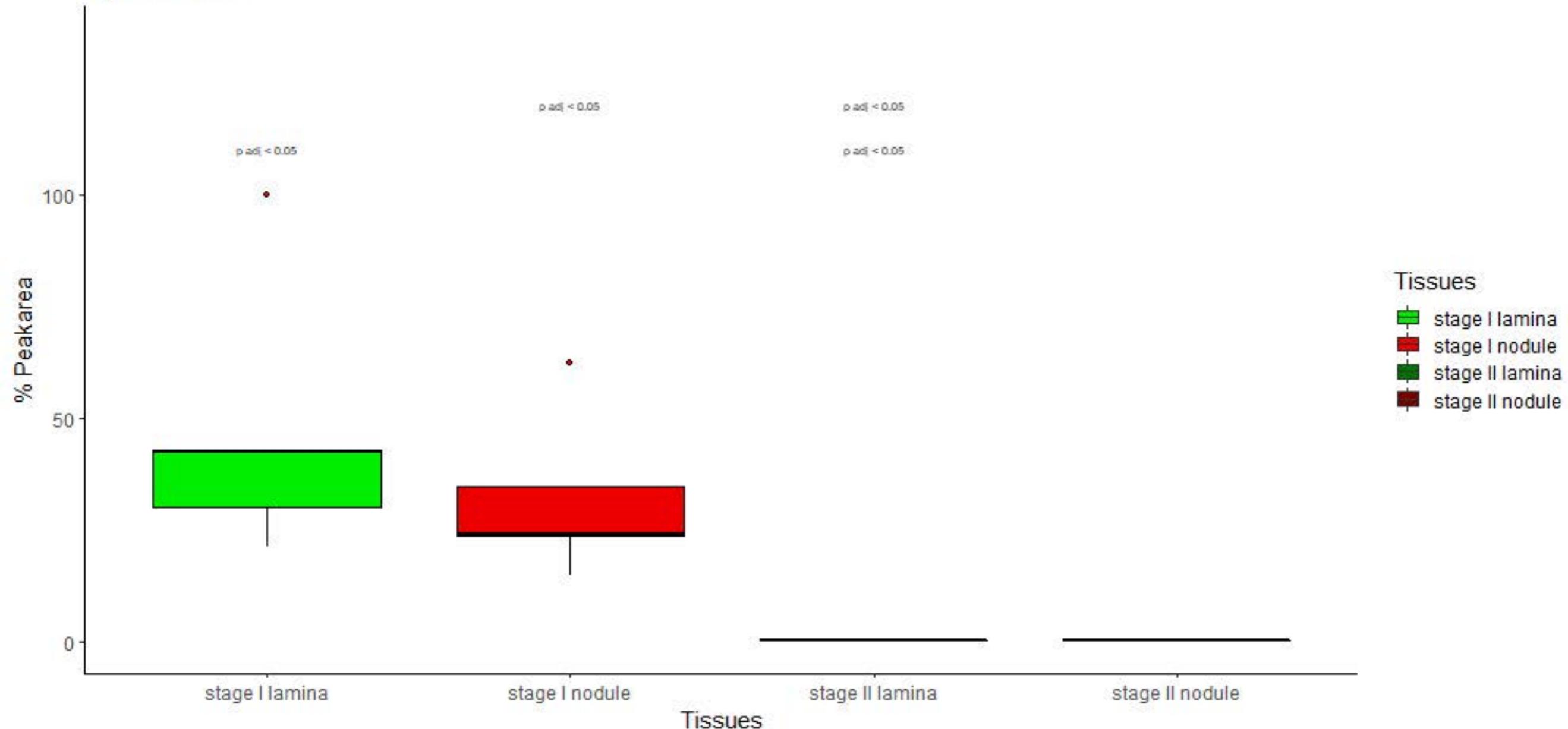
?Ethanolaminephosphate



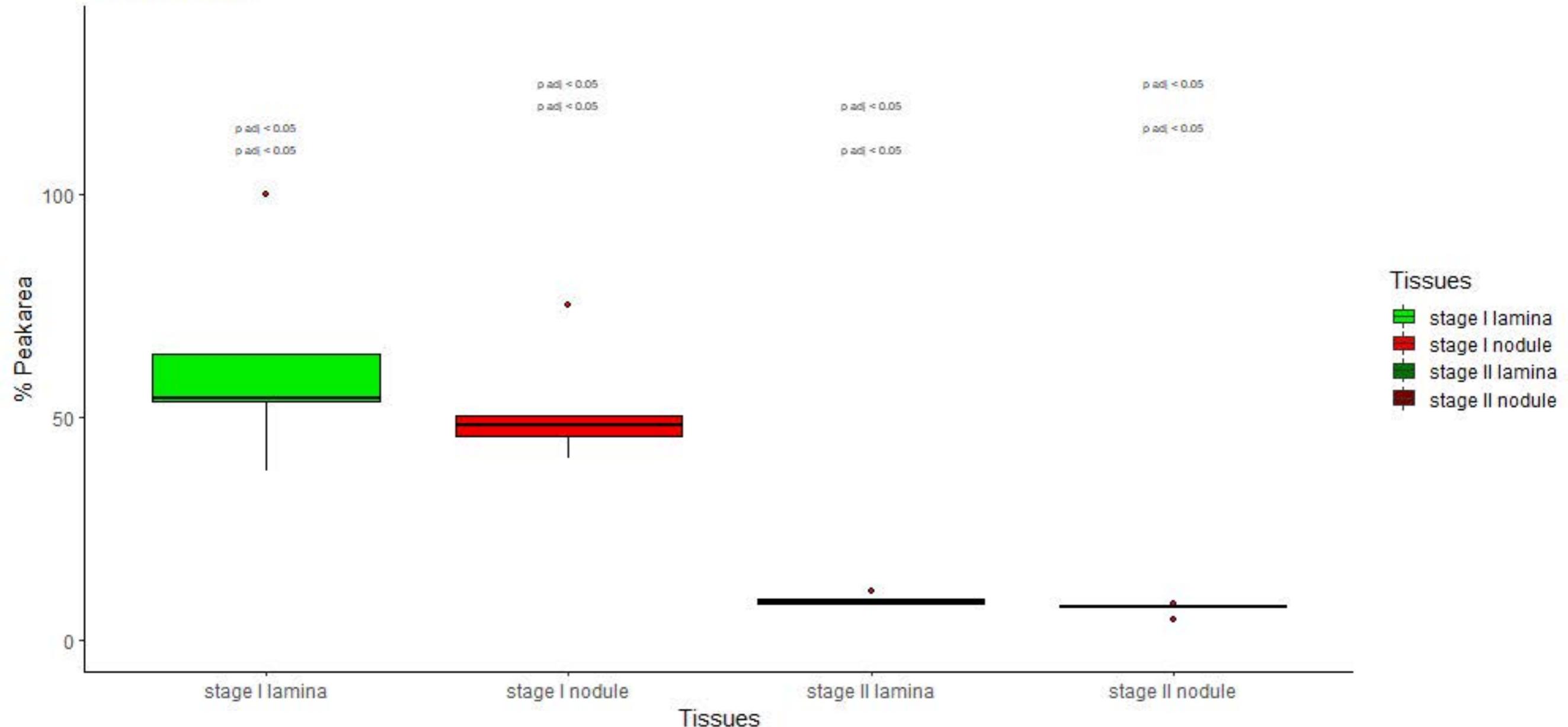
Putrescine



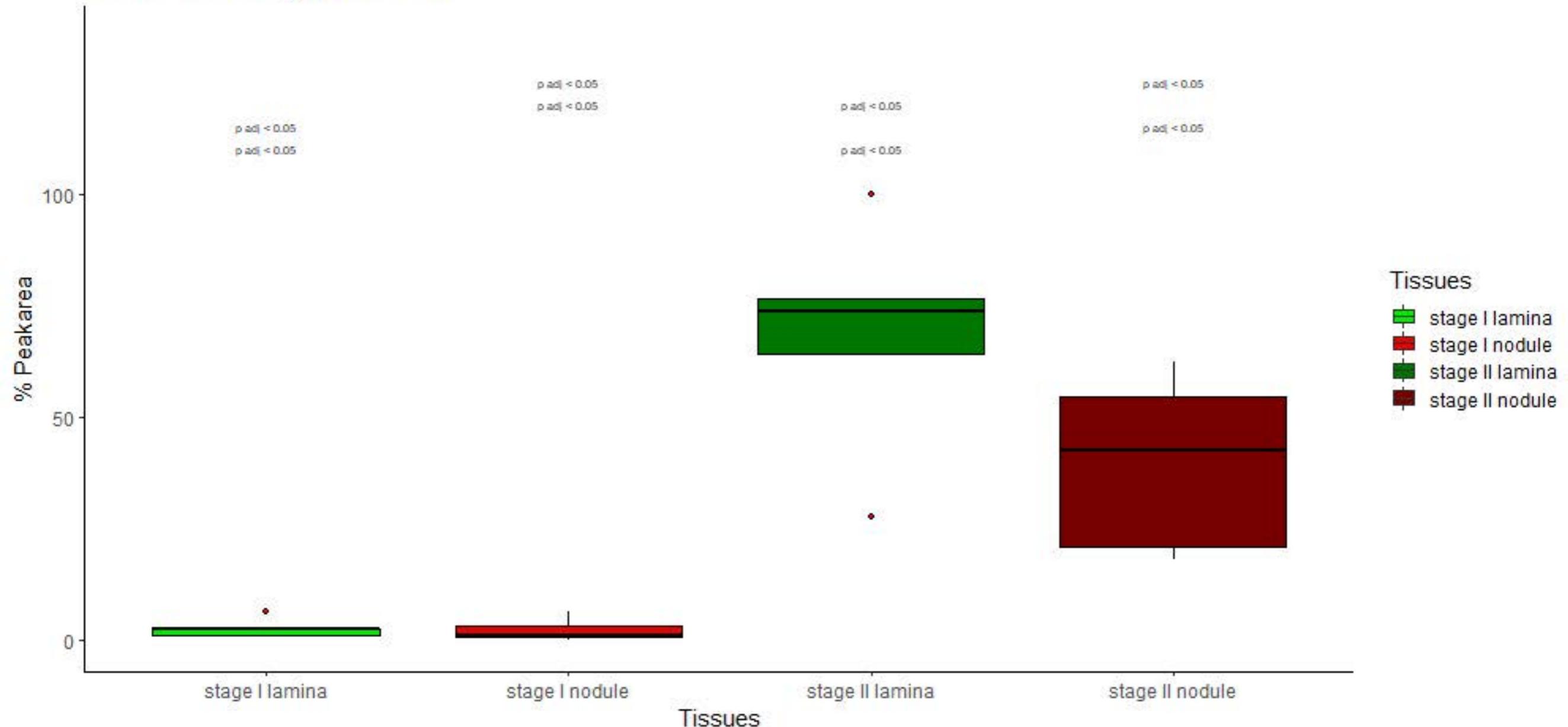
Quinic acid



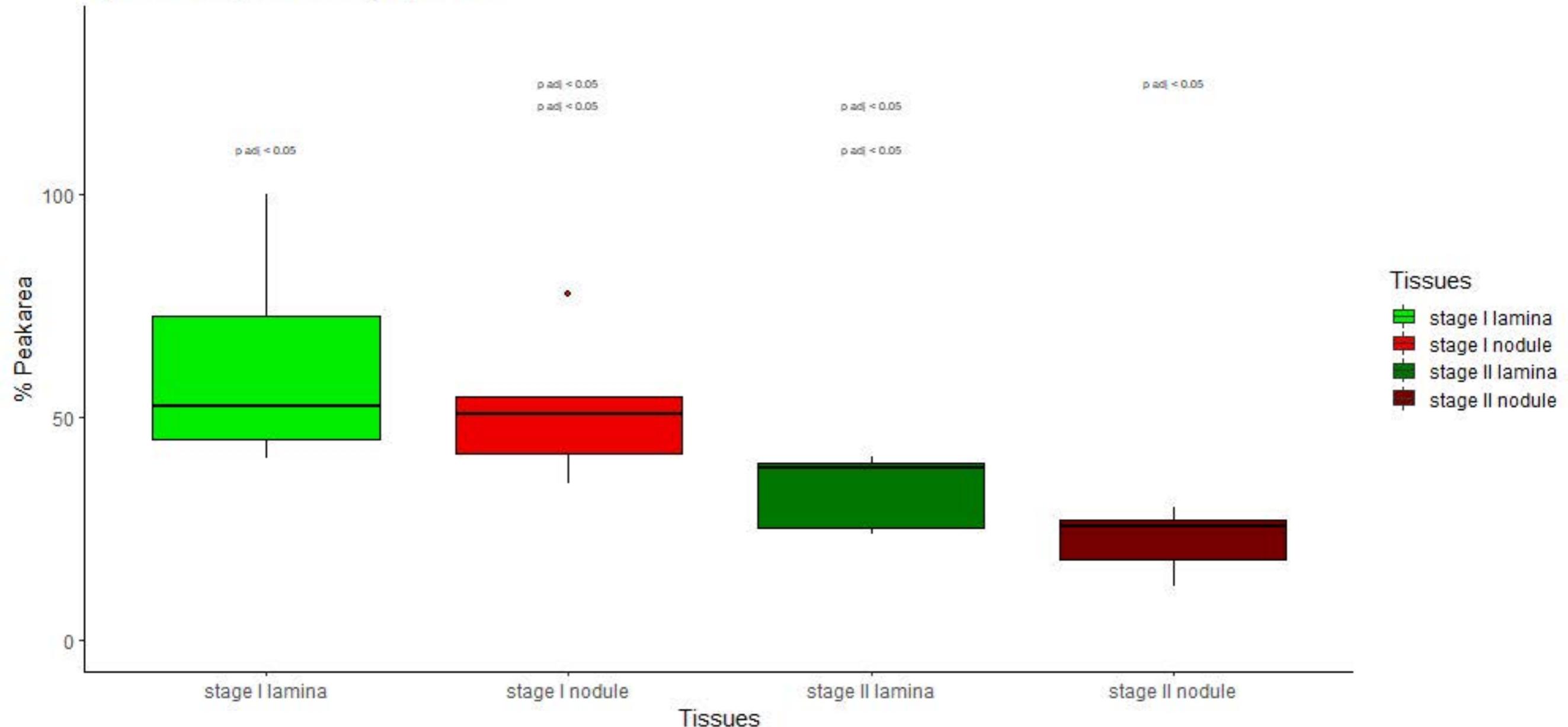
Shikimic acid



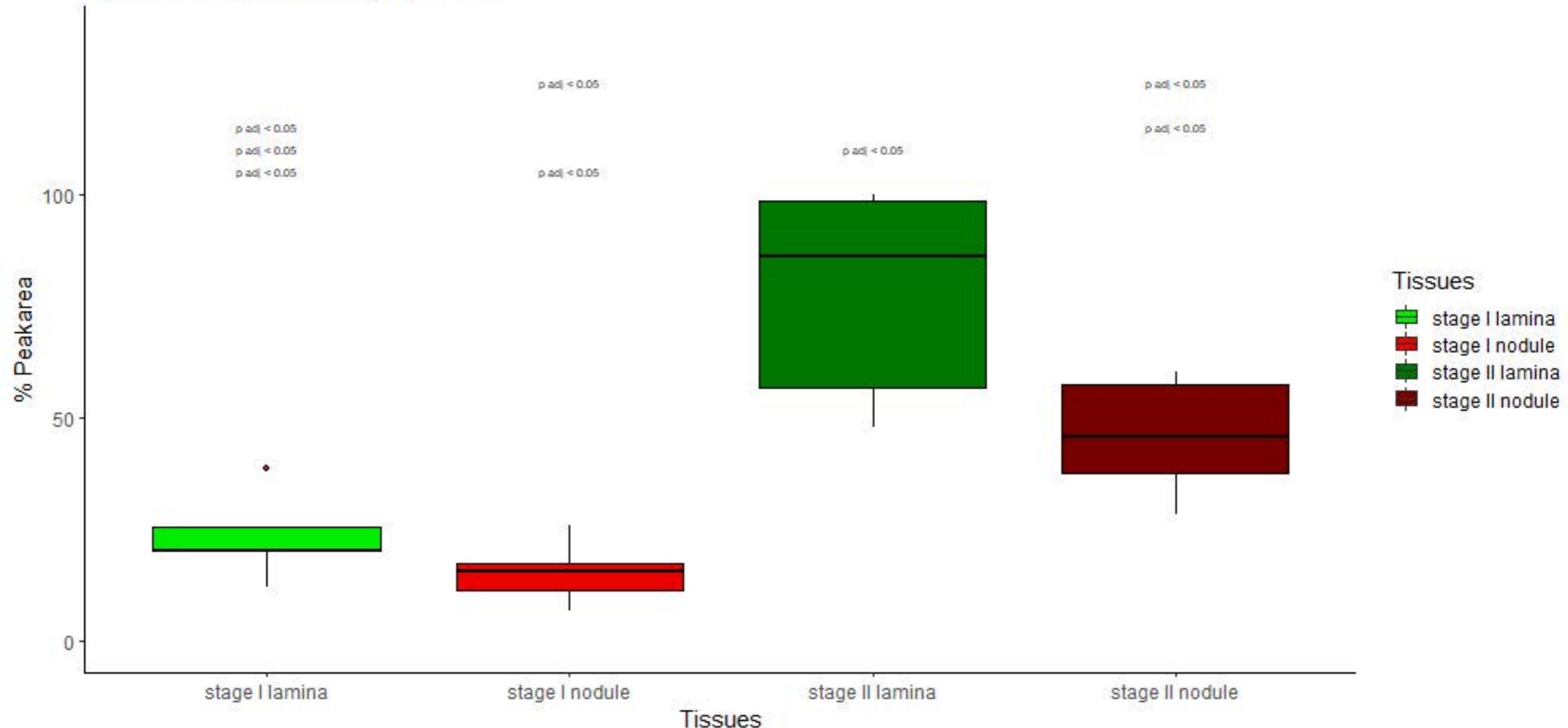
3-trans-Caffeoylquinic acid



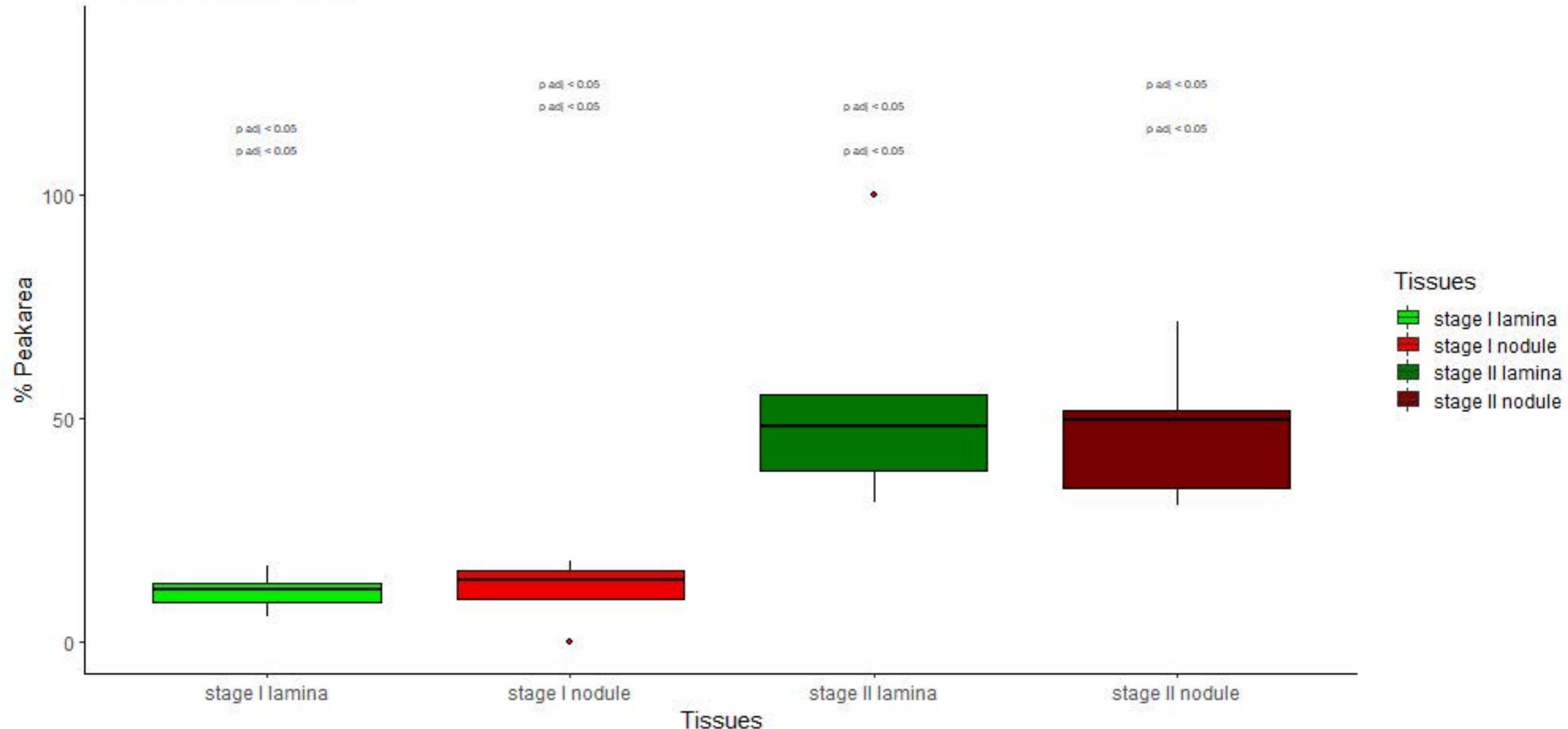
Quinic acid, 4-caffeooyl-, trans-



Quinic acid, 5-caffeyl-, trans-



Tetradecanoic acid



Stigmasterol

% Peakarea

p adj < 0.05

100

p adj < 0.05

50

0

stage I lamina

stage I nodule

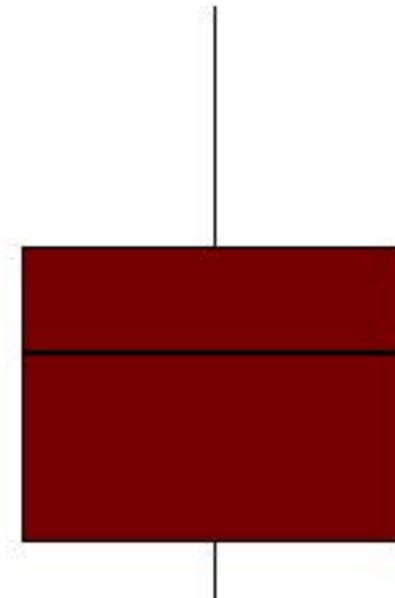
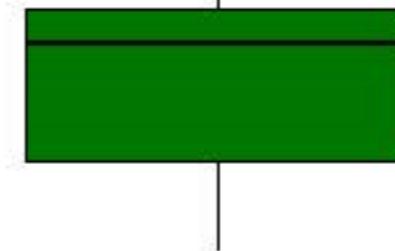
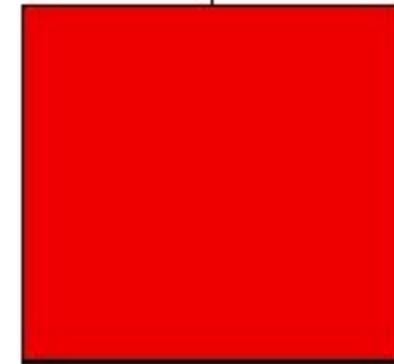
stage II lamina

stage II nodule

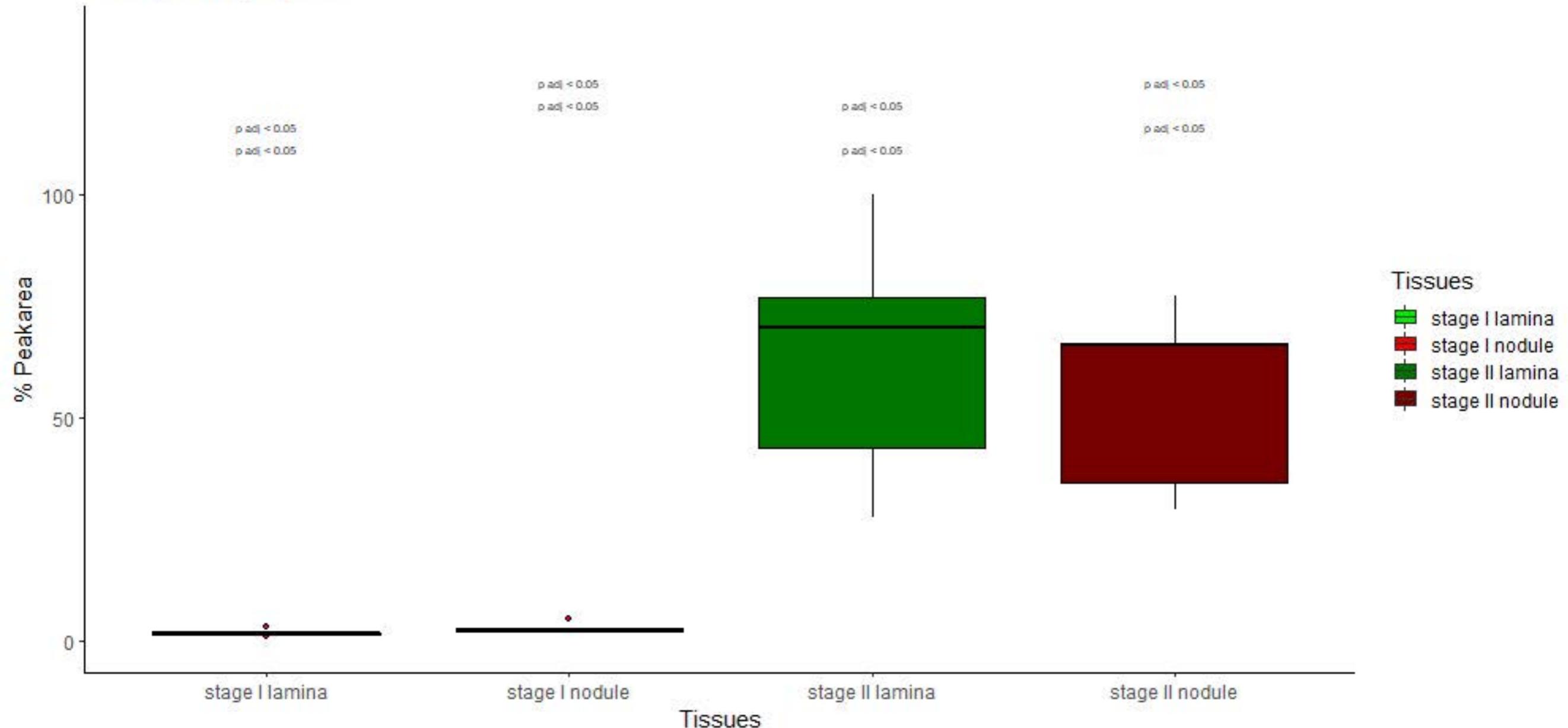
Tissues

Tissues

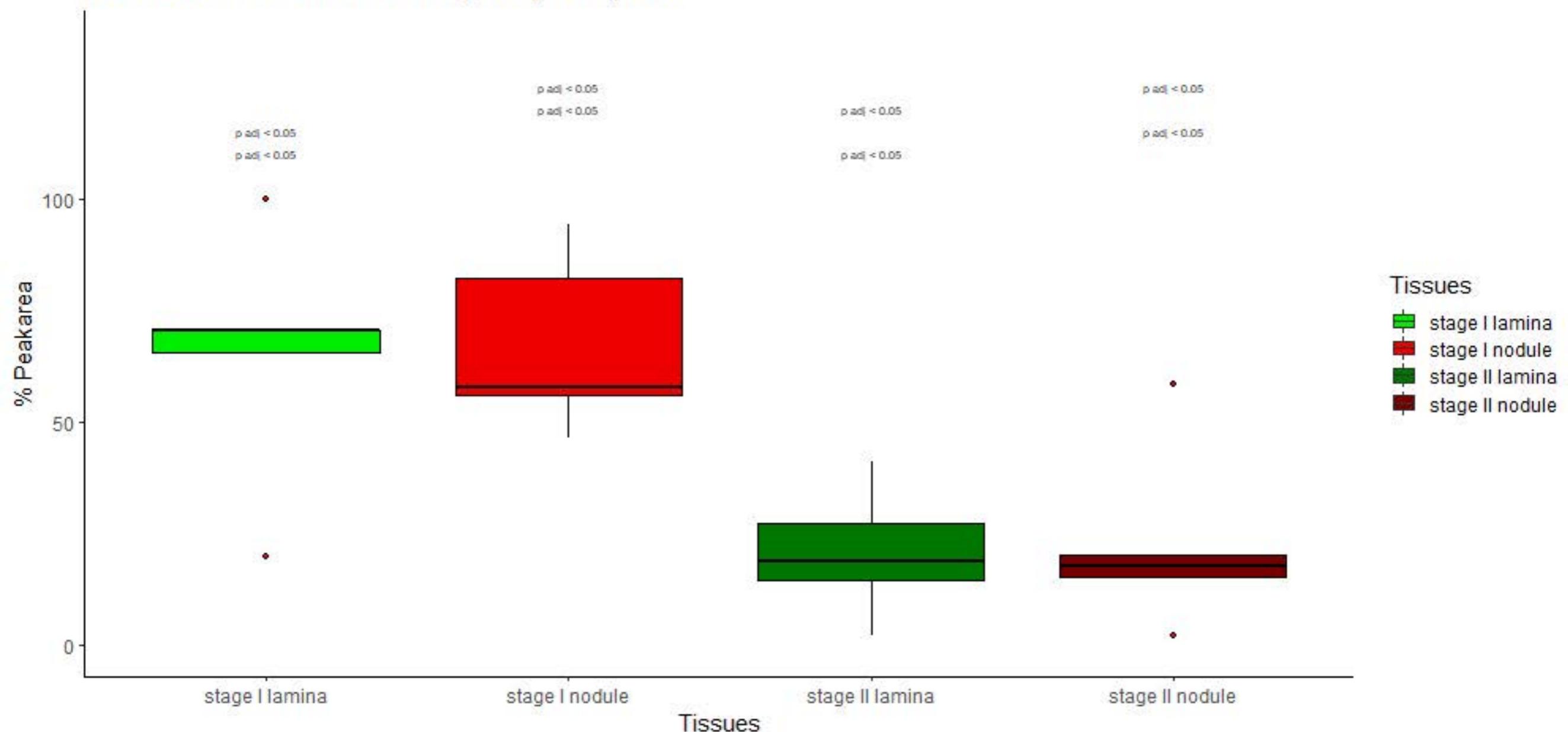
- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule



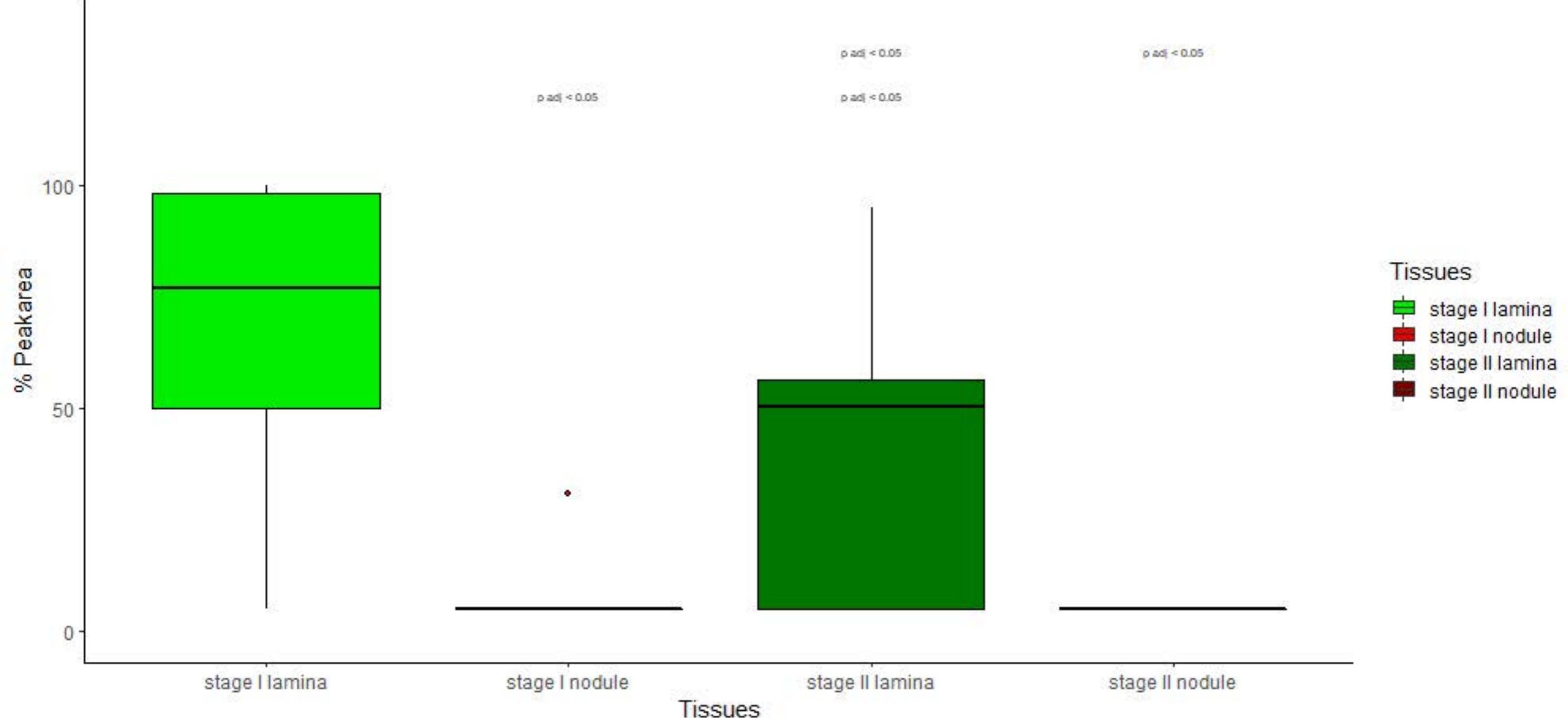
Tocopherol, alpha-



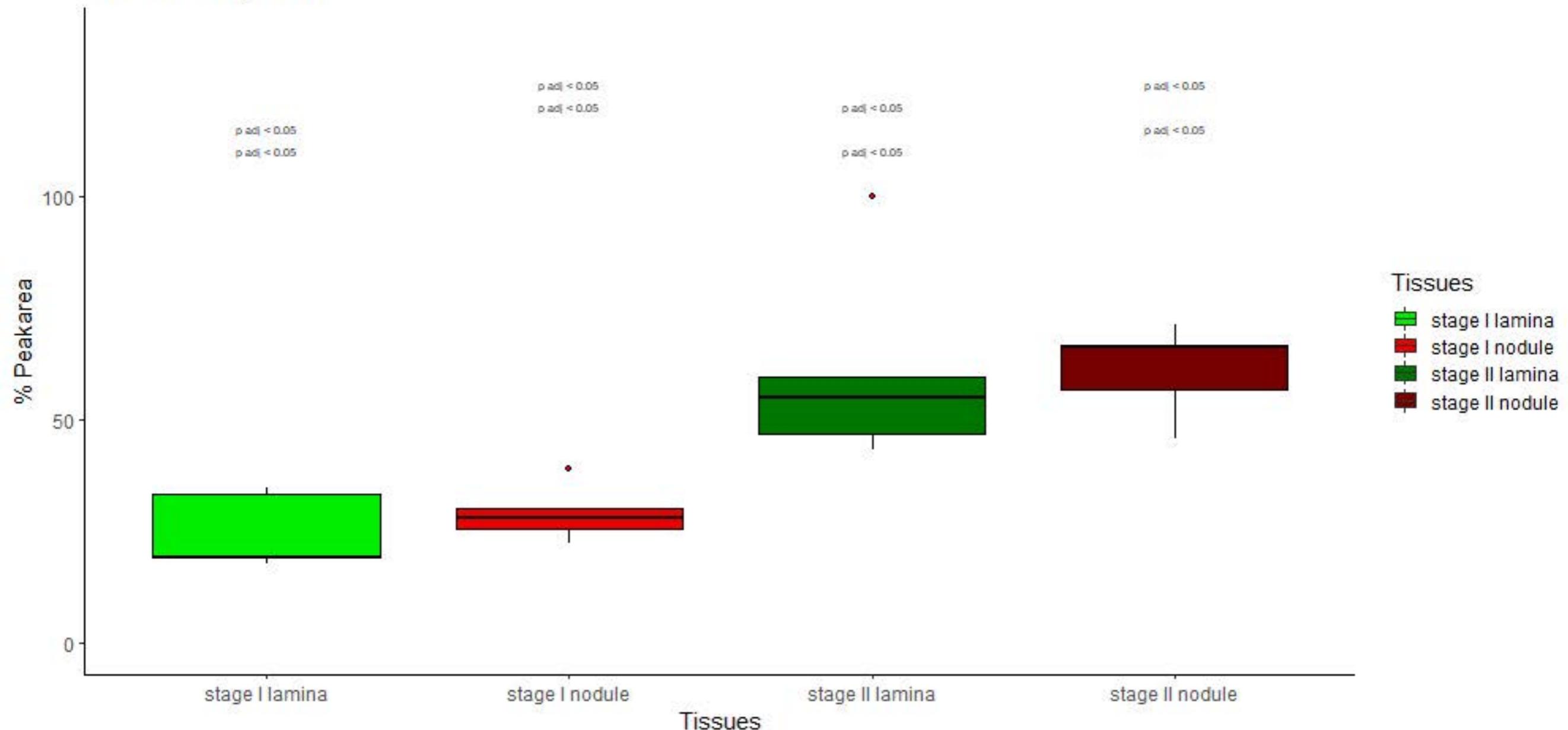
ART/CONT RI 1617 mz117, 205, 249, 438



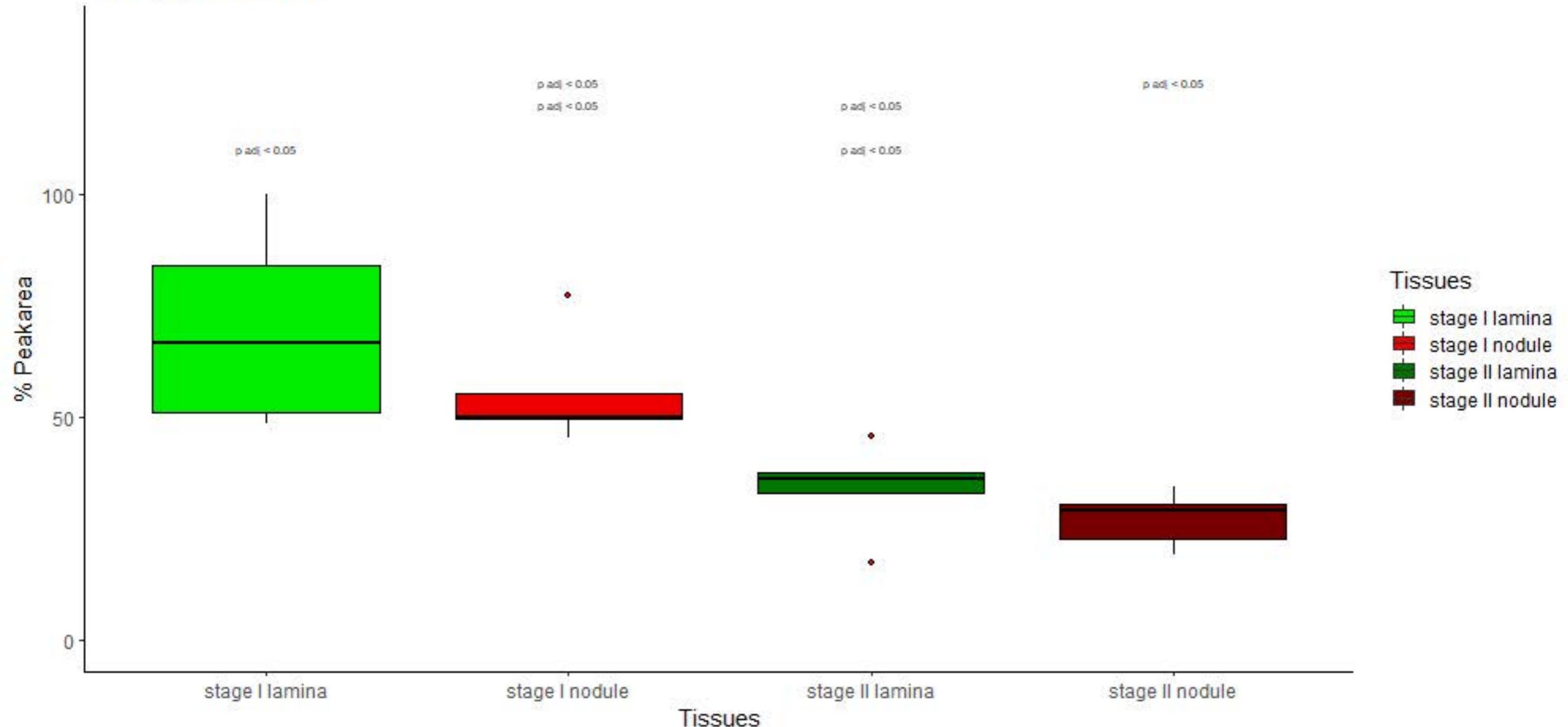
EITTMS_N12C_ATHR_1585.2_1135EC44



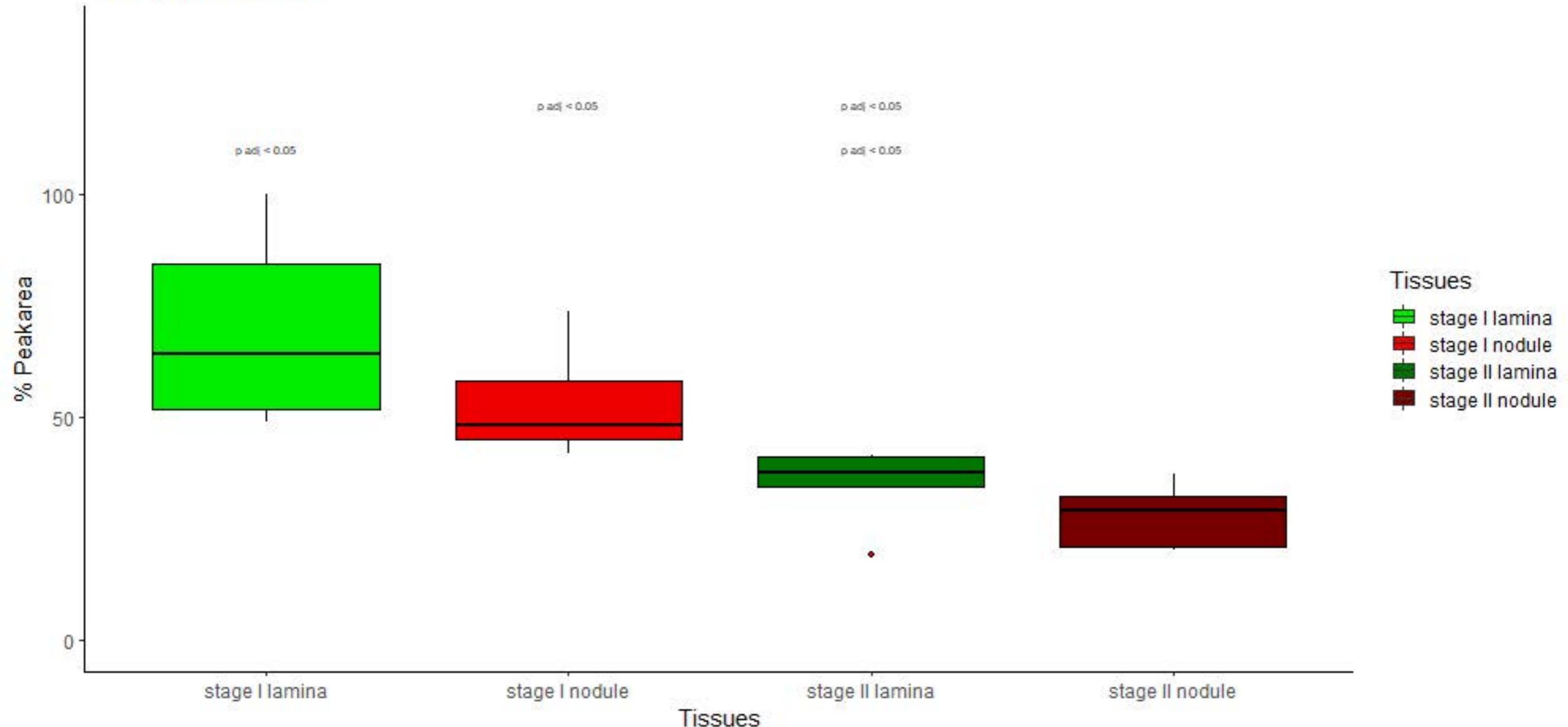
NA 163 fatty acid



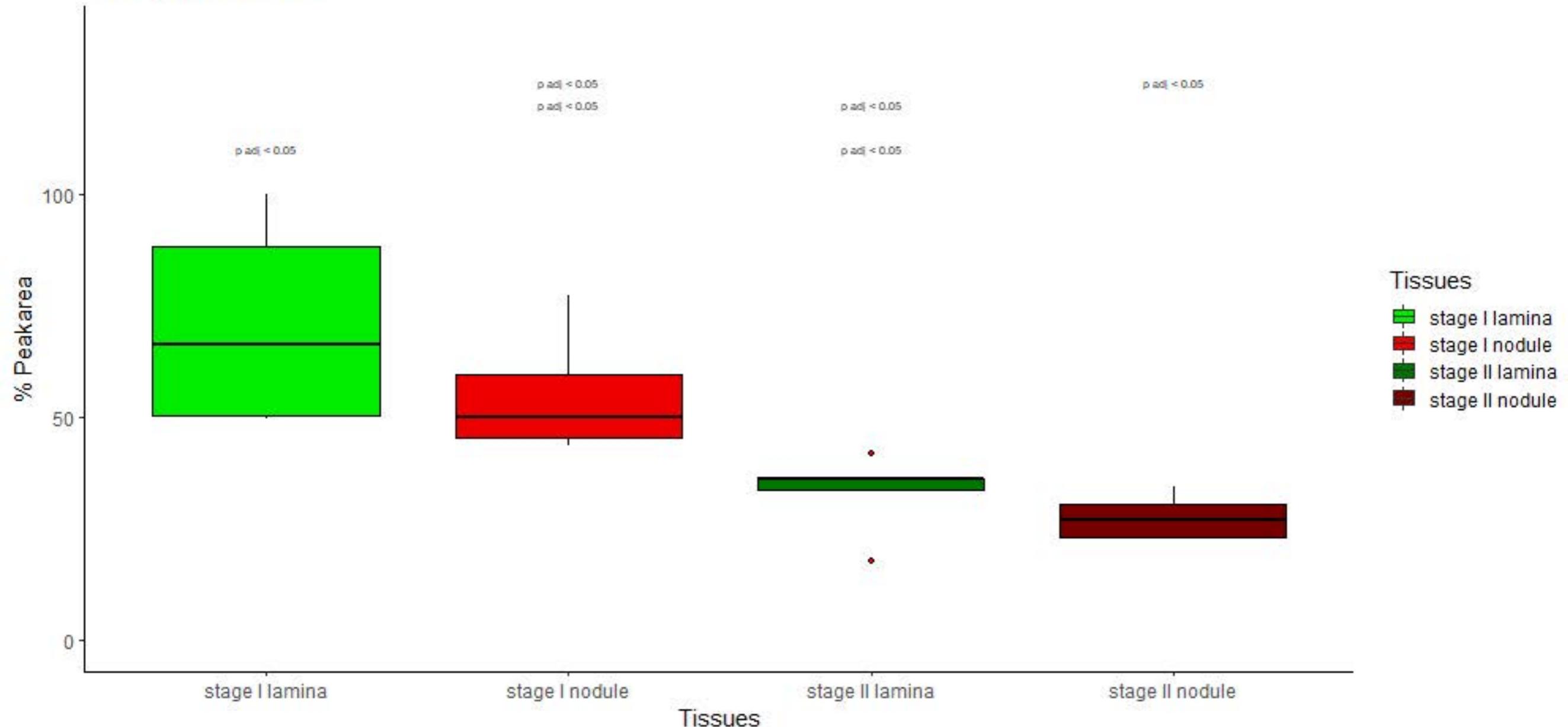
NA Lipid/FA 139



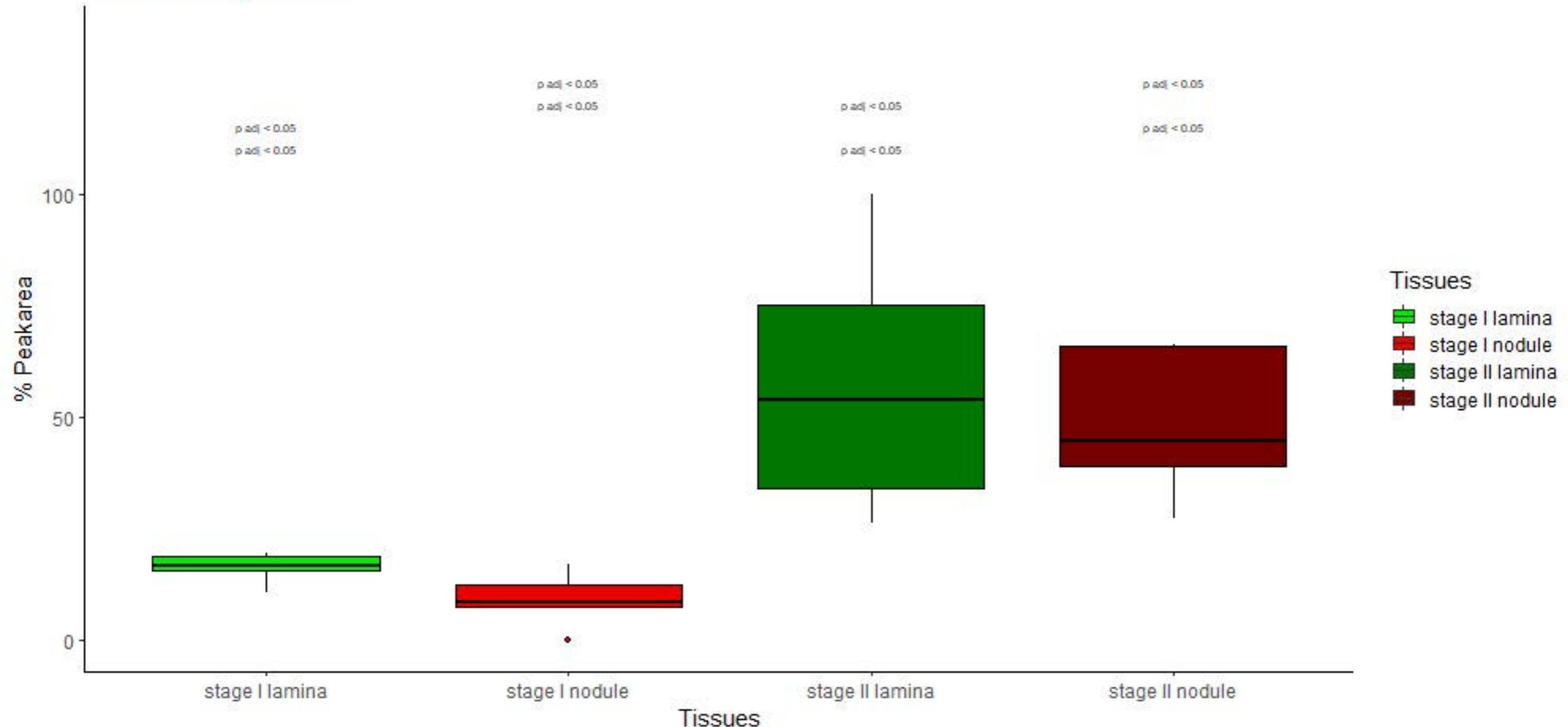
NA Lipid/FA 140



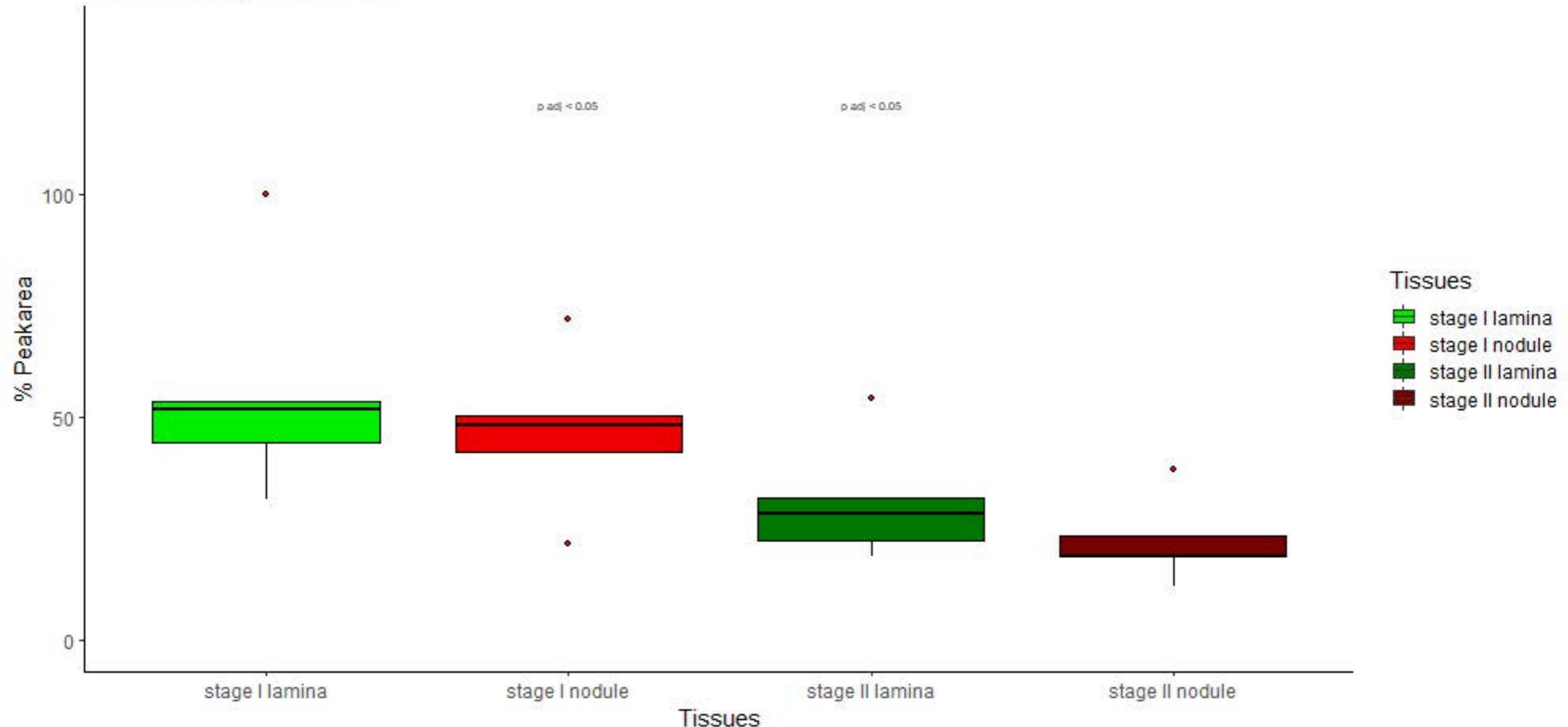
NA Lipid/FA 141



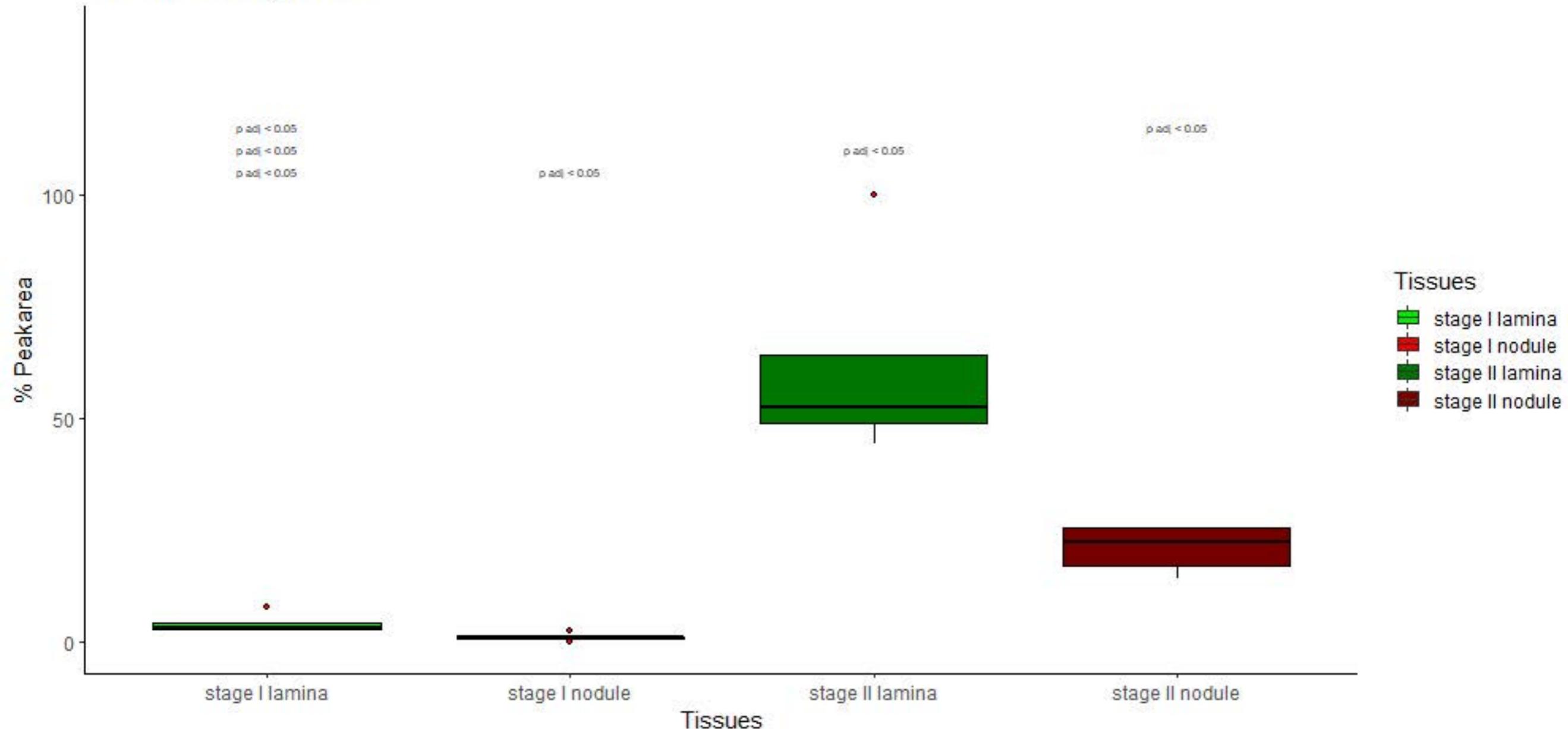
NA Carbohydrate 1



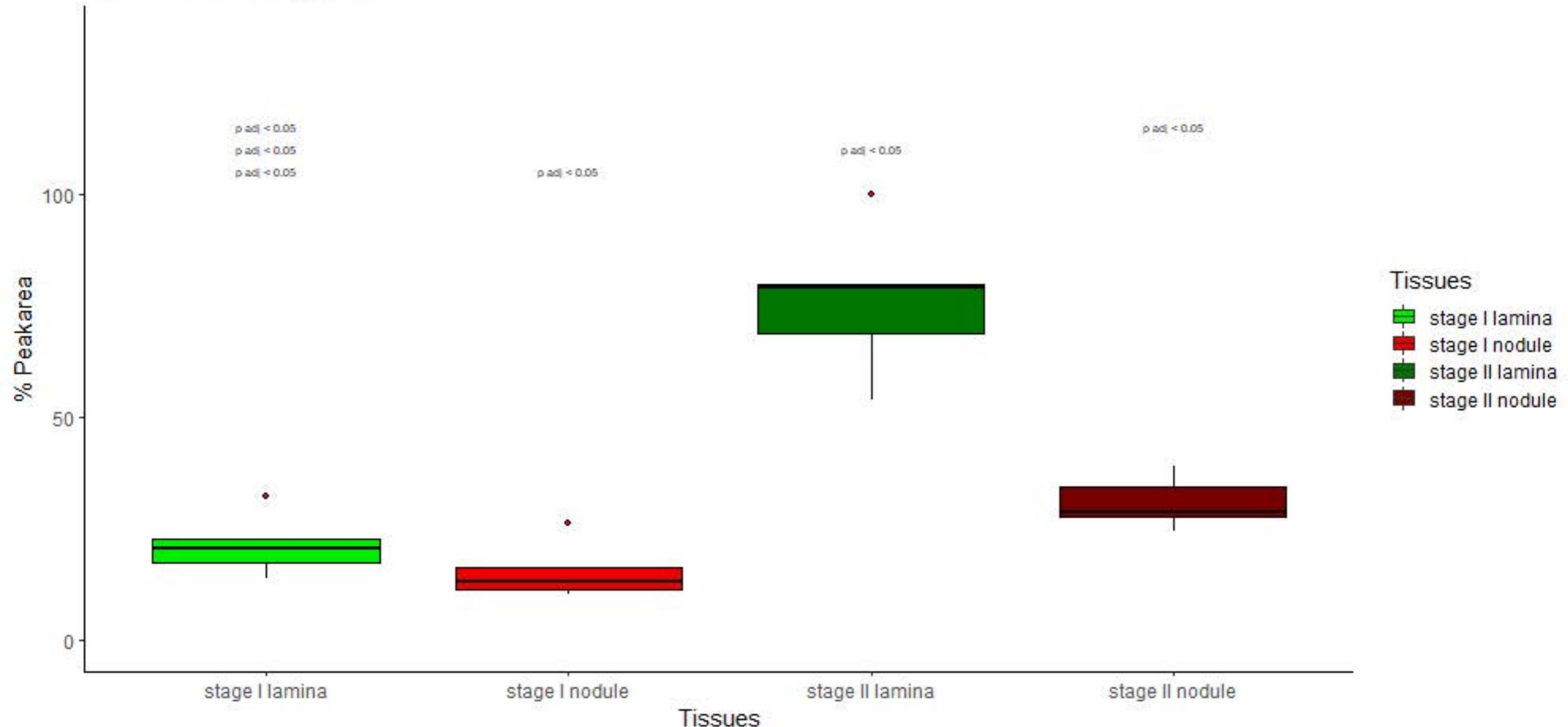
NA Carbohydrate 135



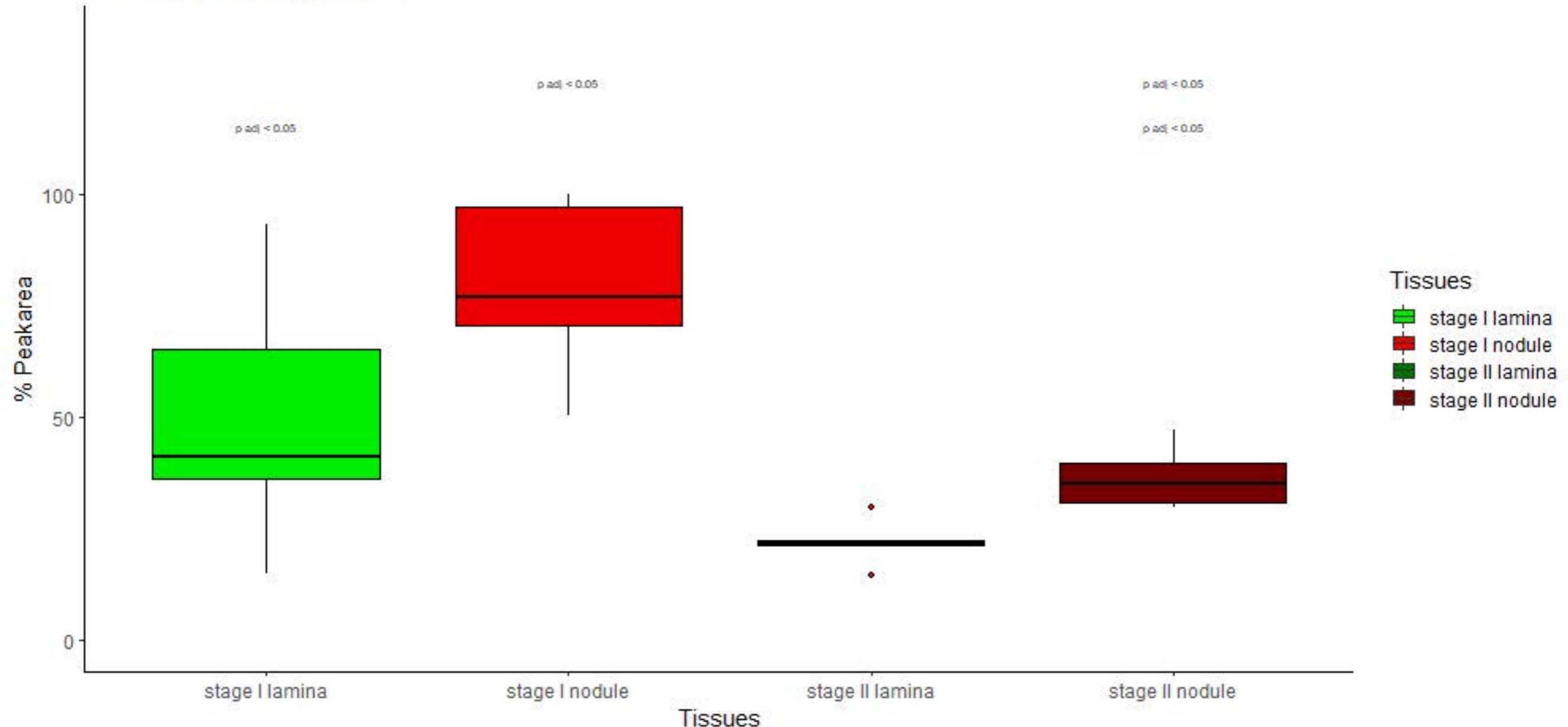
NA 17Carbohydrate



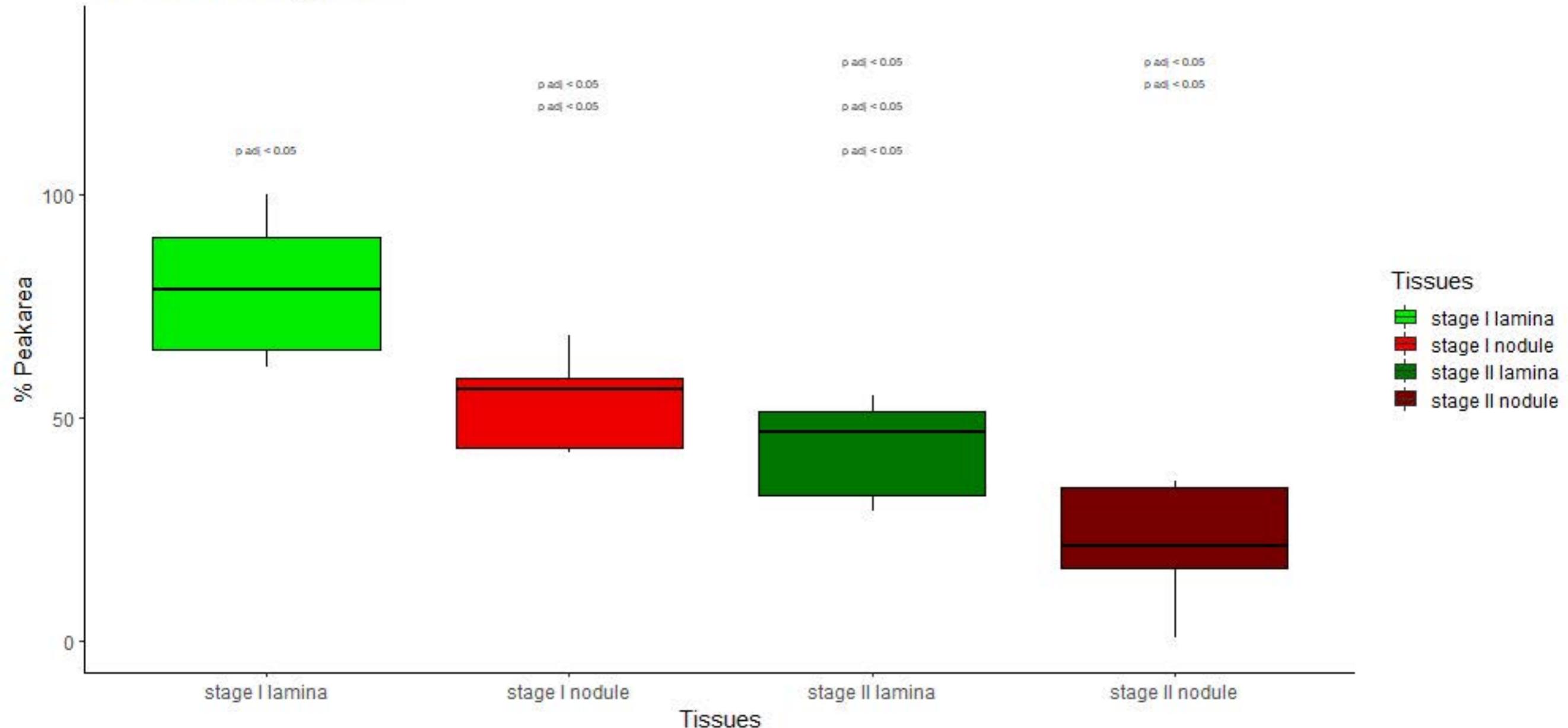
NA 157 Carbohydrate



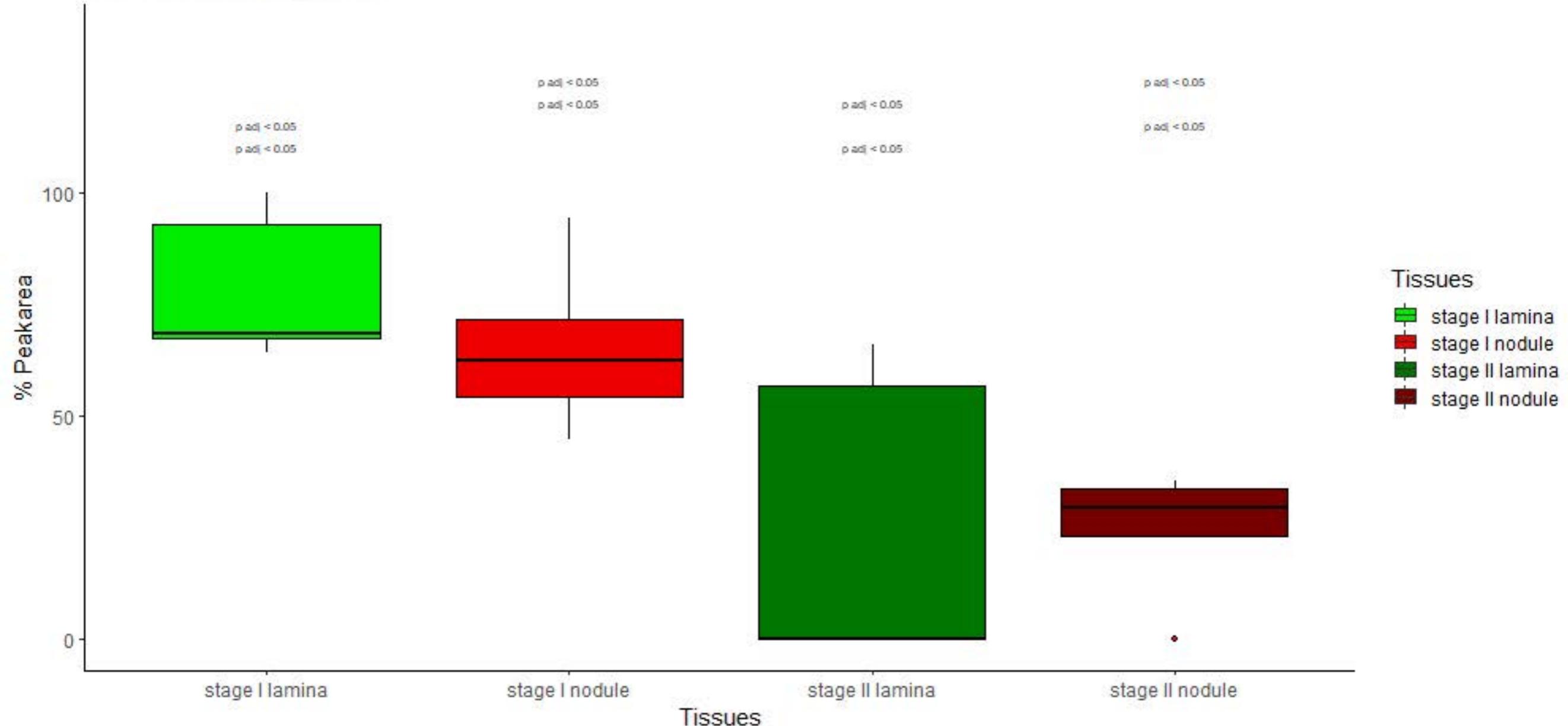
NA 159 Carbohydrate



NA 161 Carbohydrate



NA 155 Carbohydrate



NA 158 Carbohydrate

% Peakarea

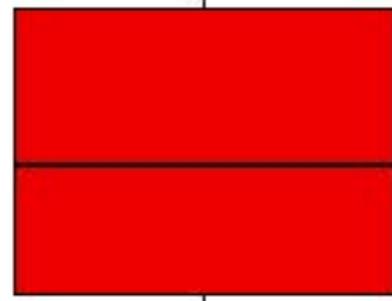
100

50

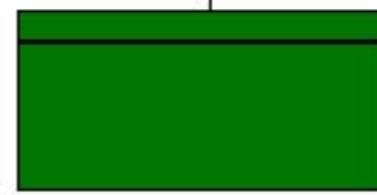
0



stage I lamina



stage I nodule



stage II lamina

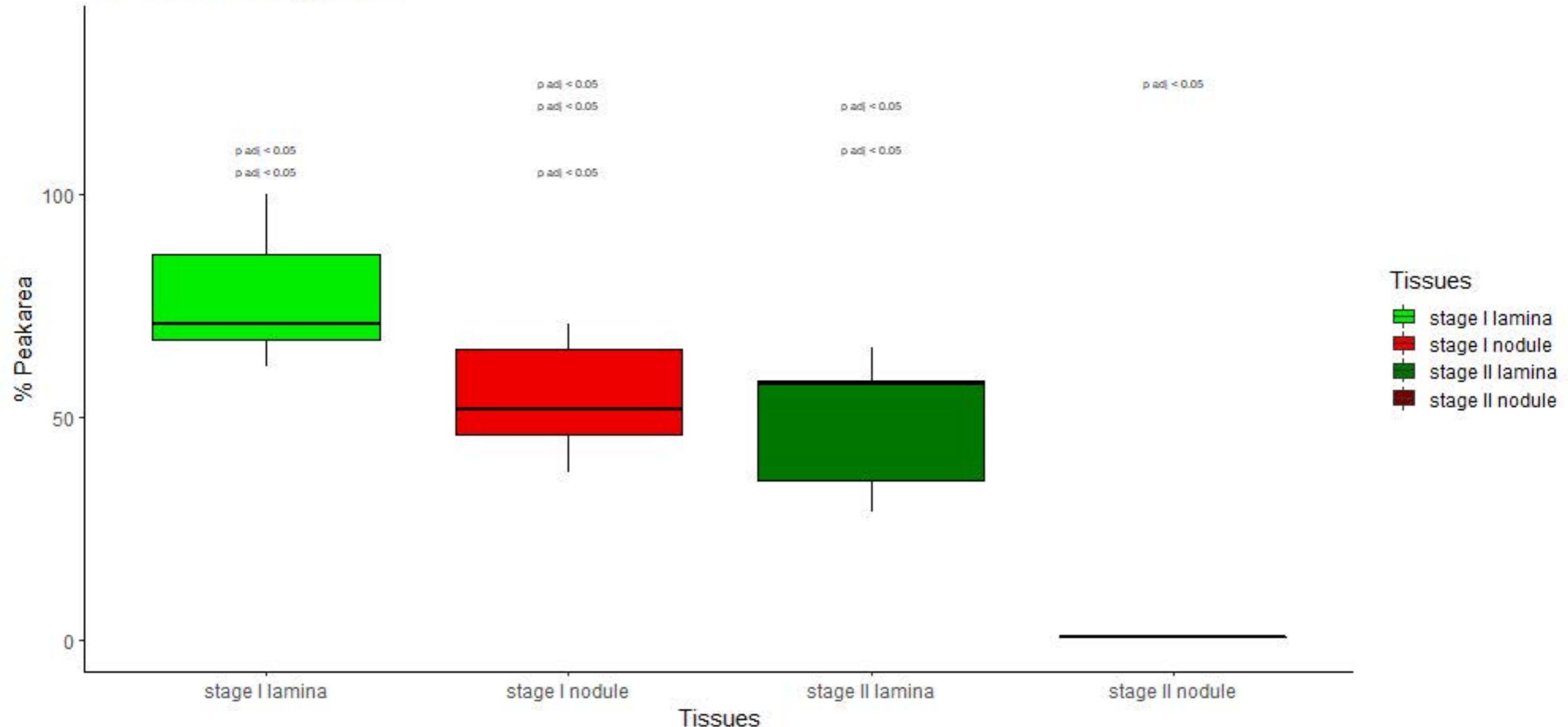


stage II nodule

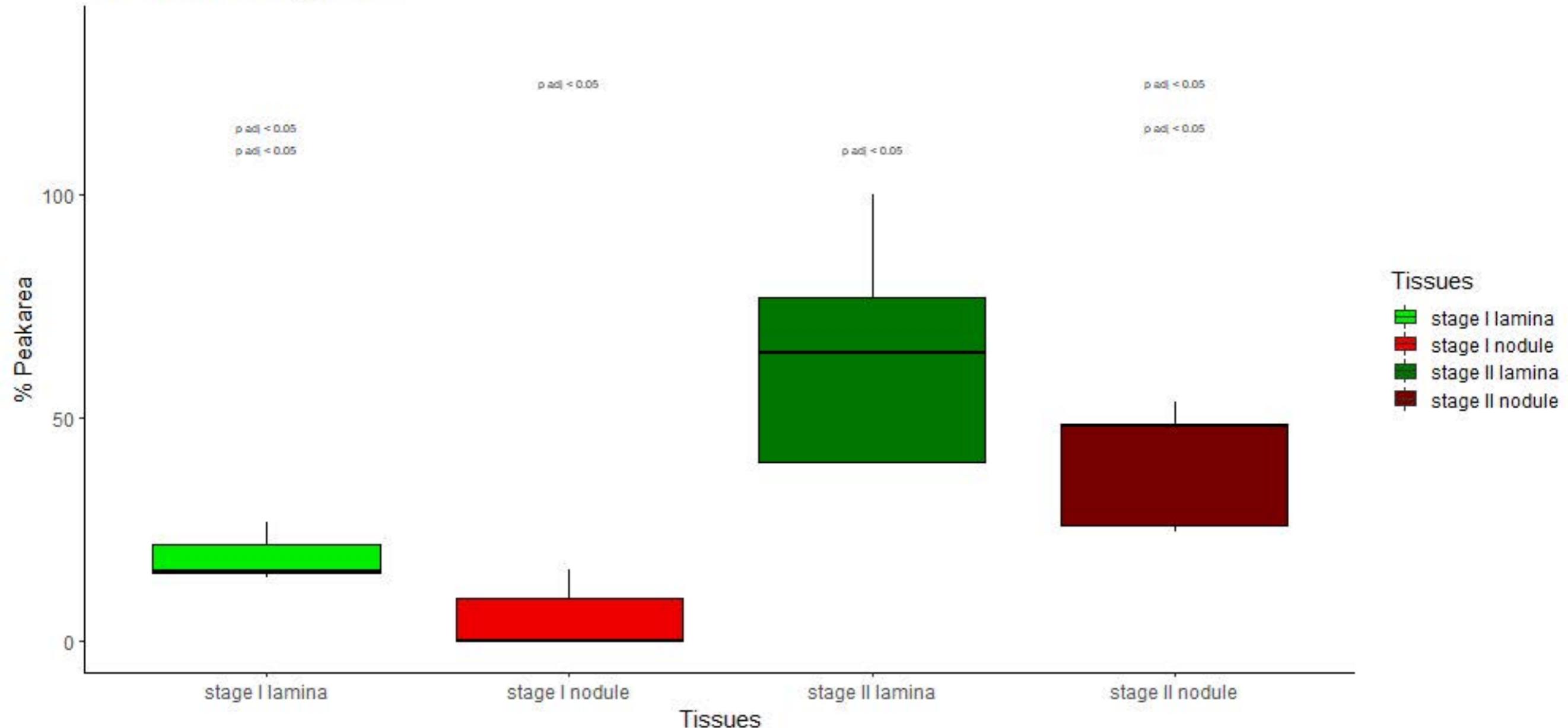
Tissues

- stage I lamina
- stage I nodule
- stage II lamina
- stage II nodule

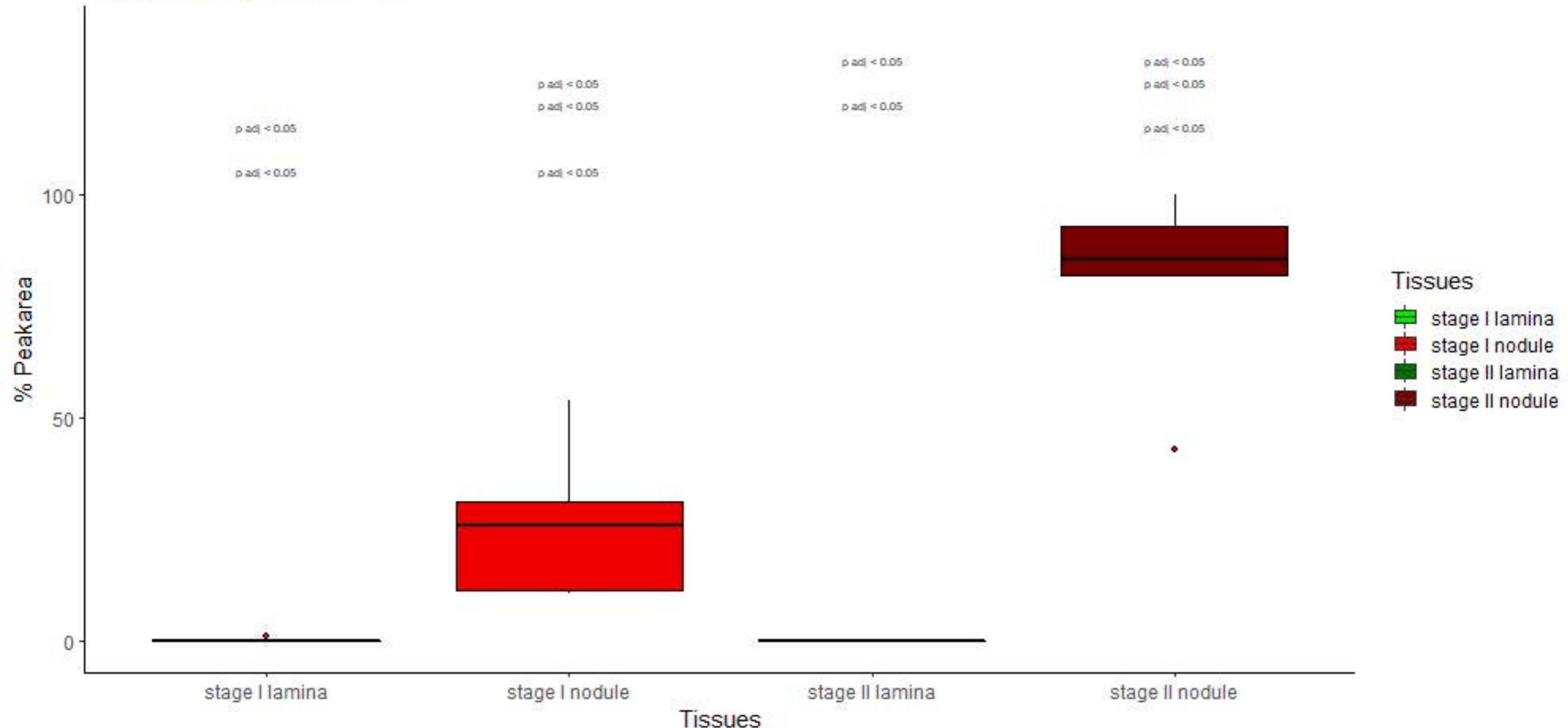
NA 160 Carbohydrate



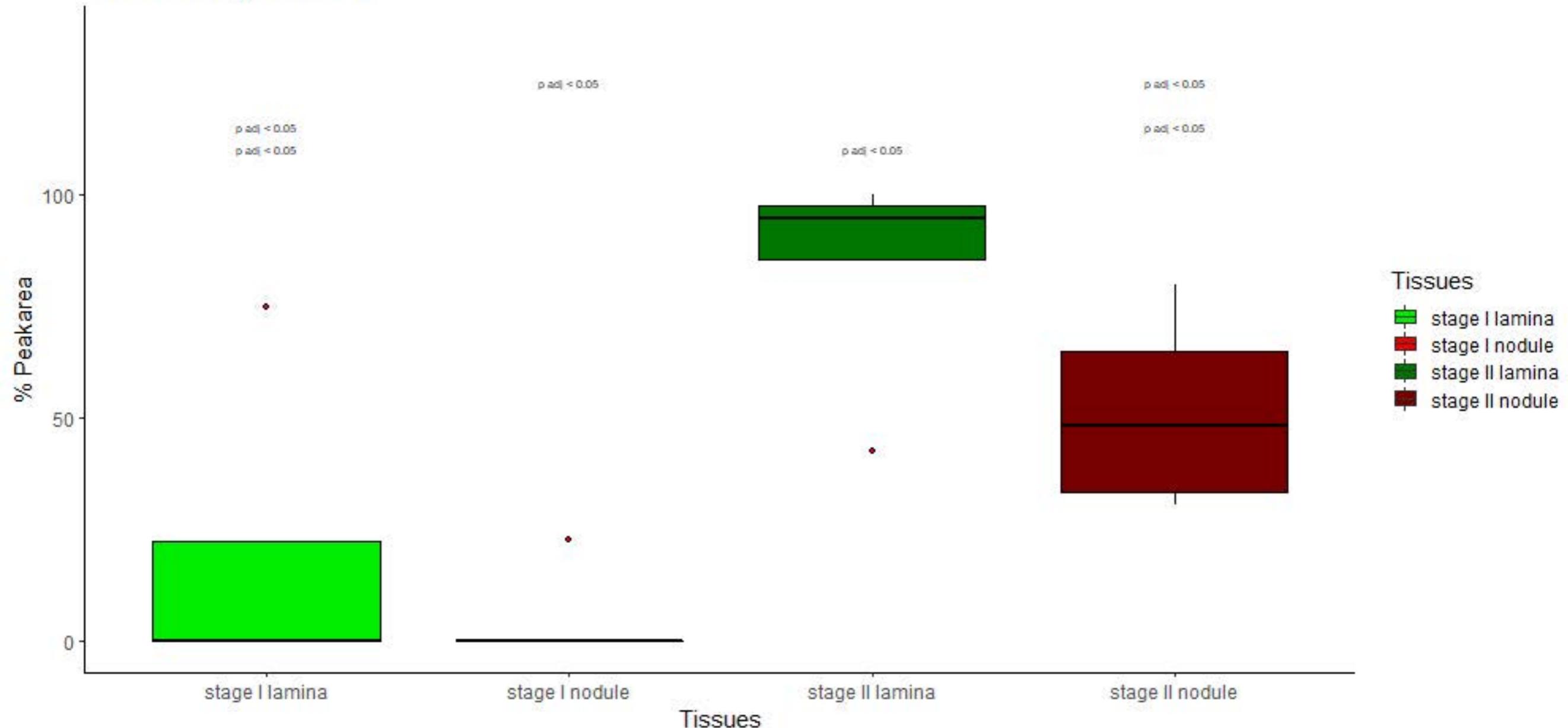
NA 166 Carbohydrate



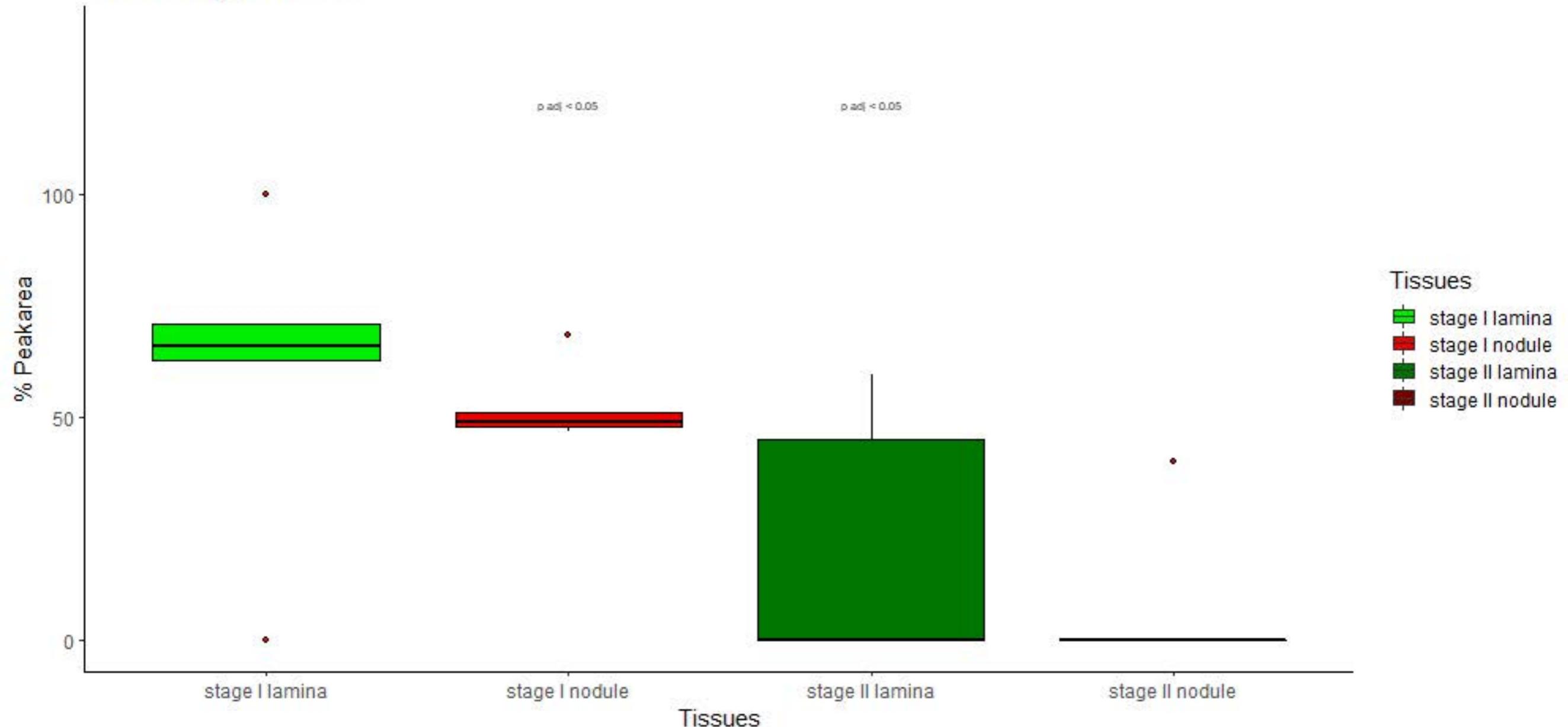
NA_Carbohydrate 177



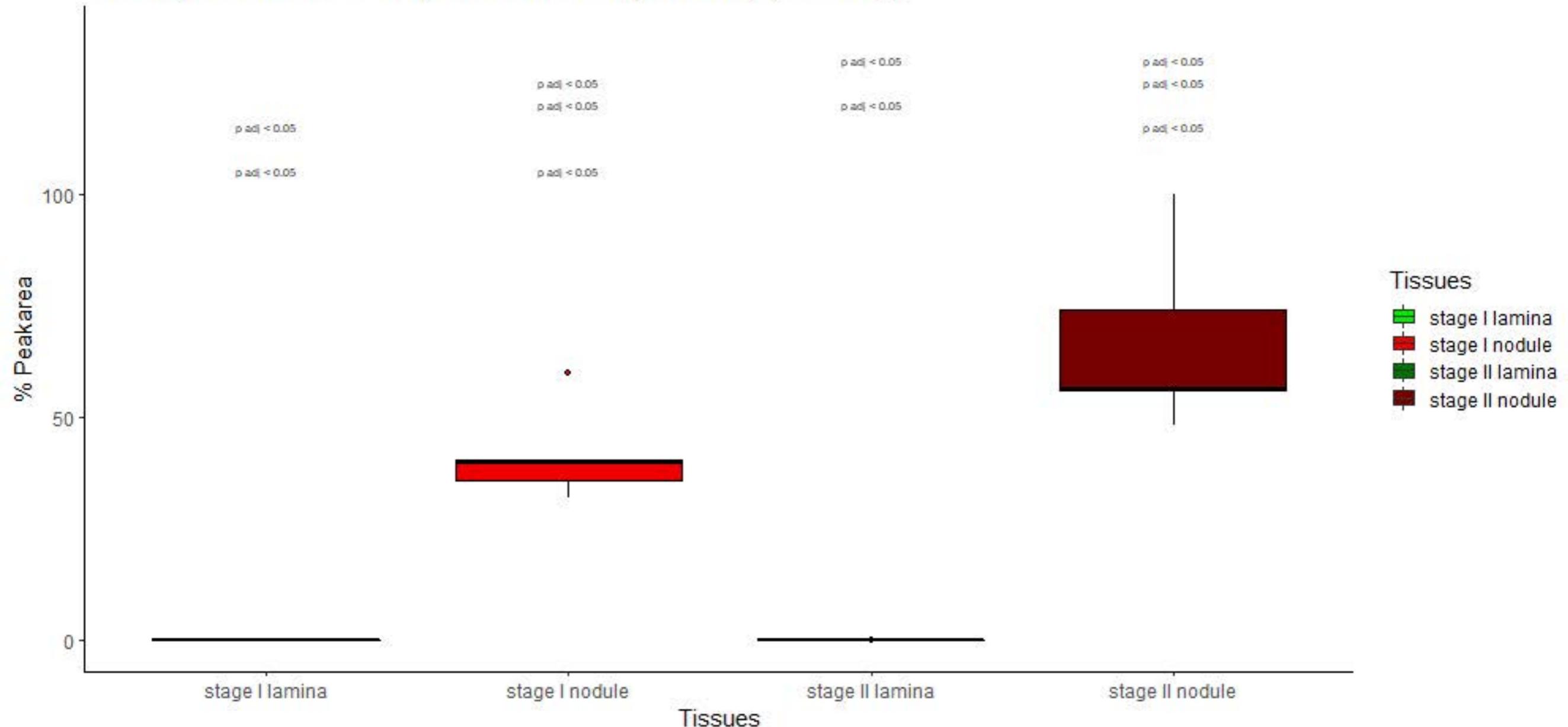
NA Carbohydrate 43



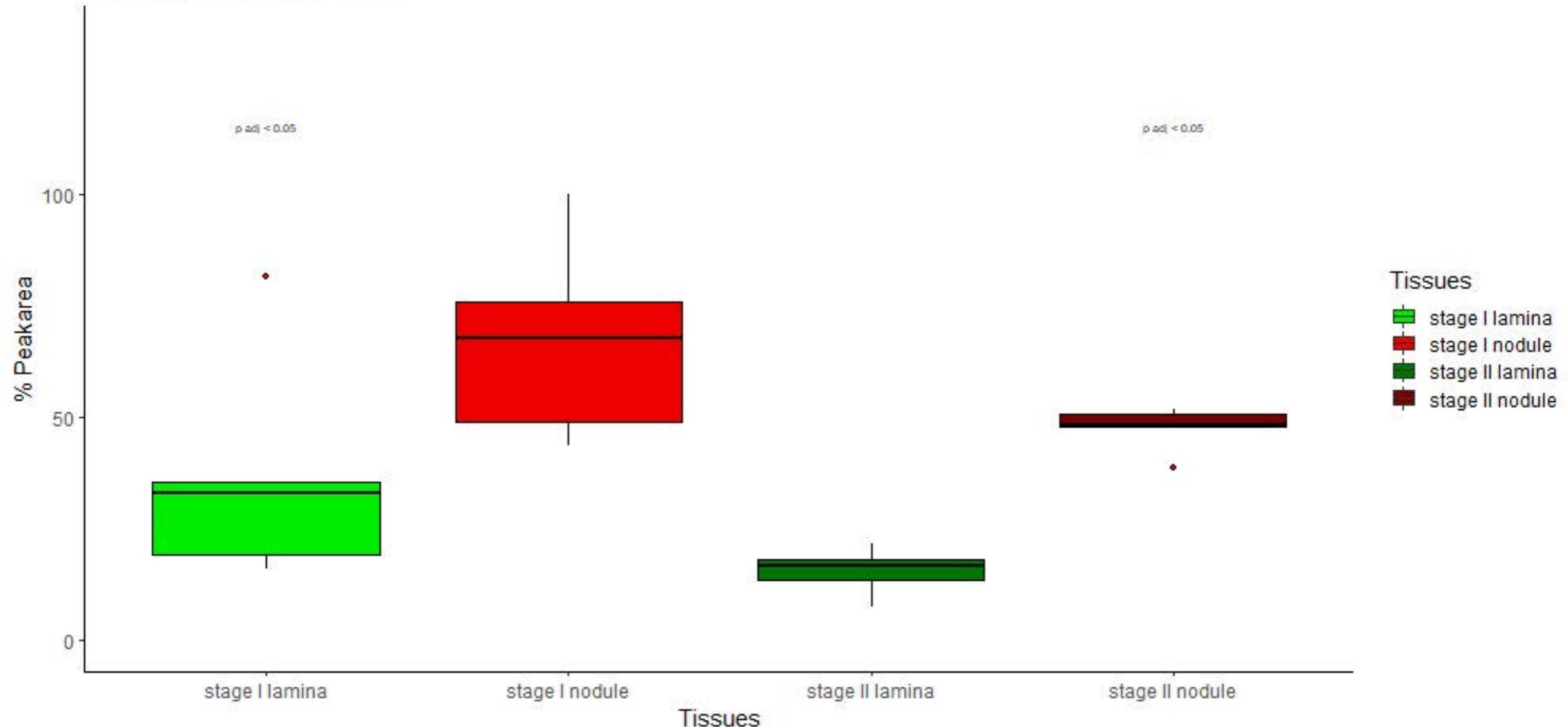
NA Carbohydrate 137



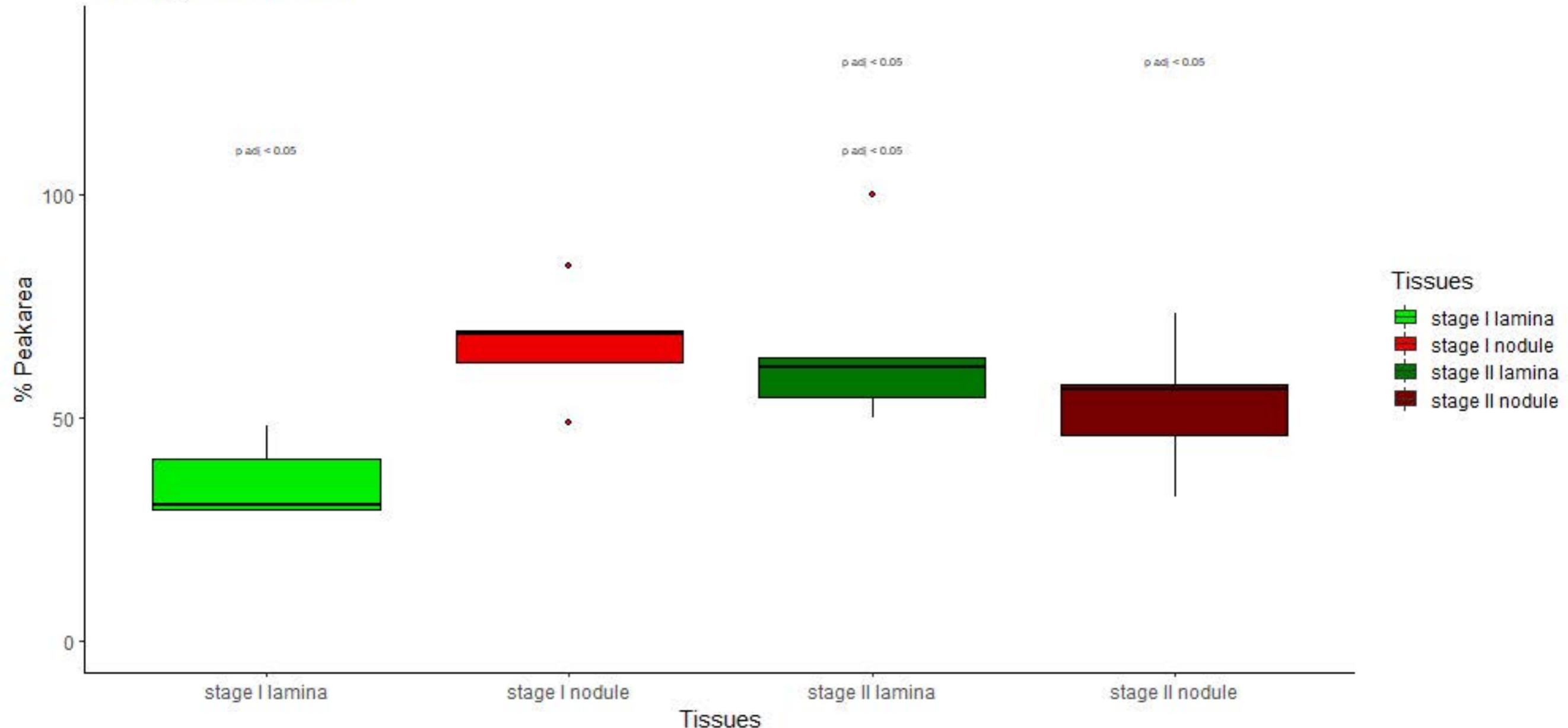
NA Polysaccharide 145 (??Maltotriose (1MEOX) (11TMS))



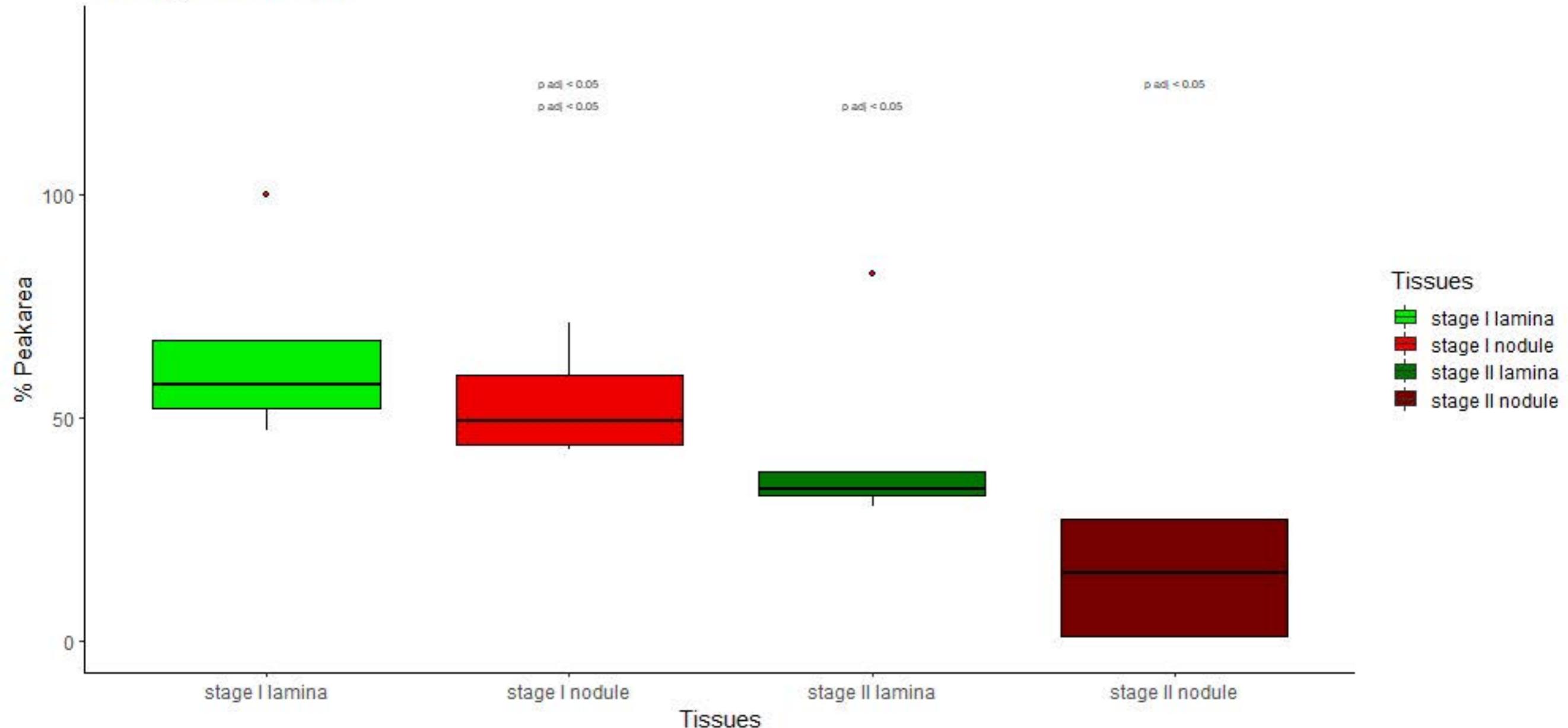
NA Sugar alcohol 175



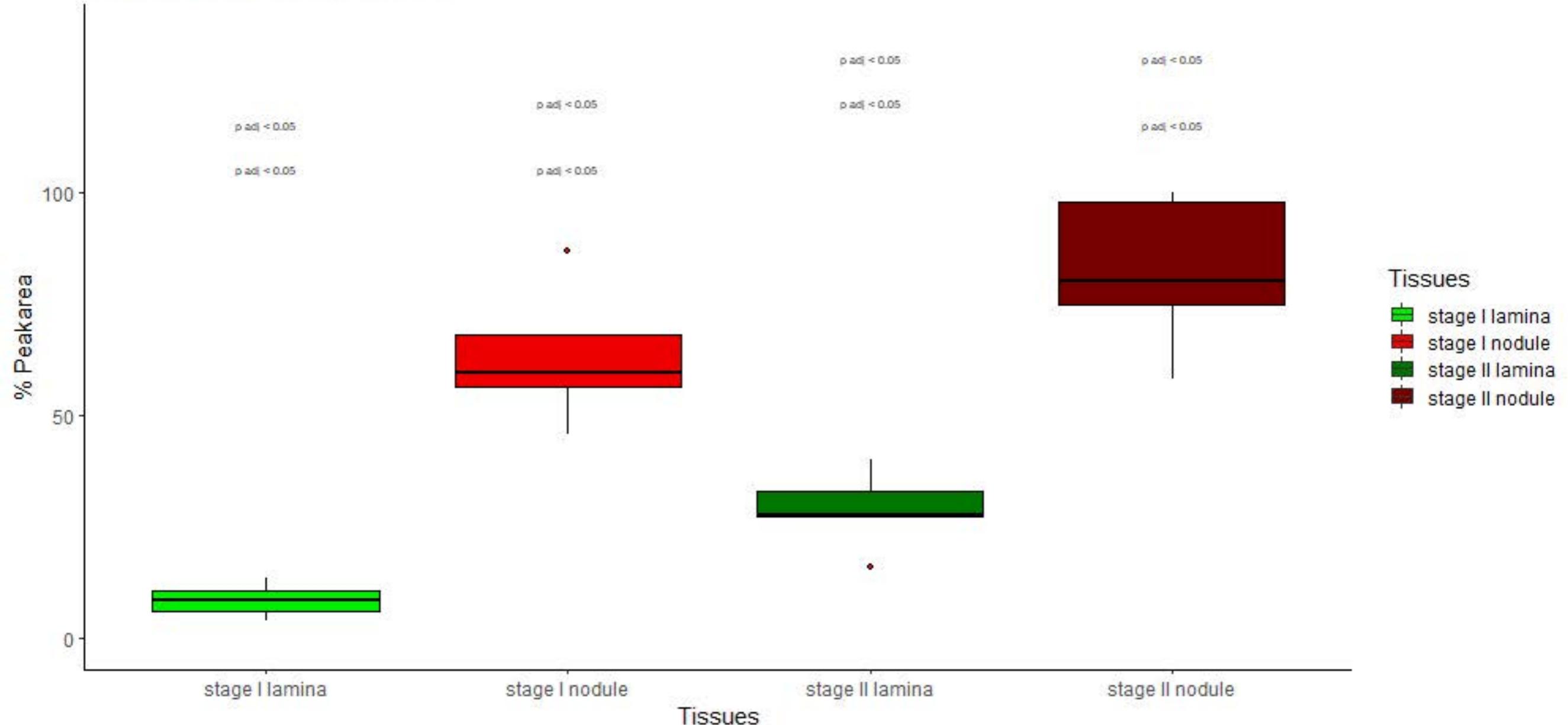
NA Sugar acid 172

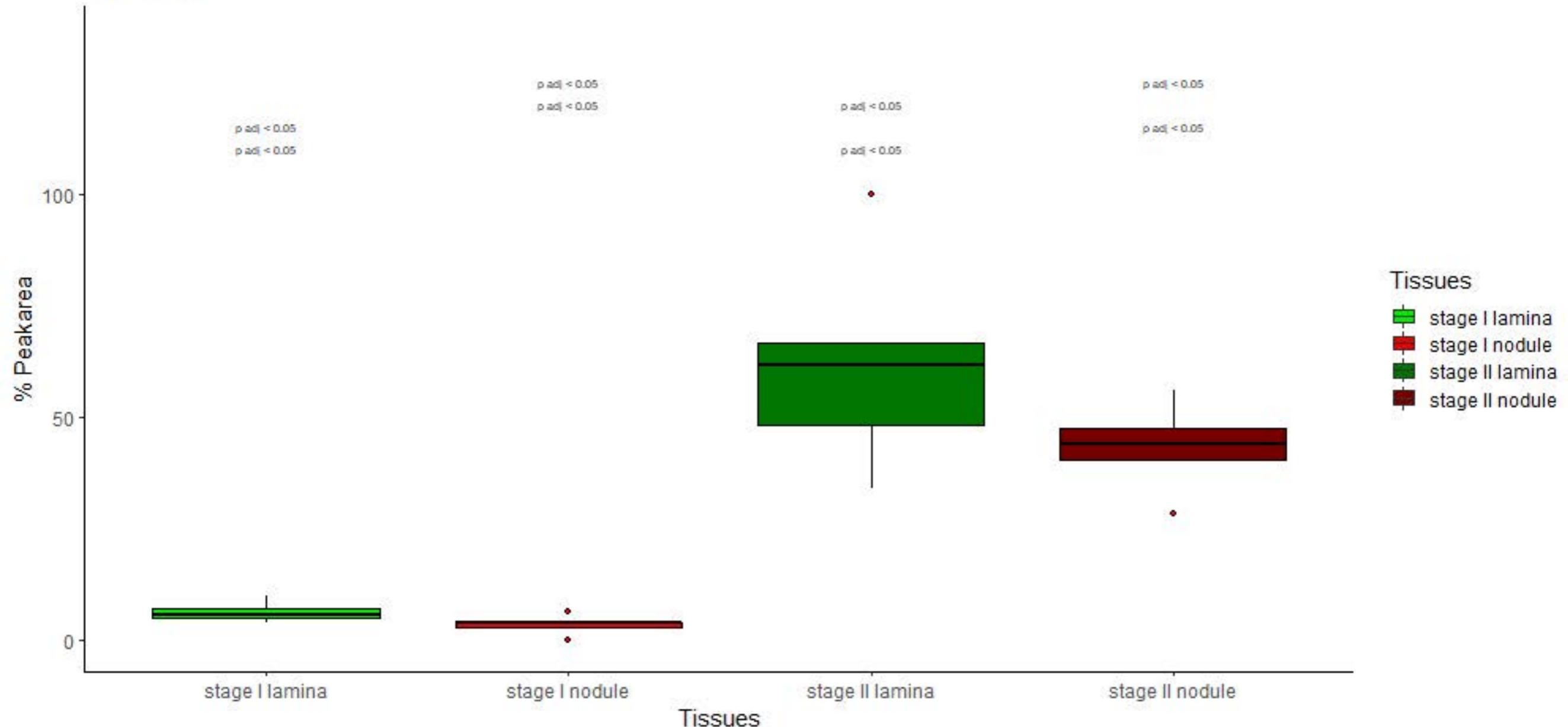


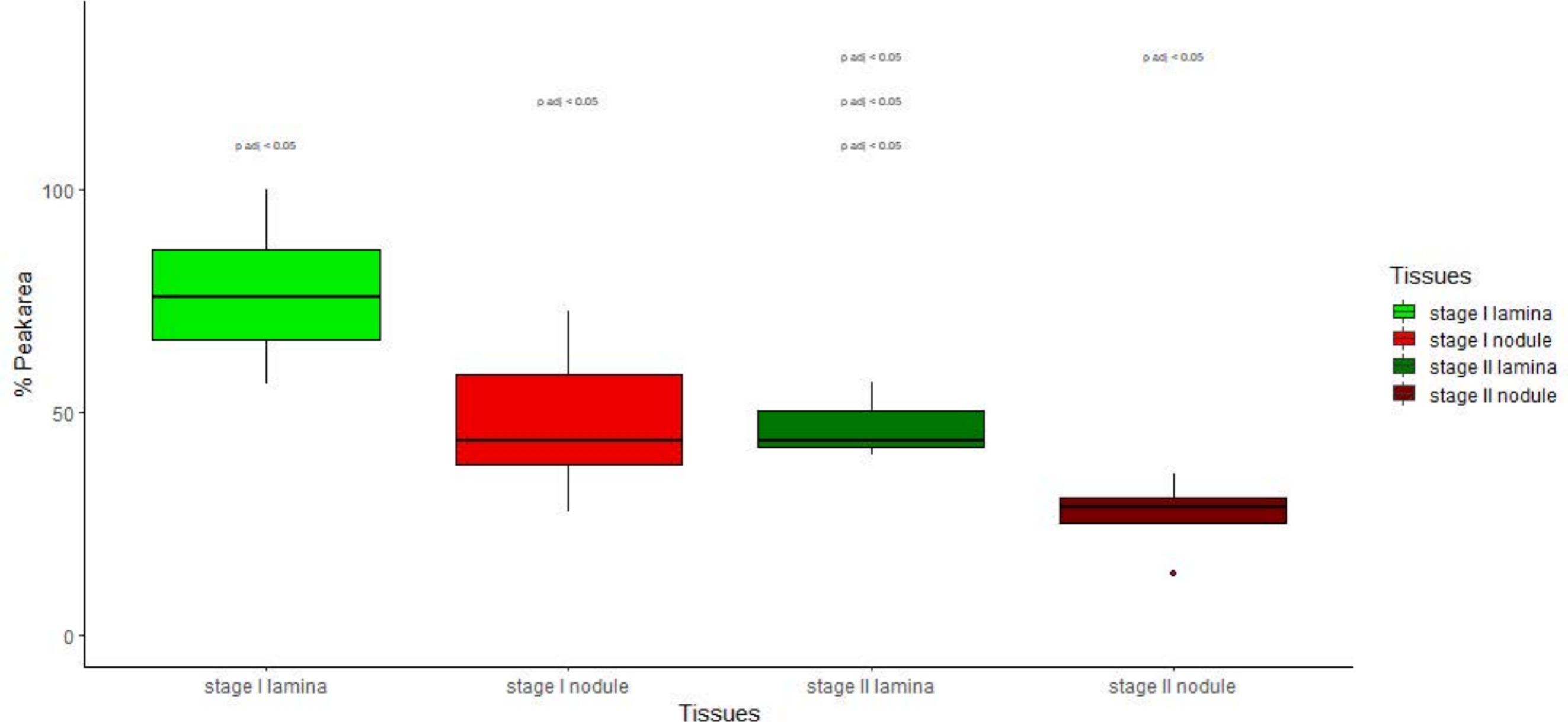
NA Sugar acid 173

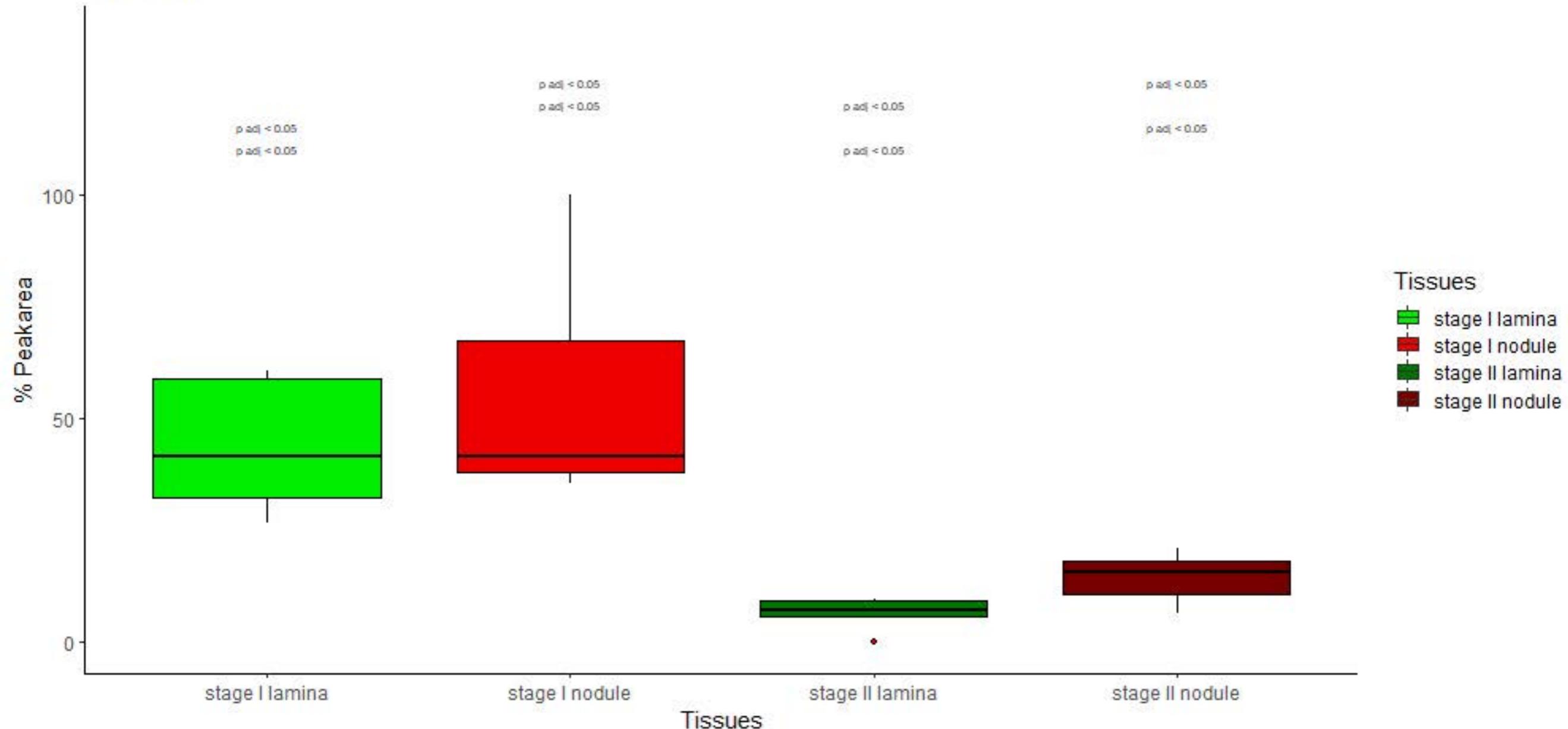


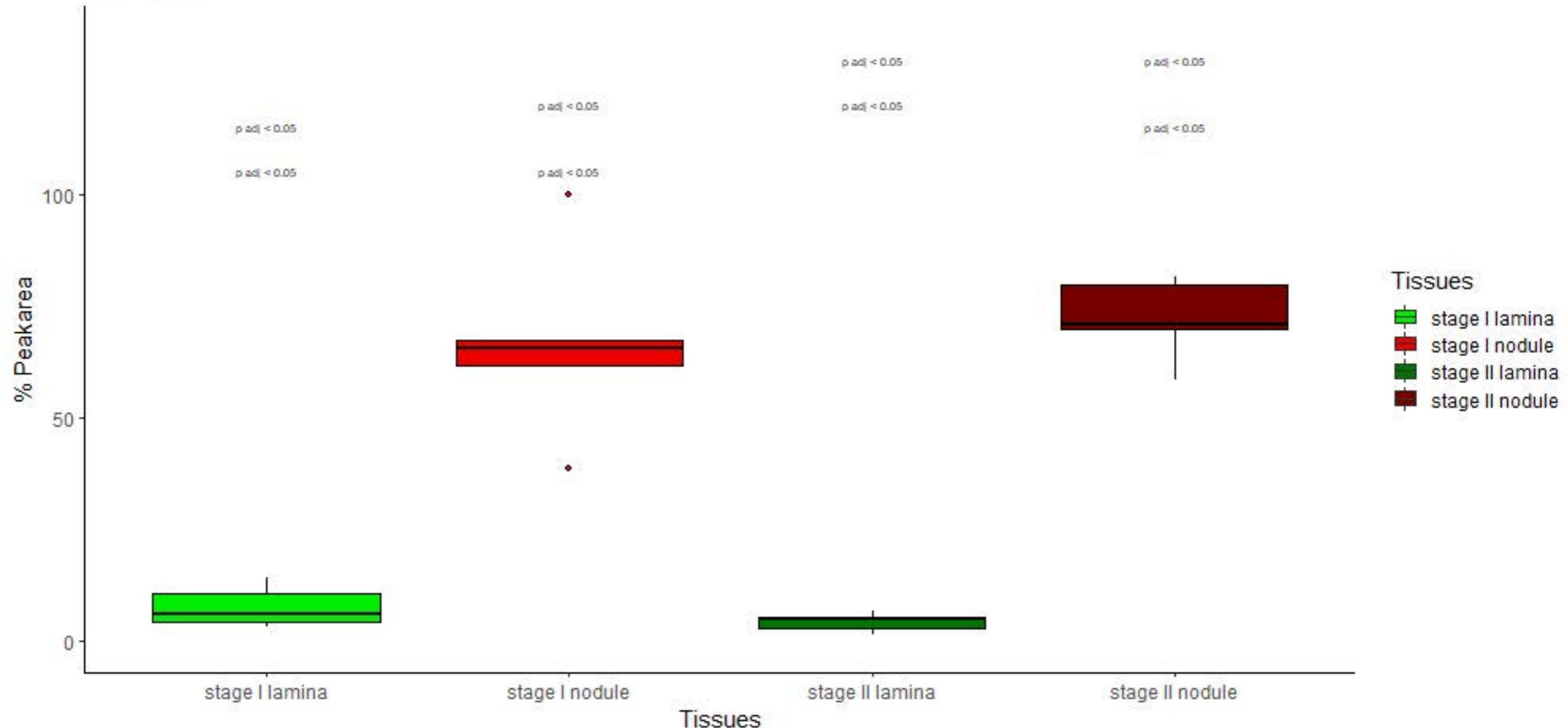
NA Ascorbic acid like 134

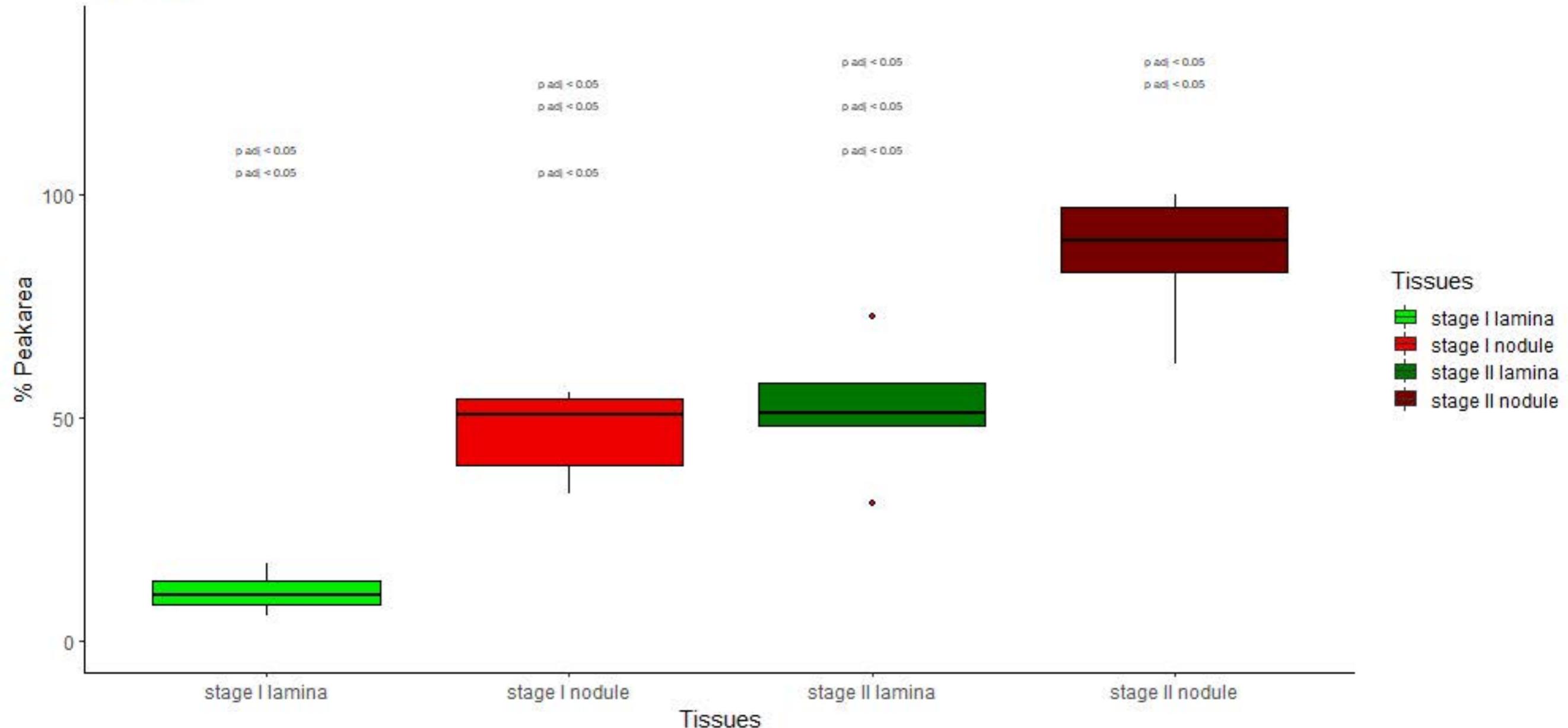


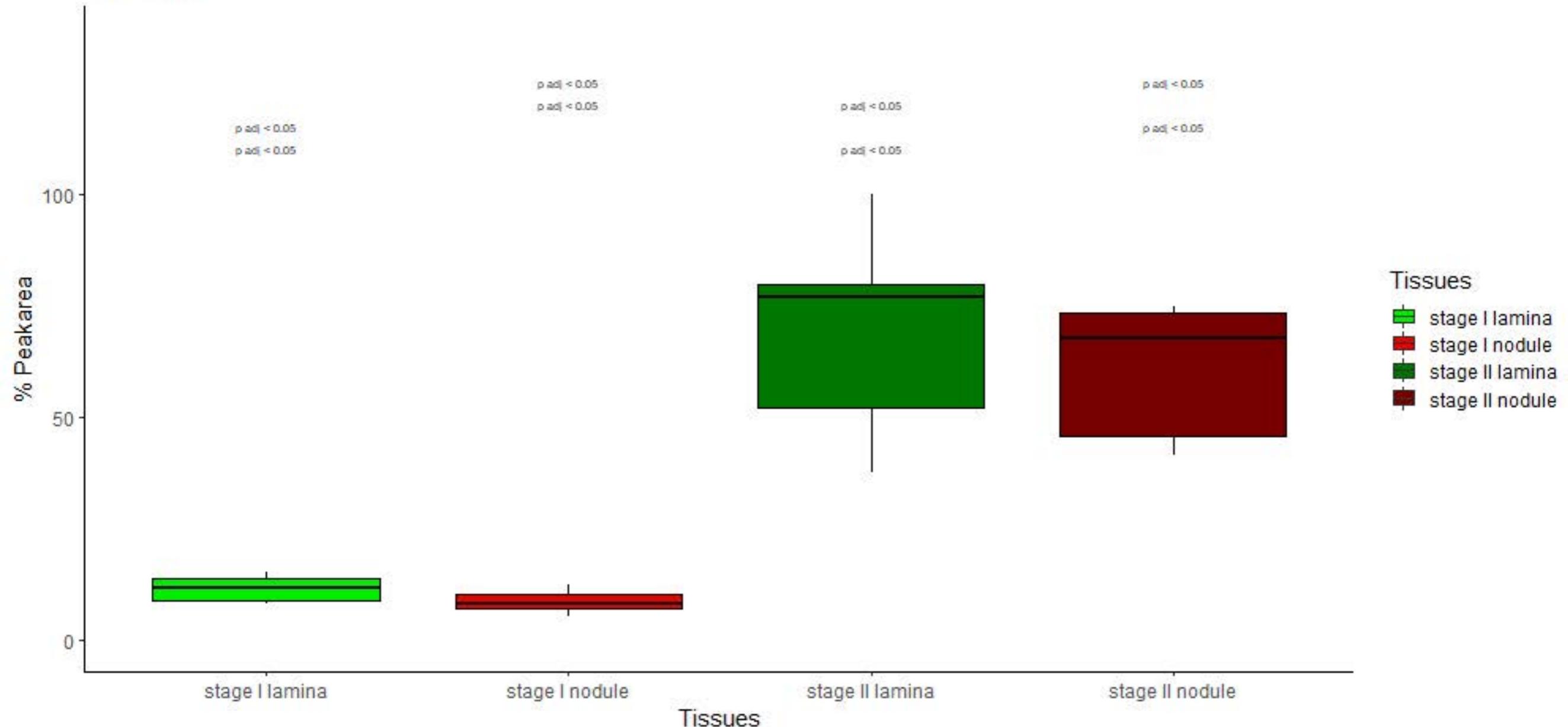


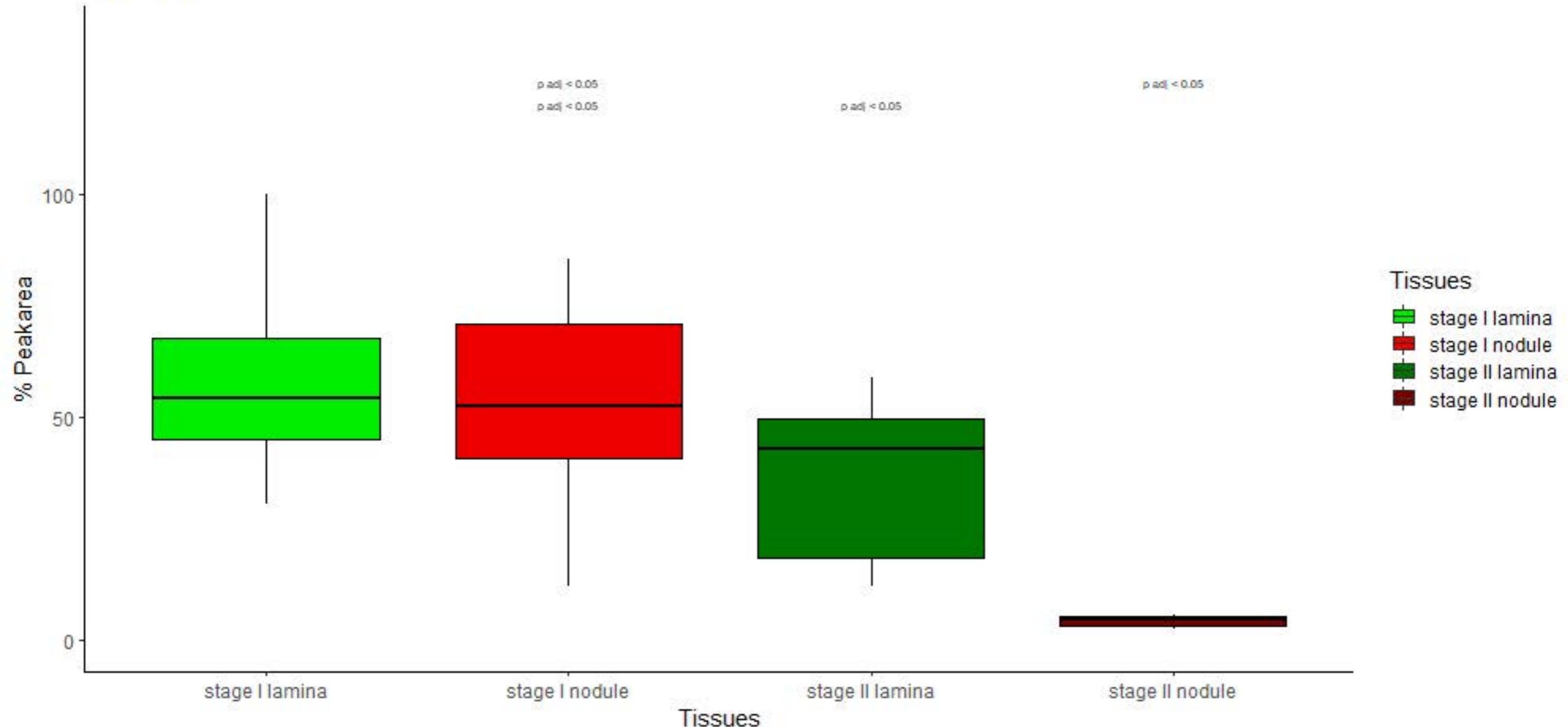


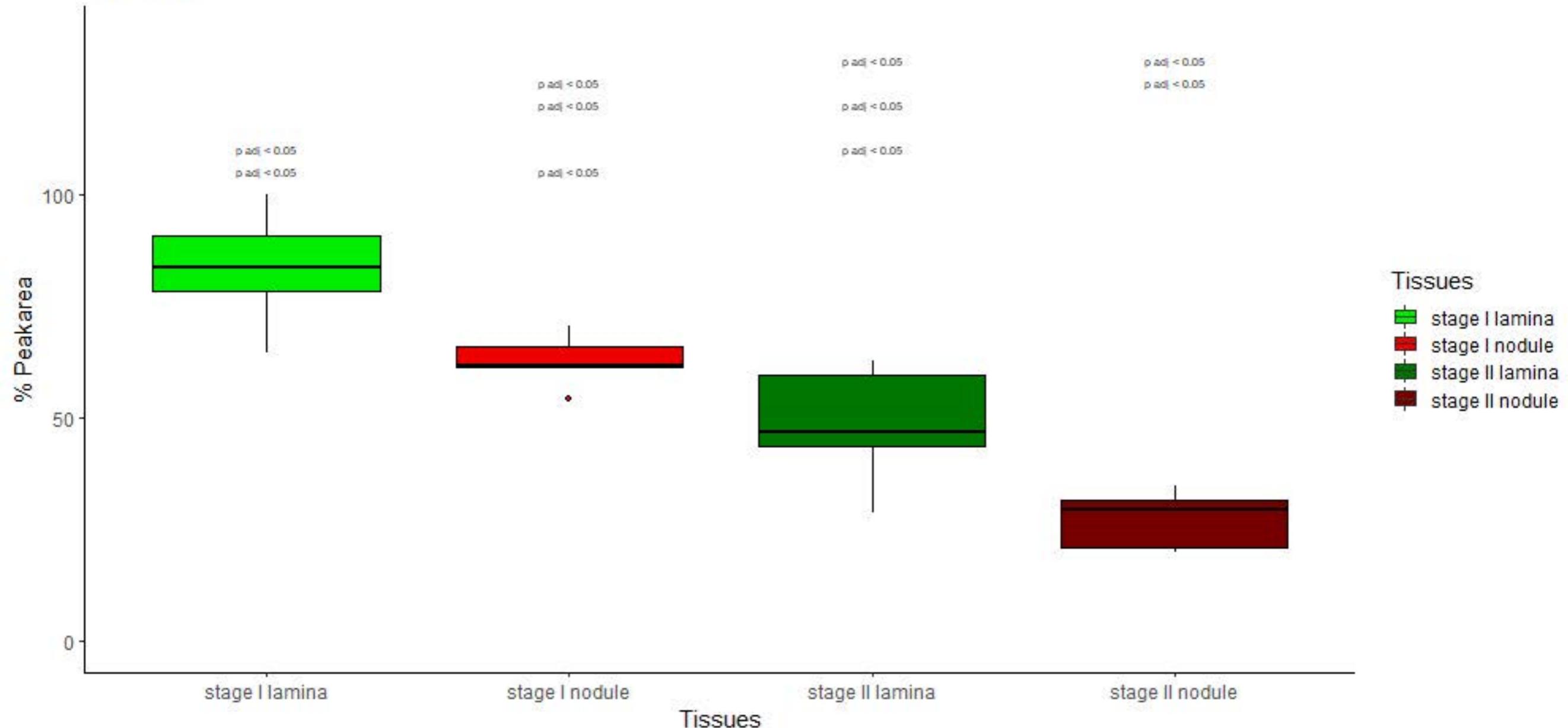




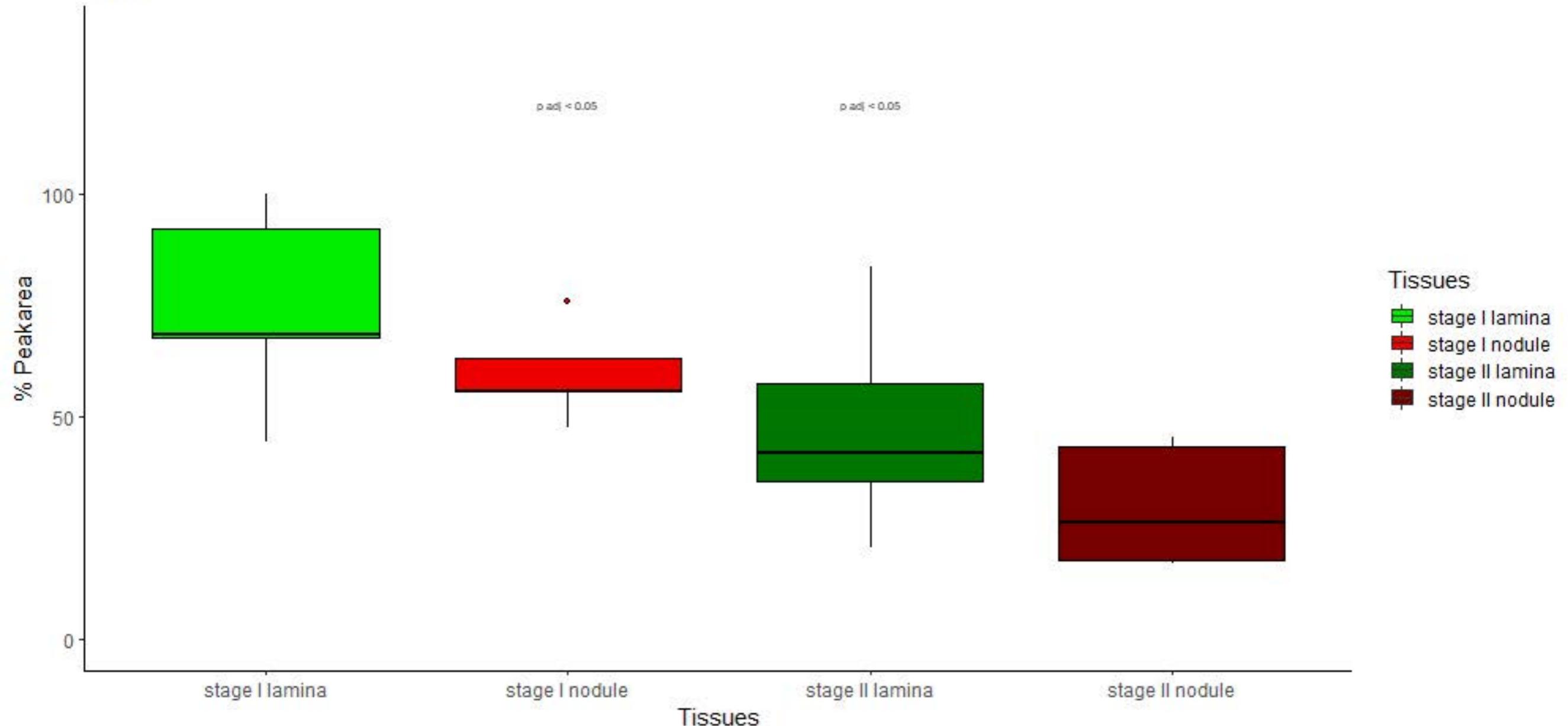


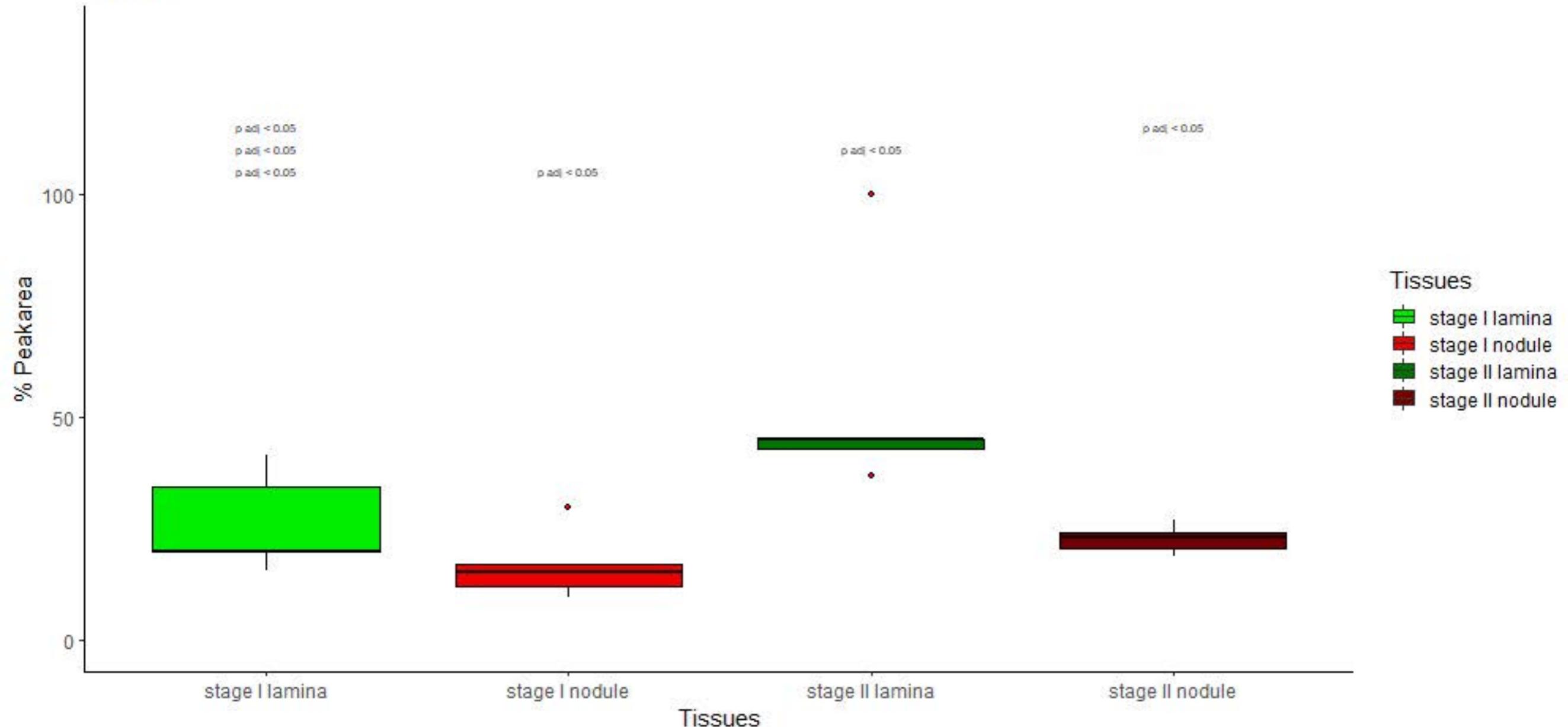




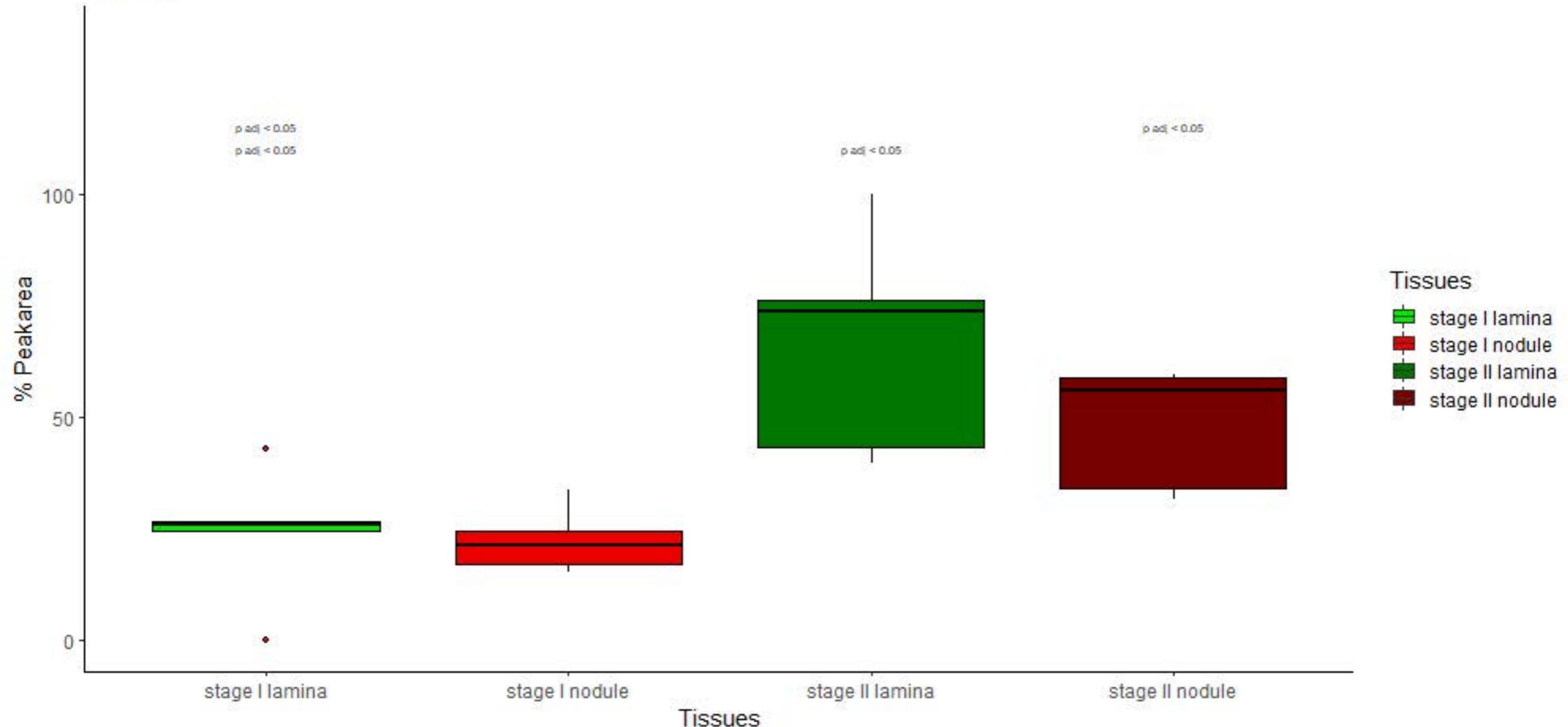


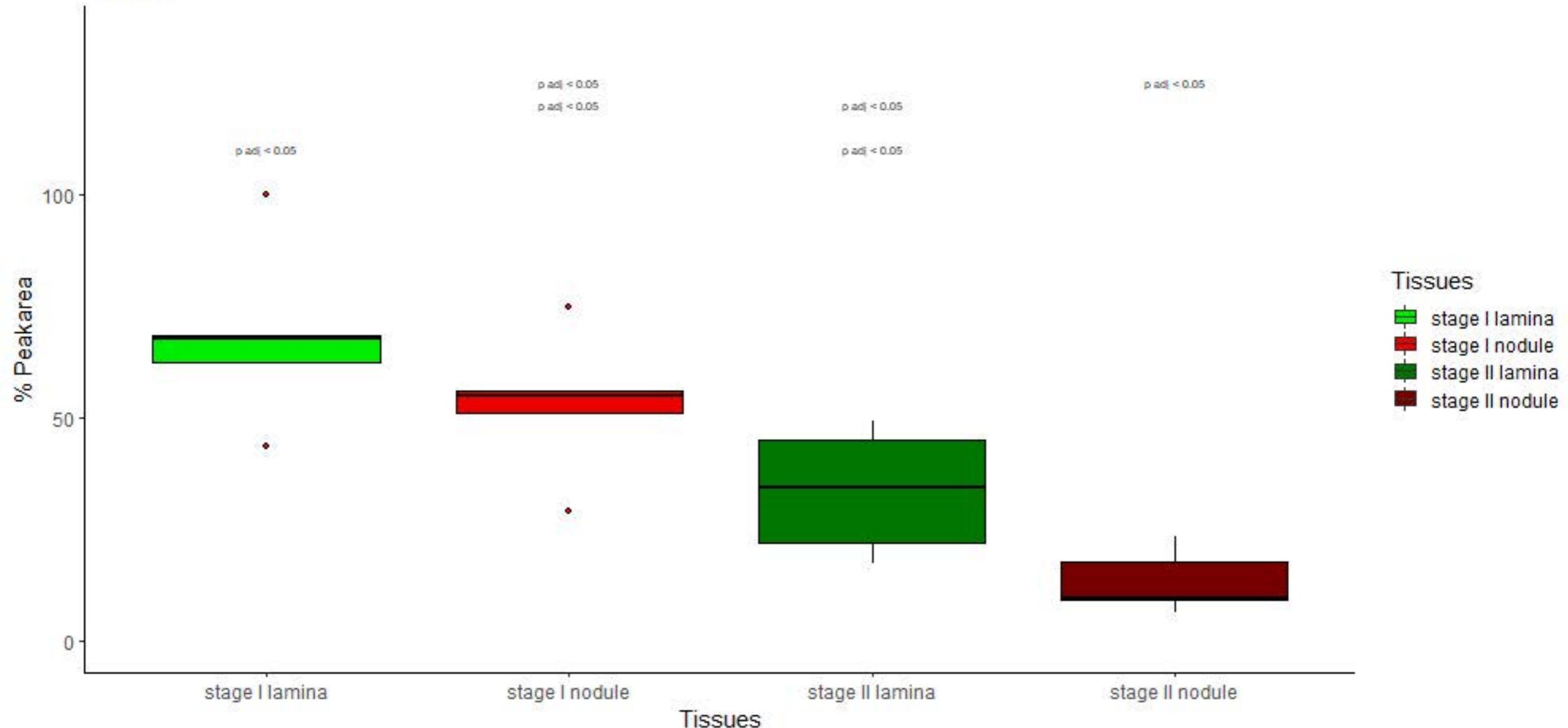
NA 2



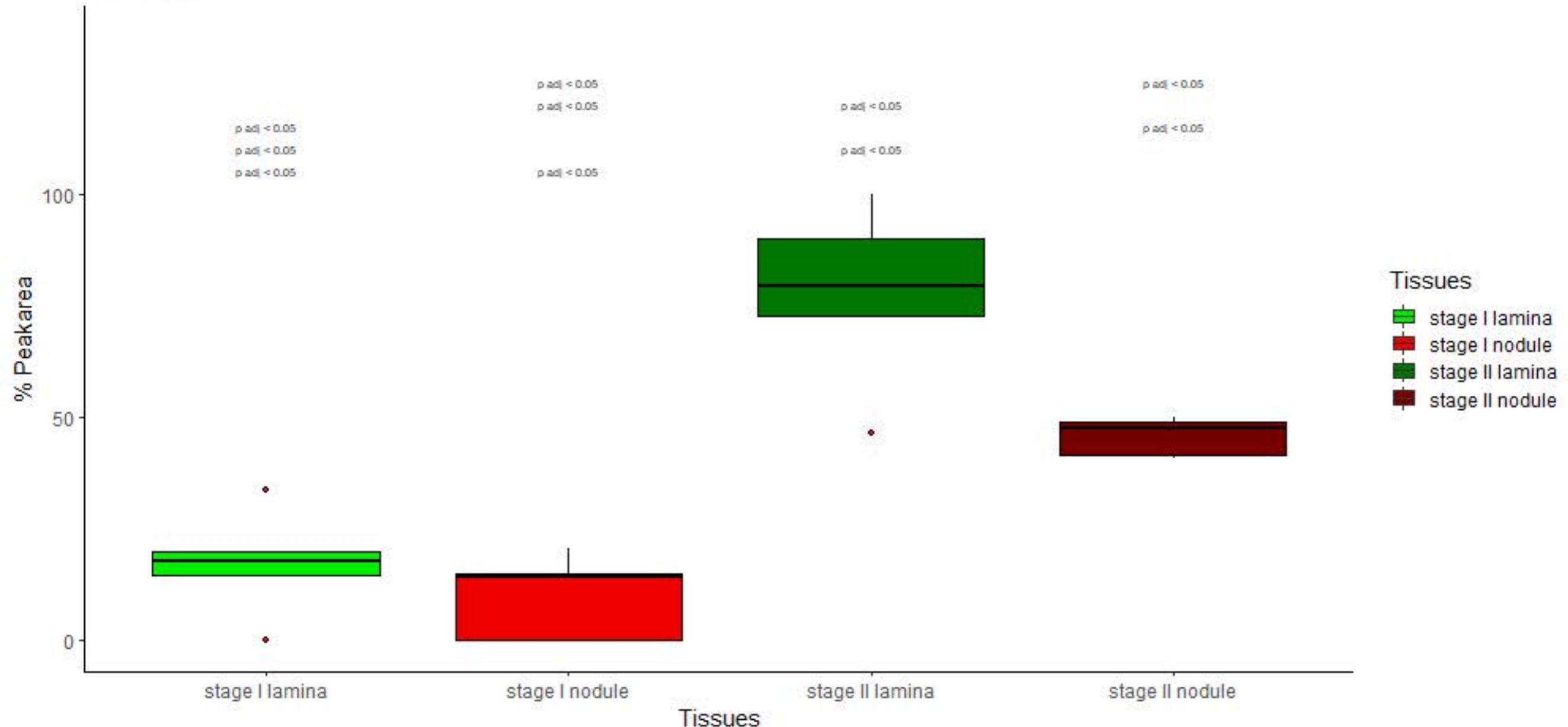


NA 47

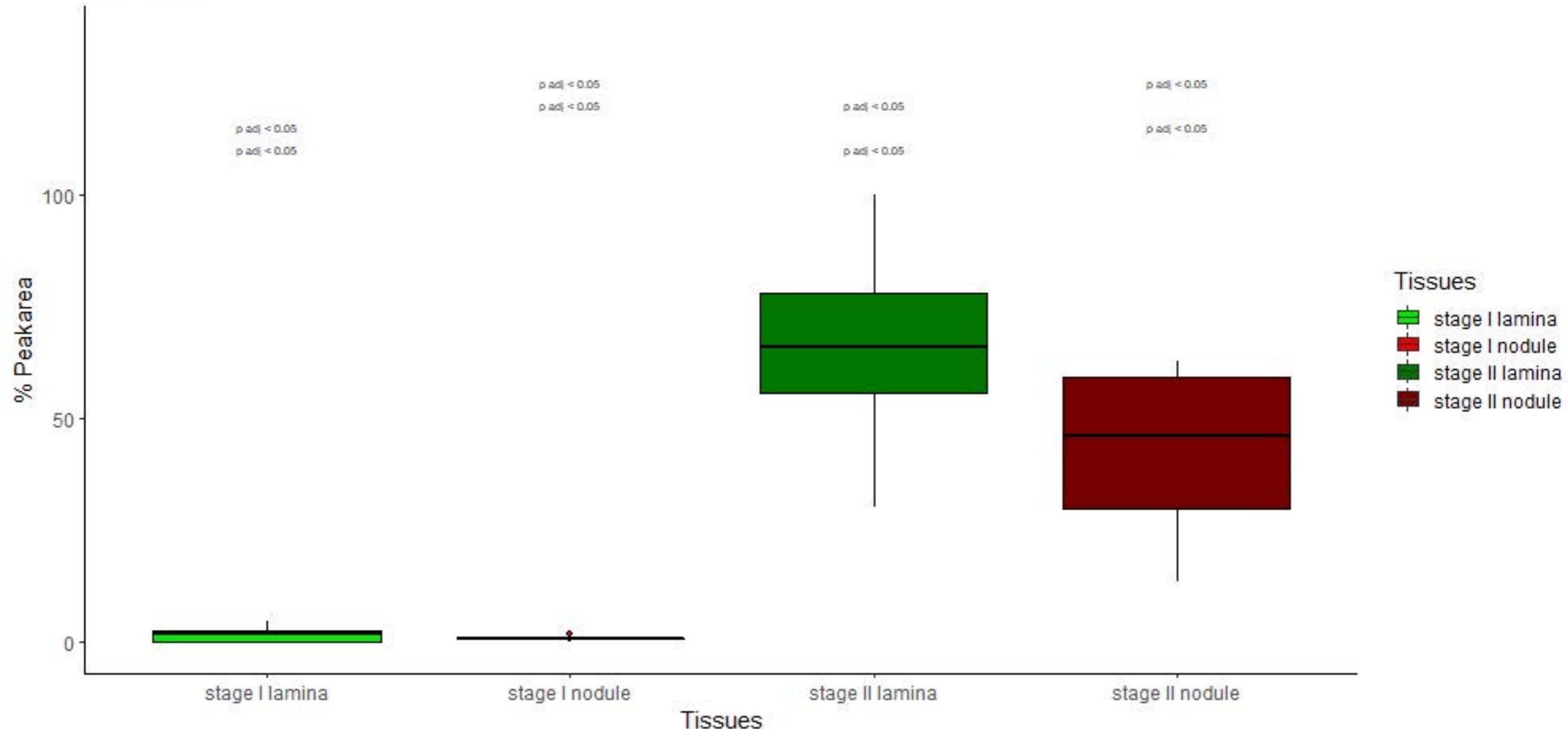


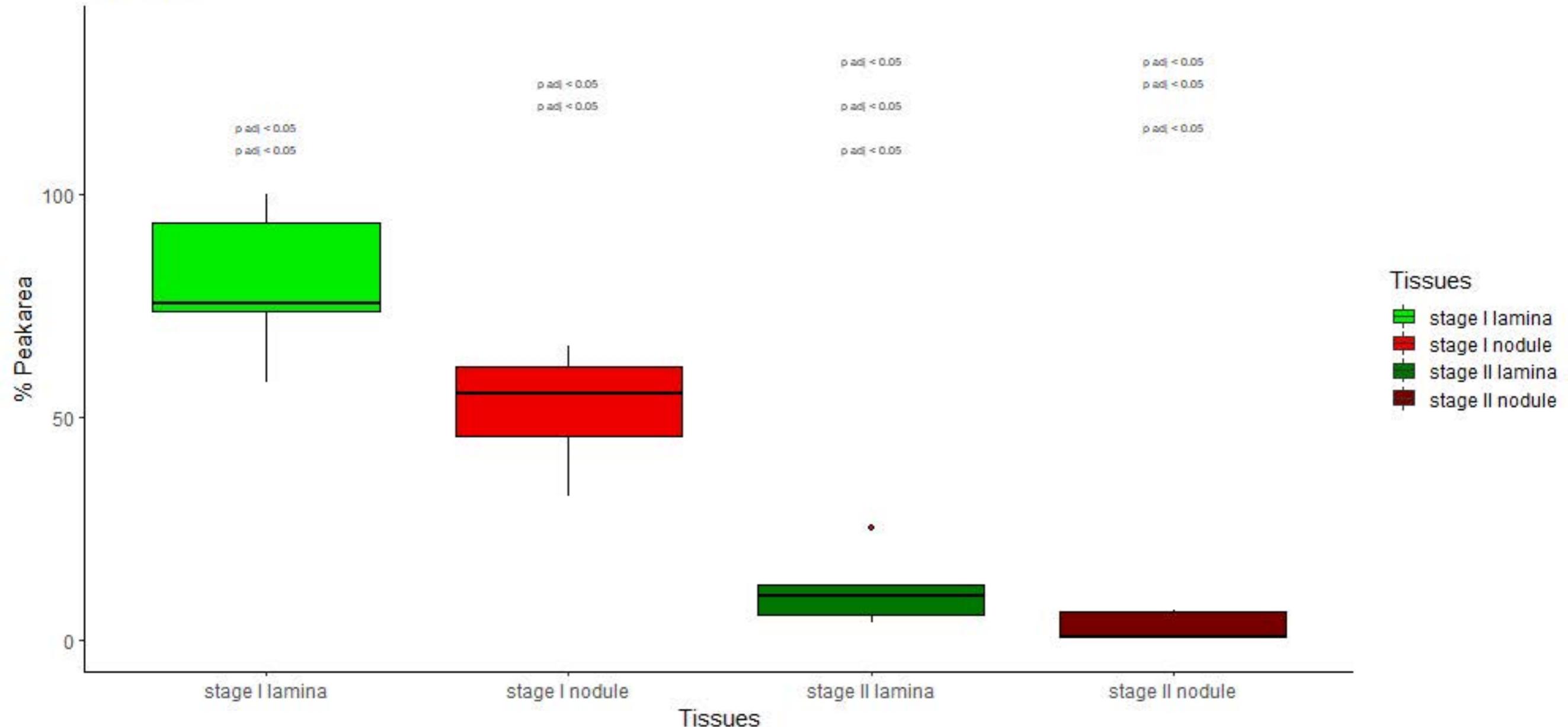


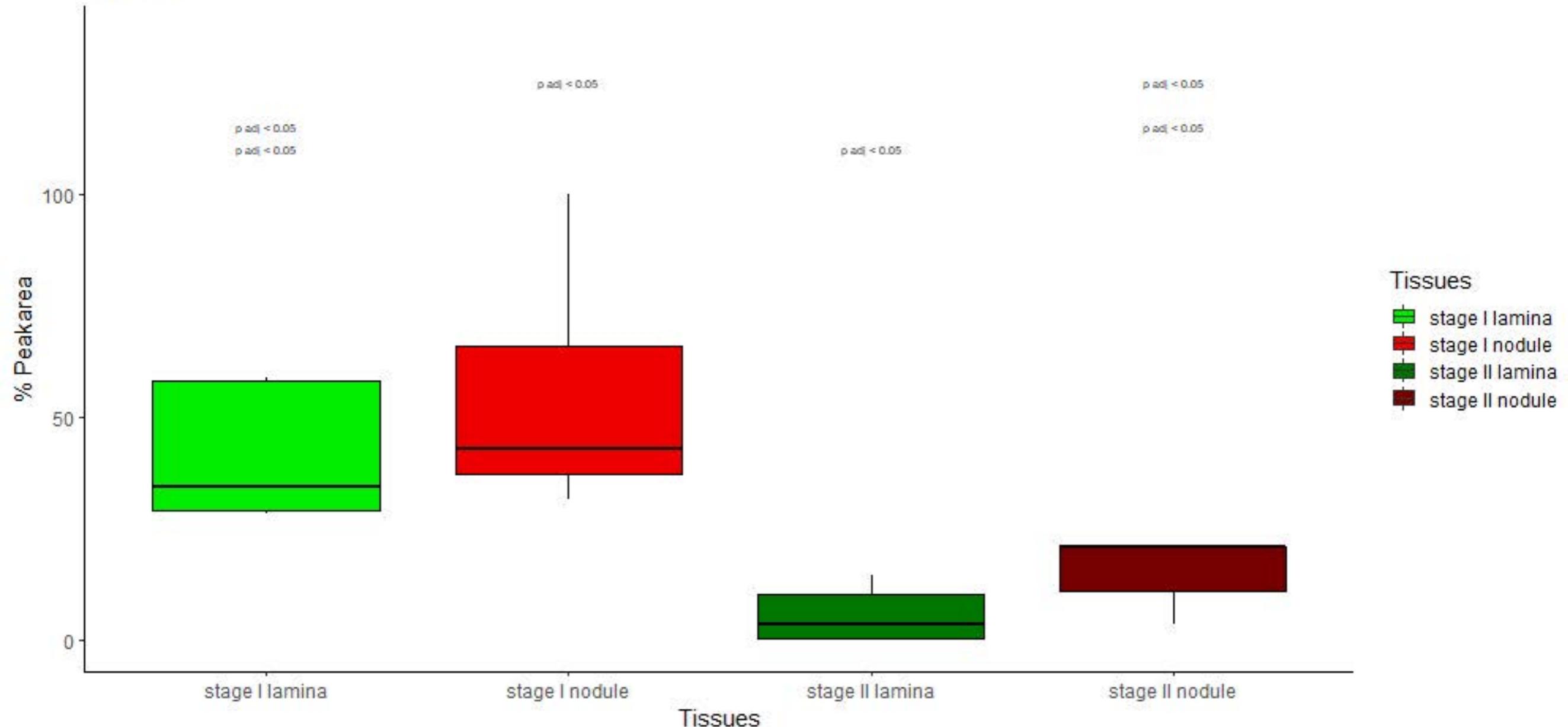
NA 100

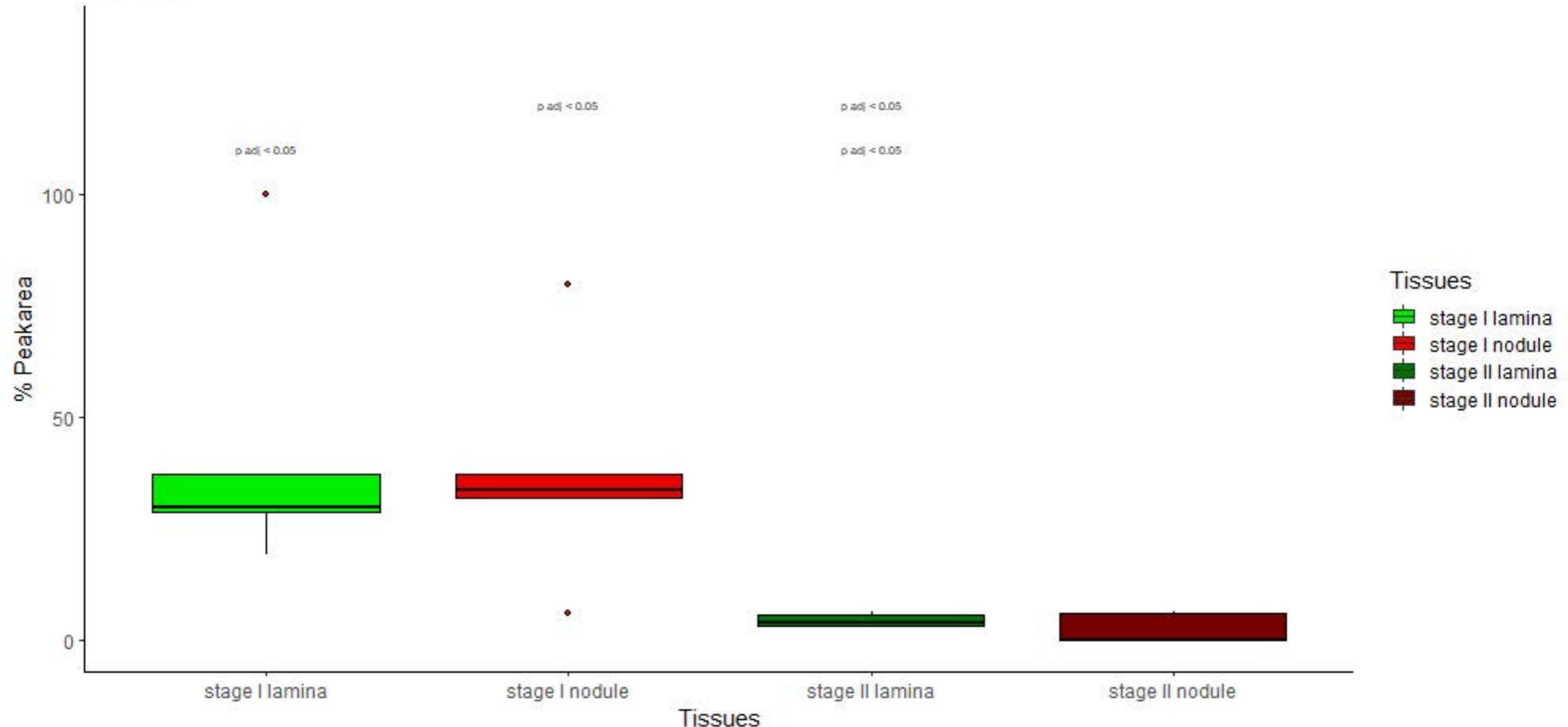


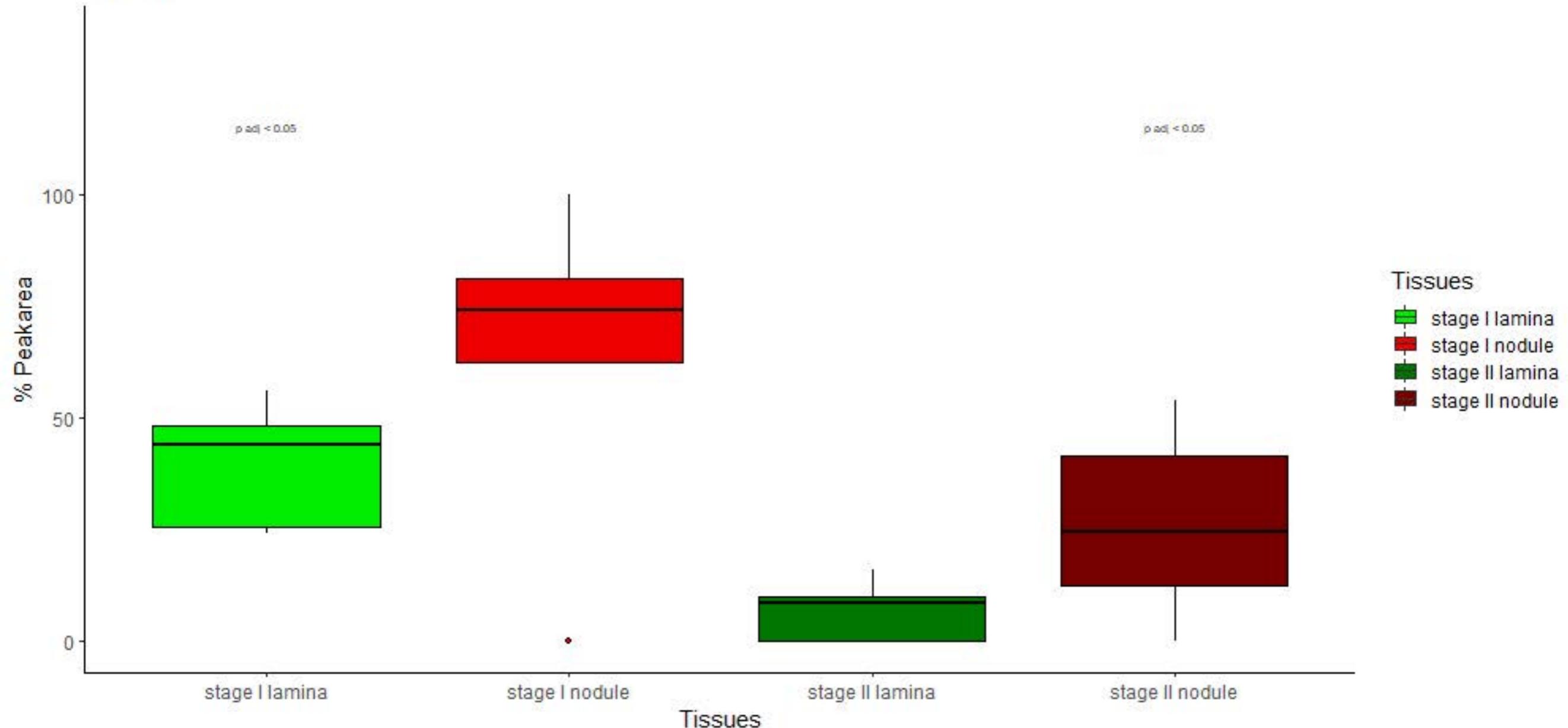
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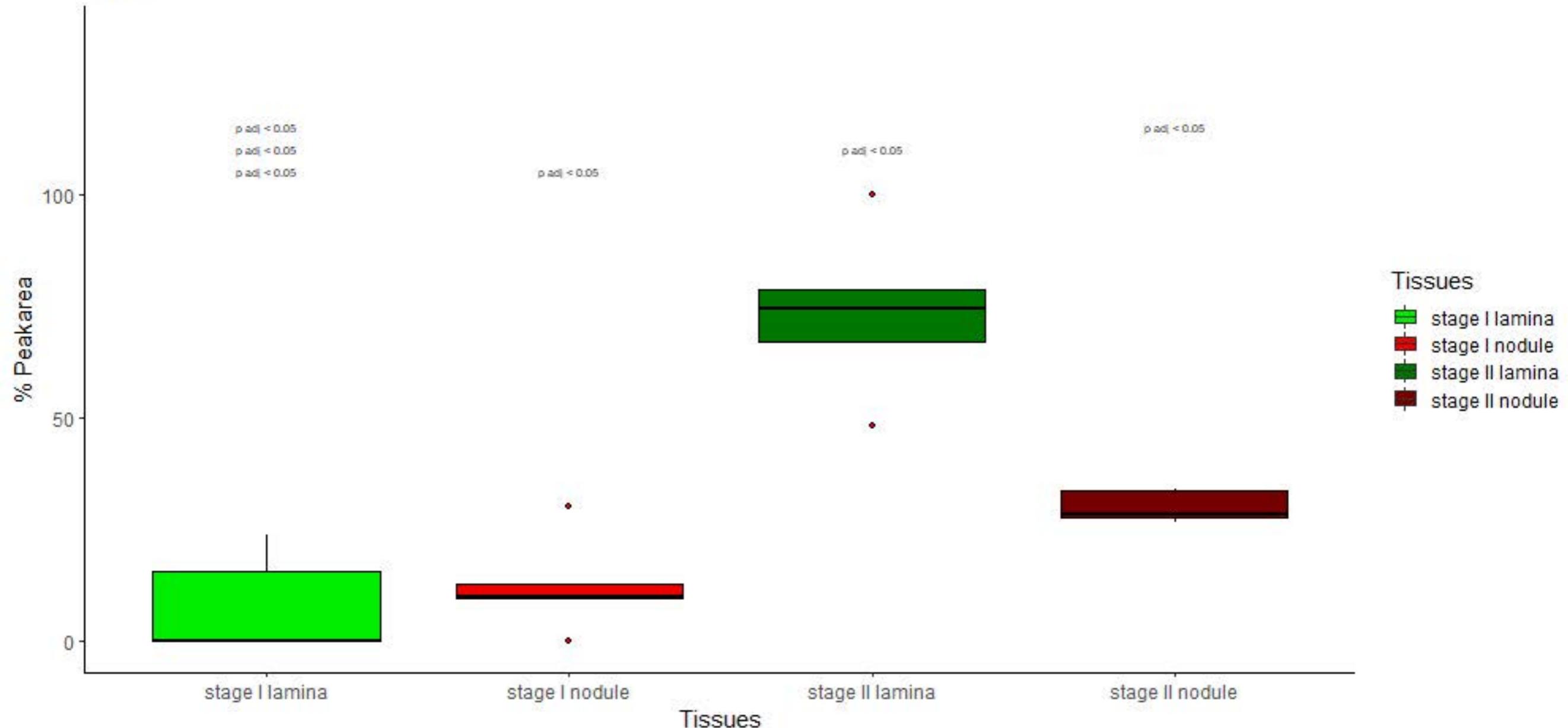


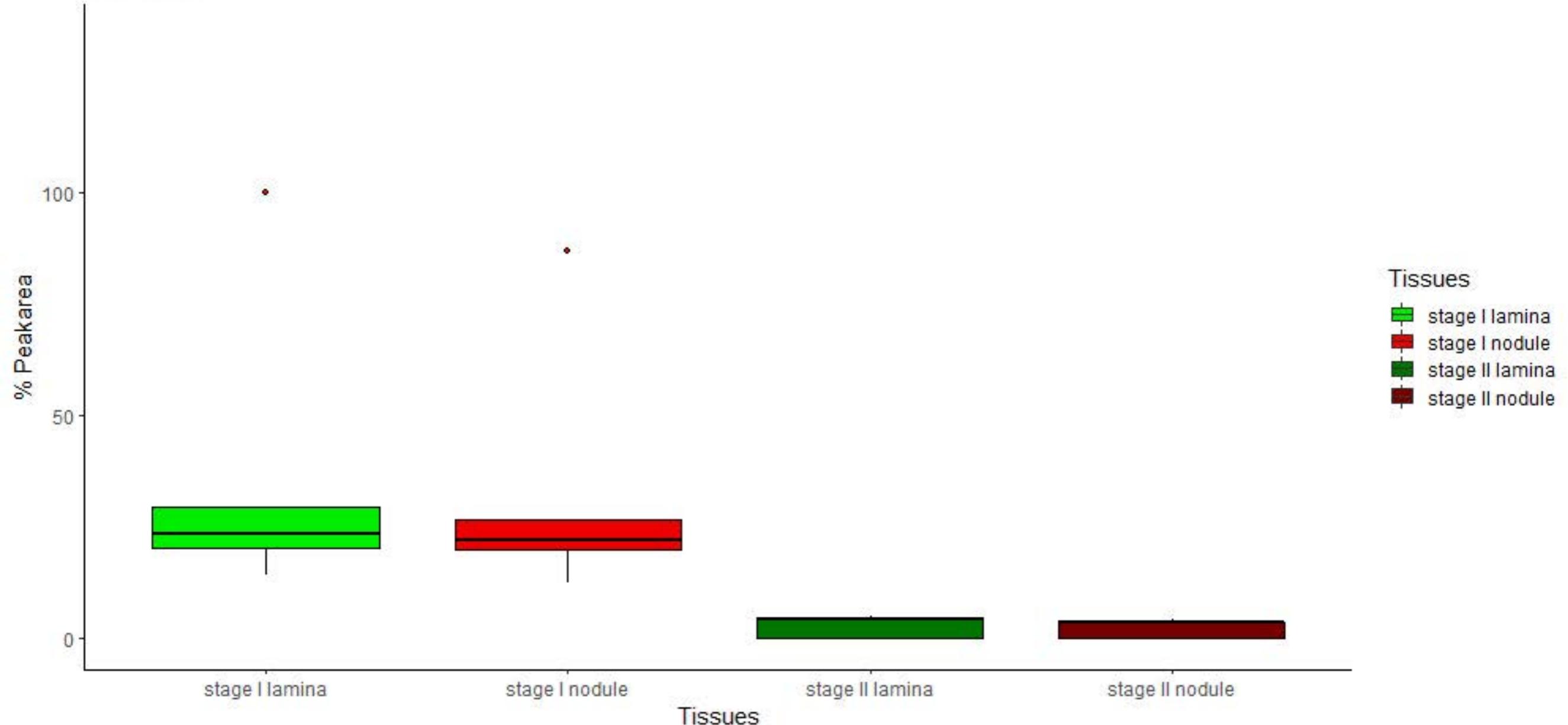


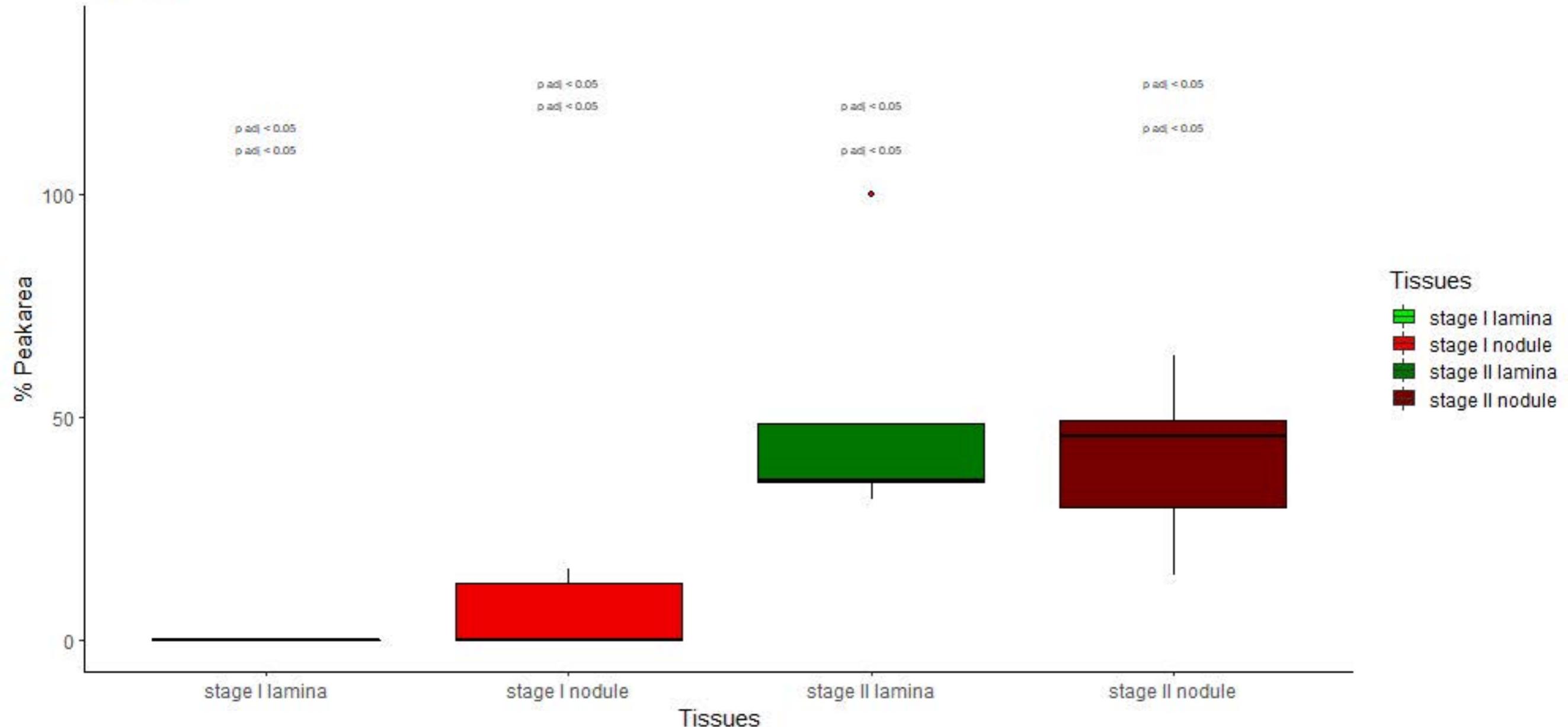


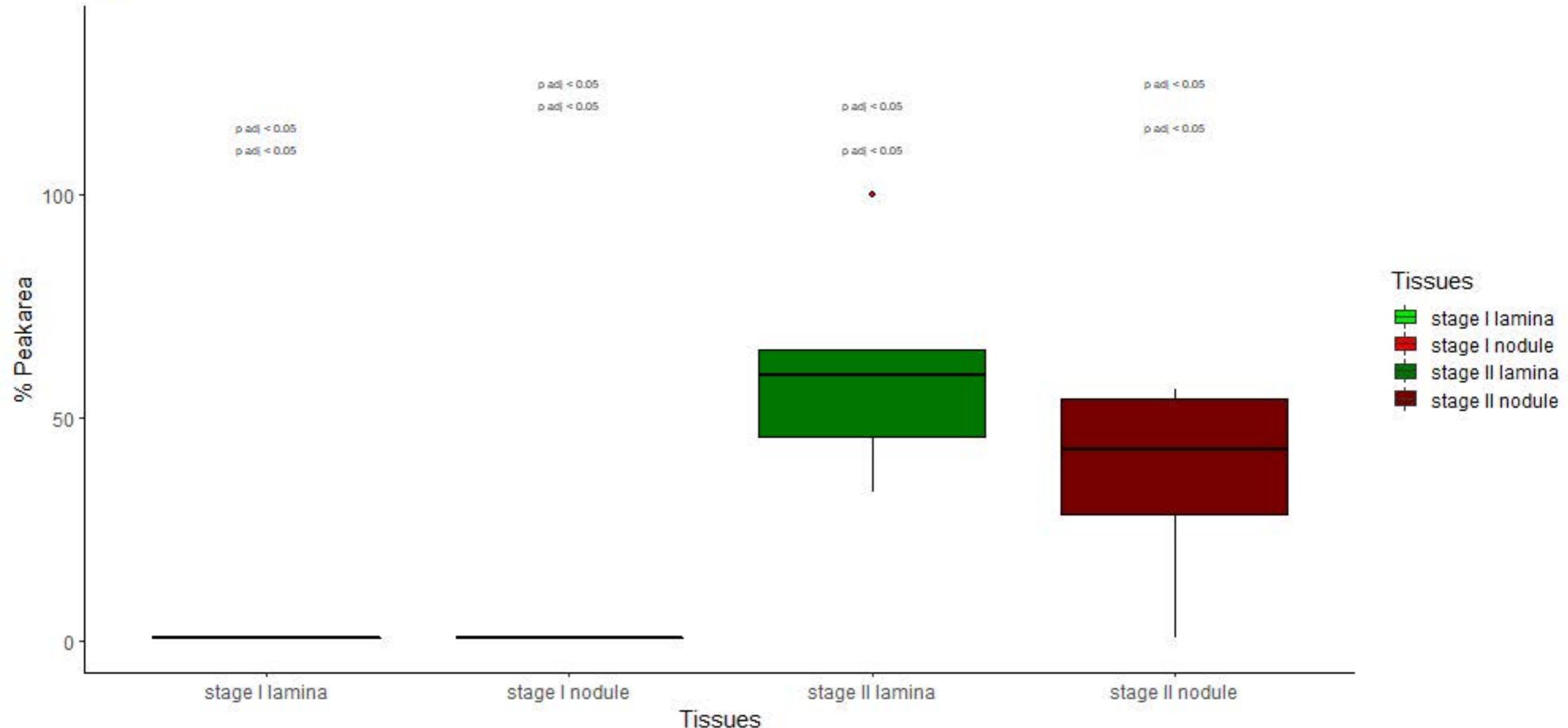


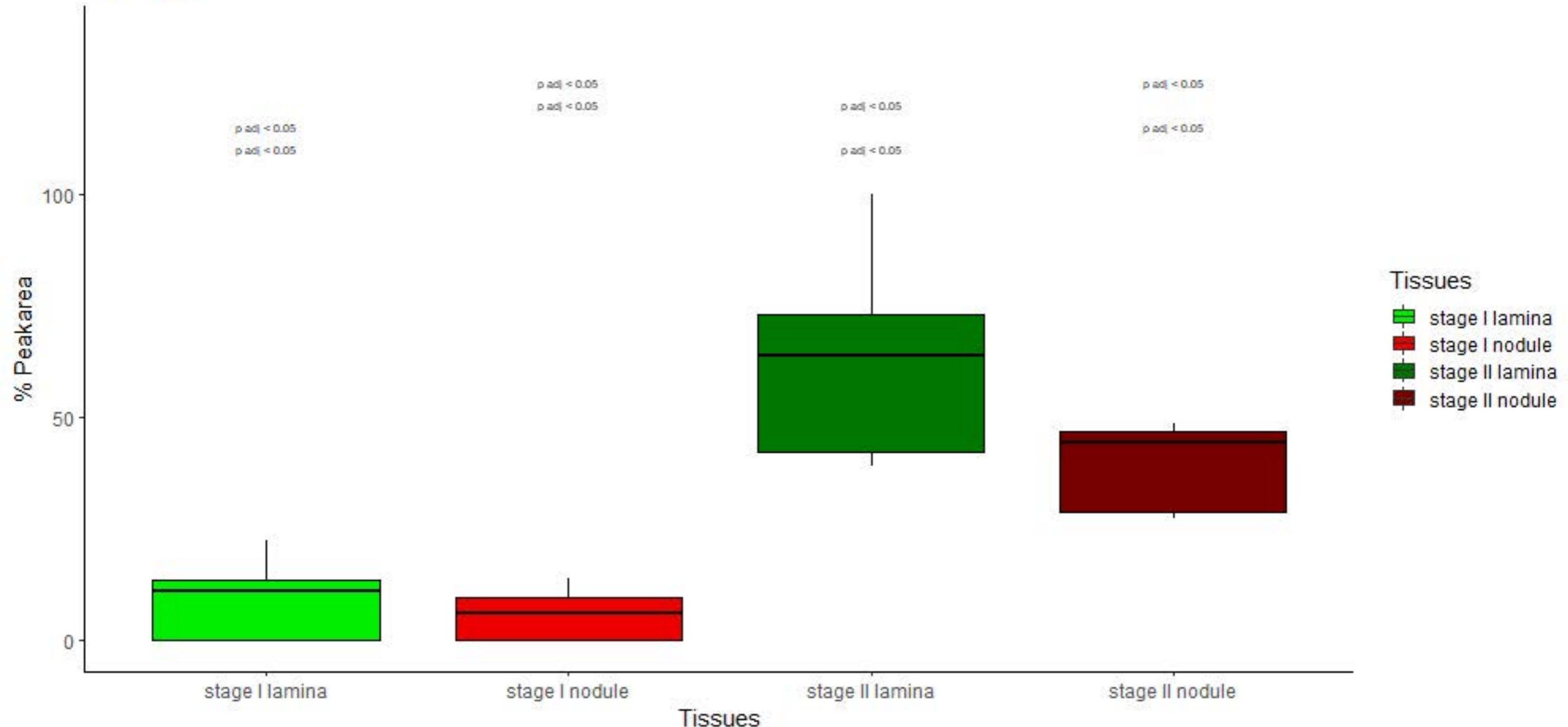


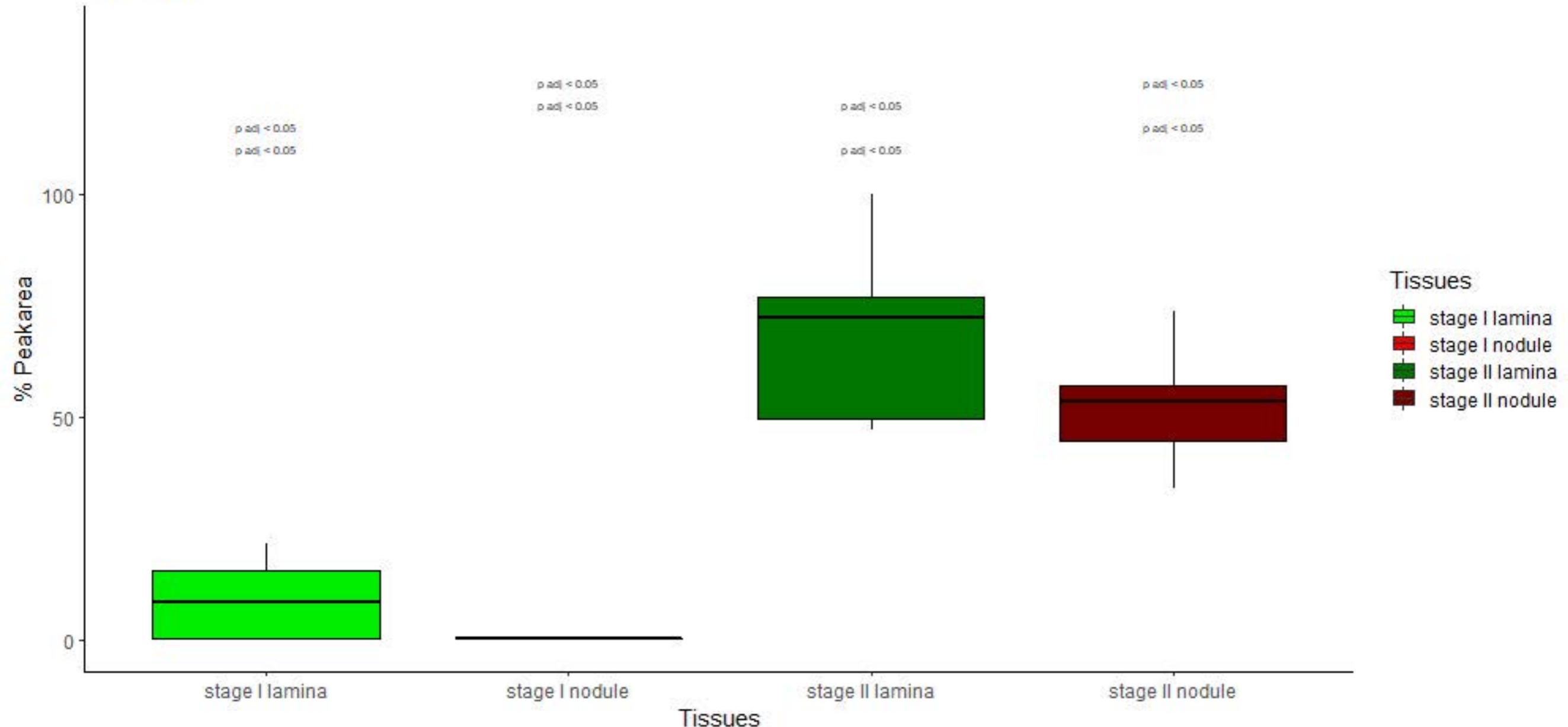


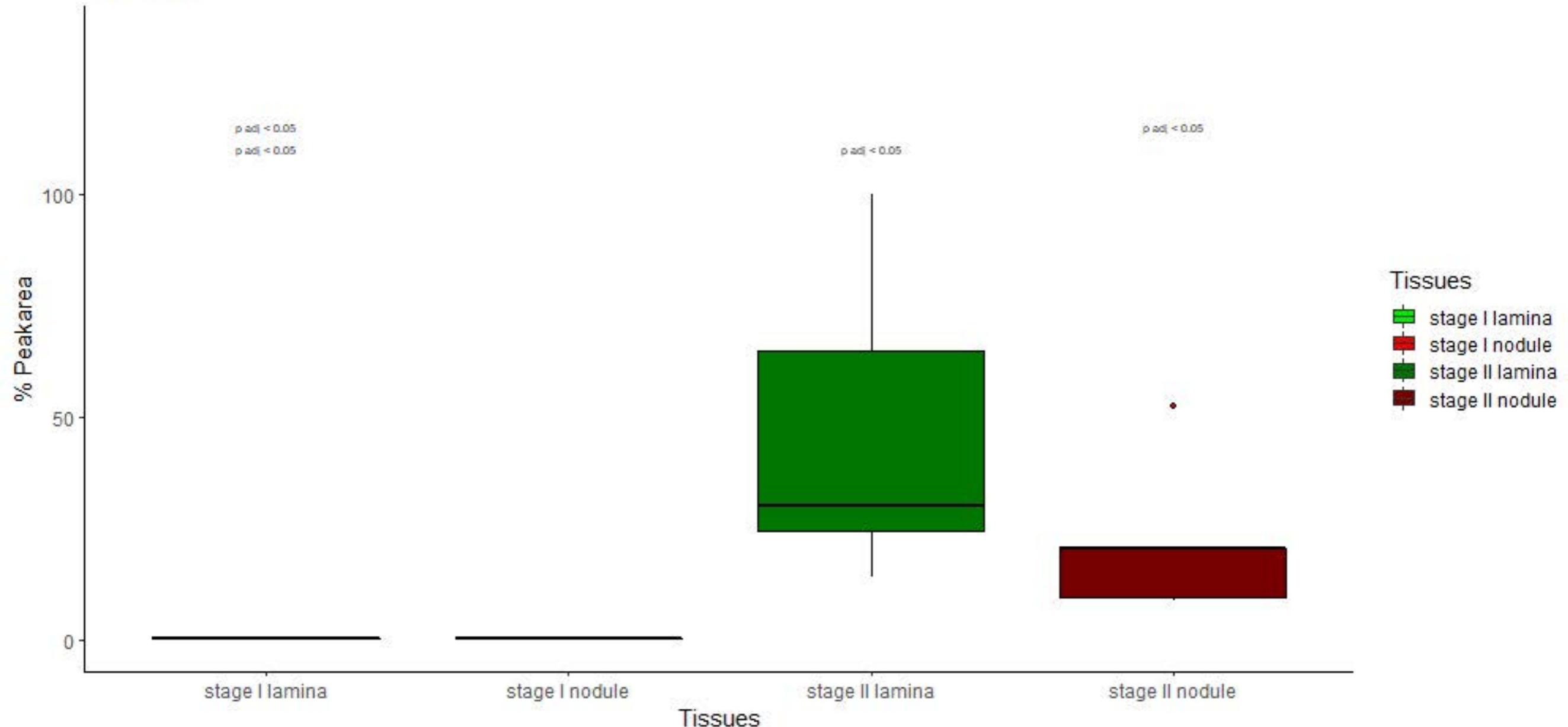


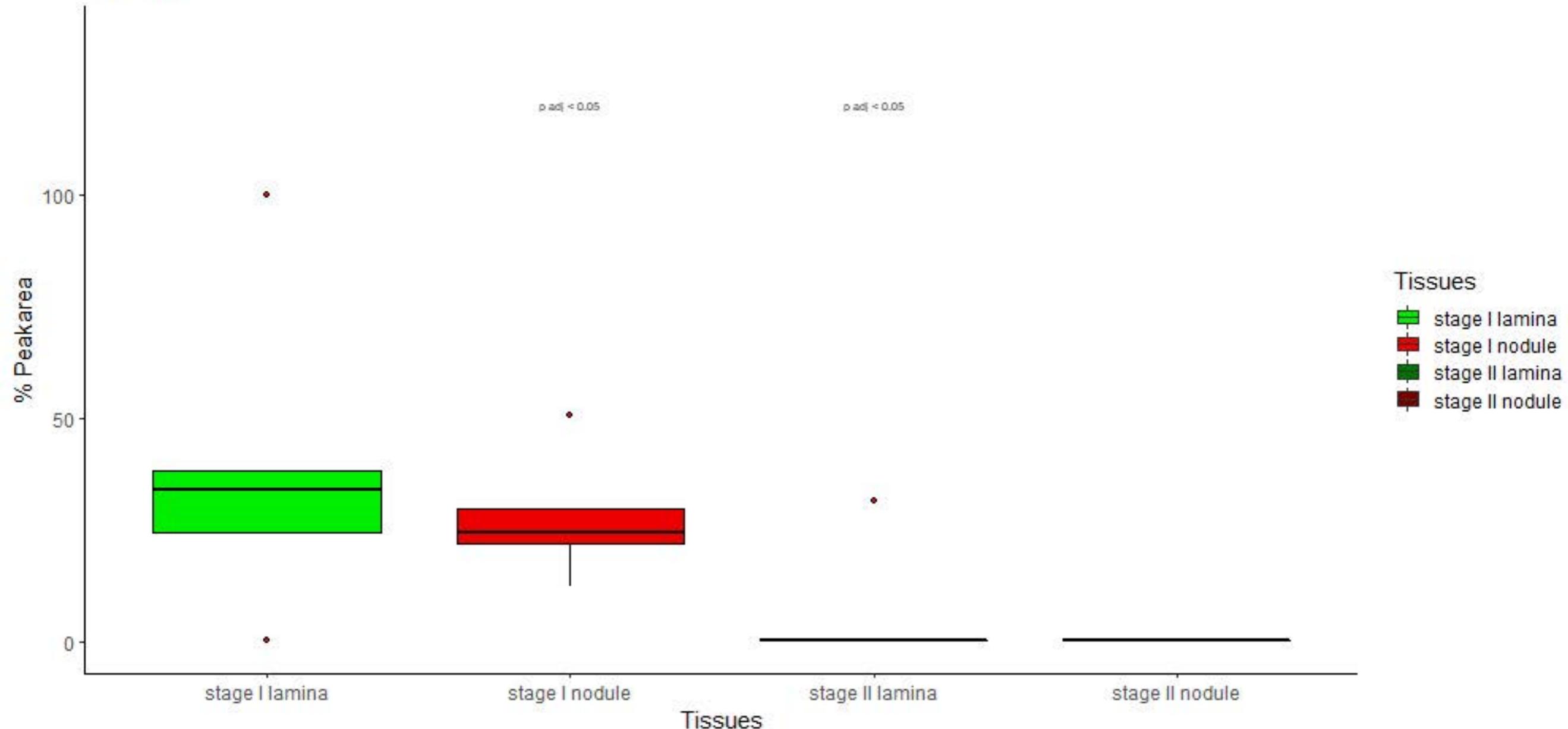


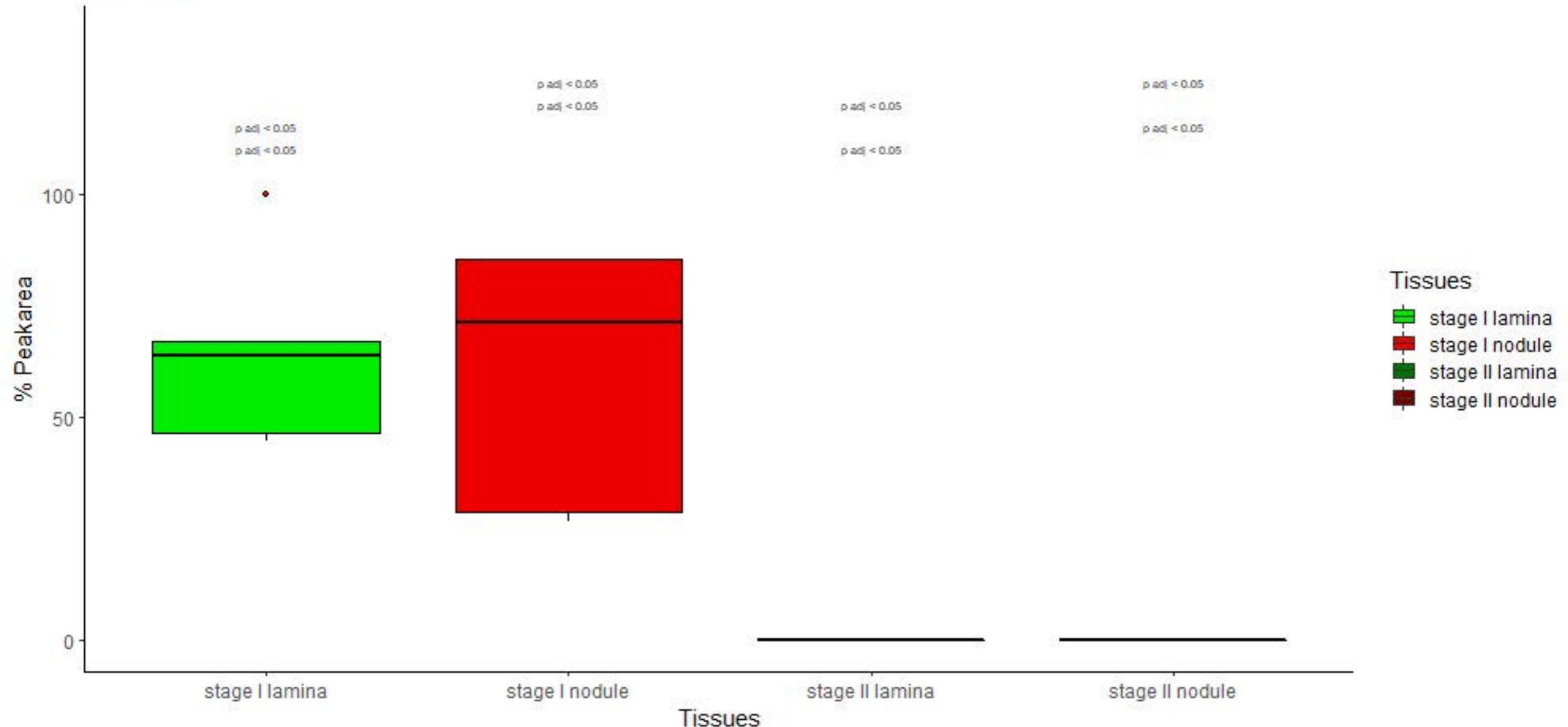




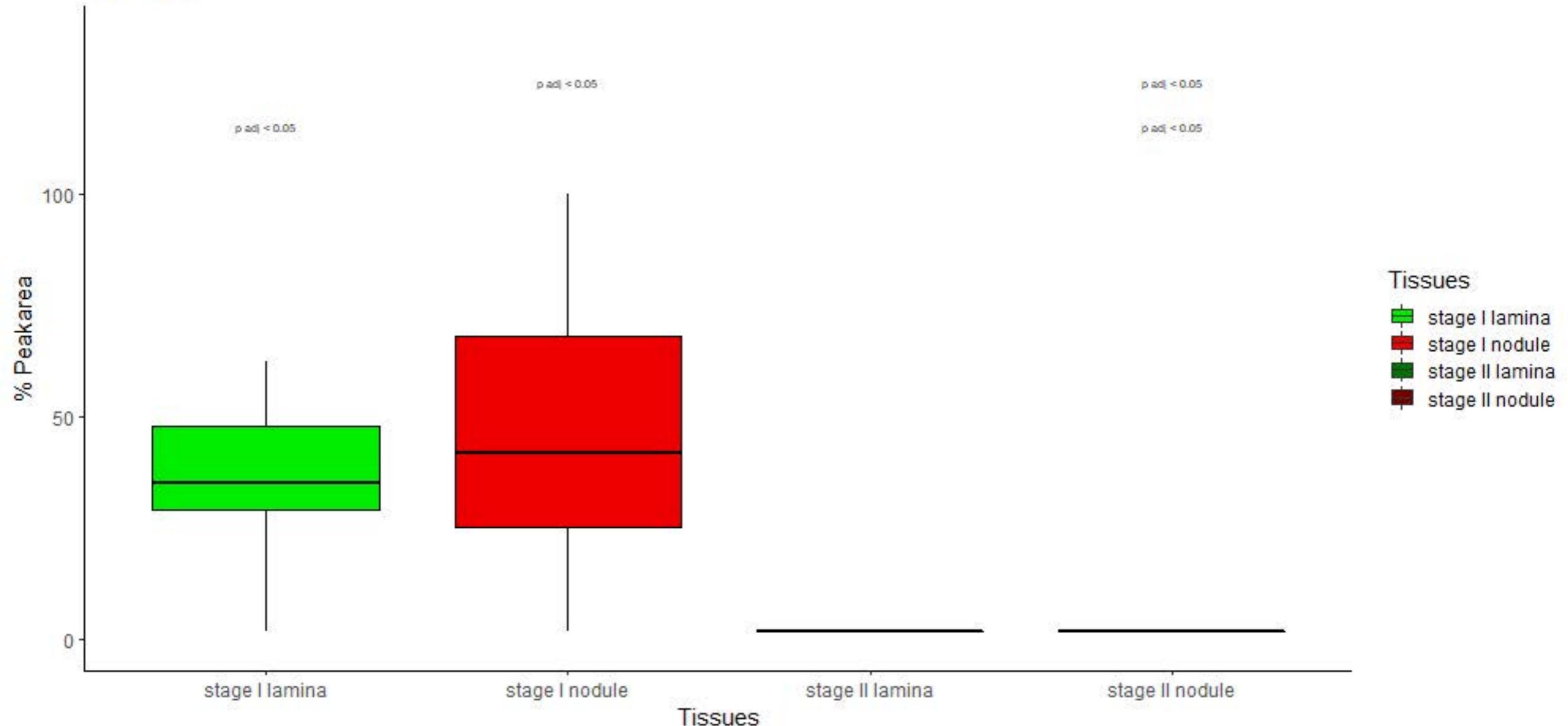


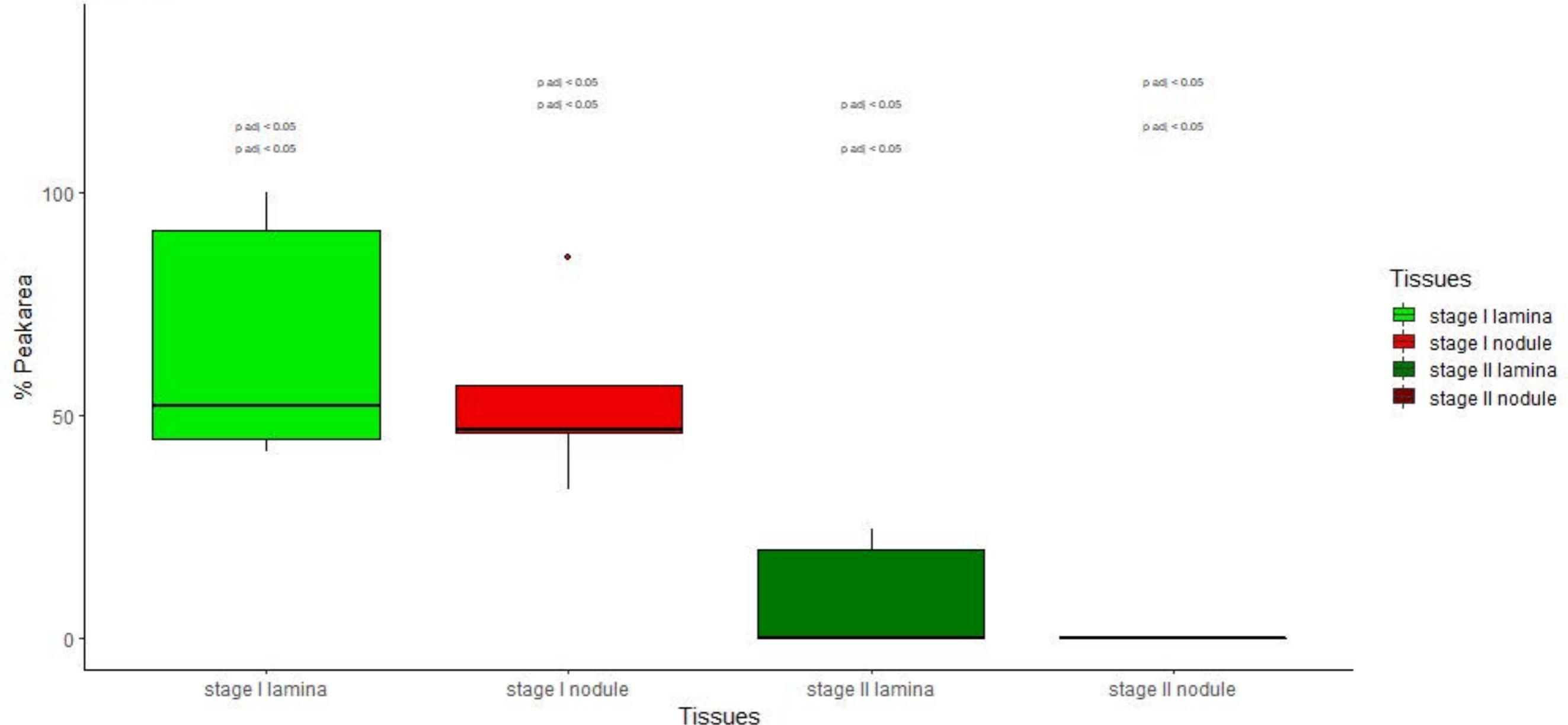


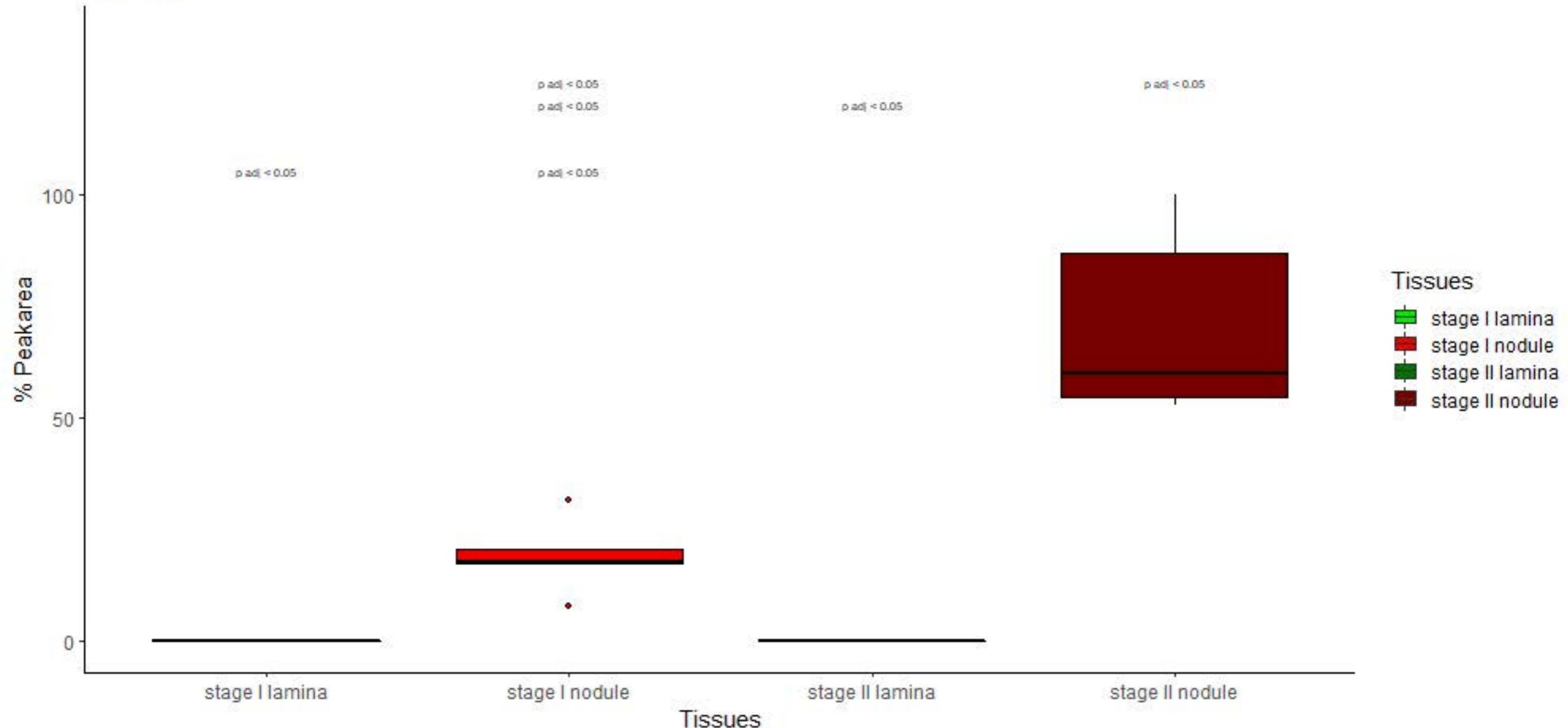


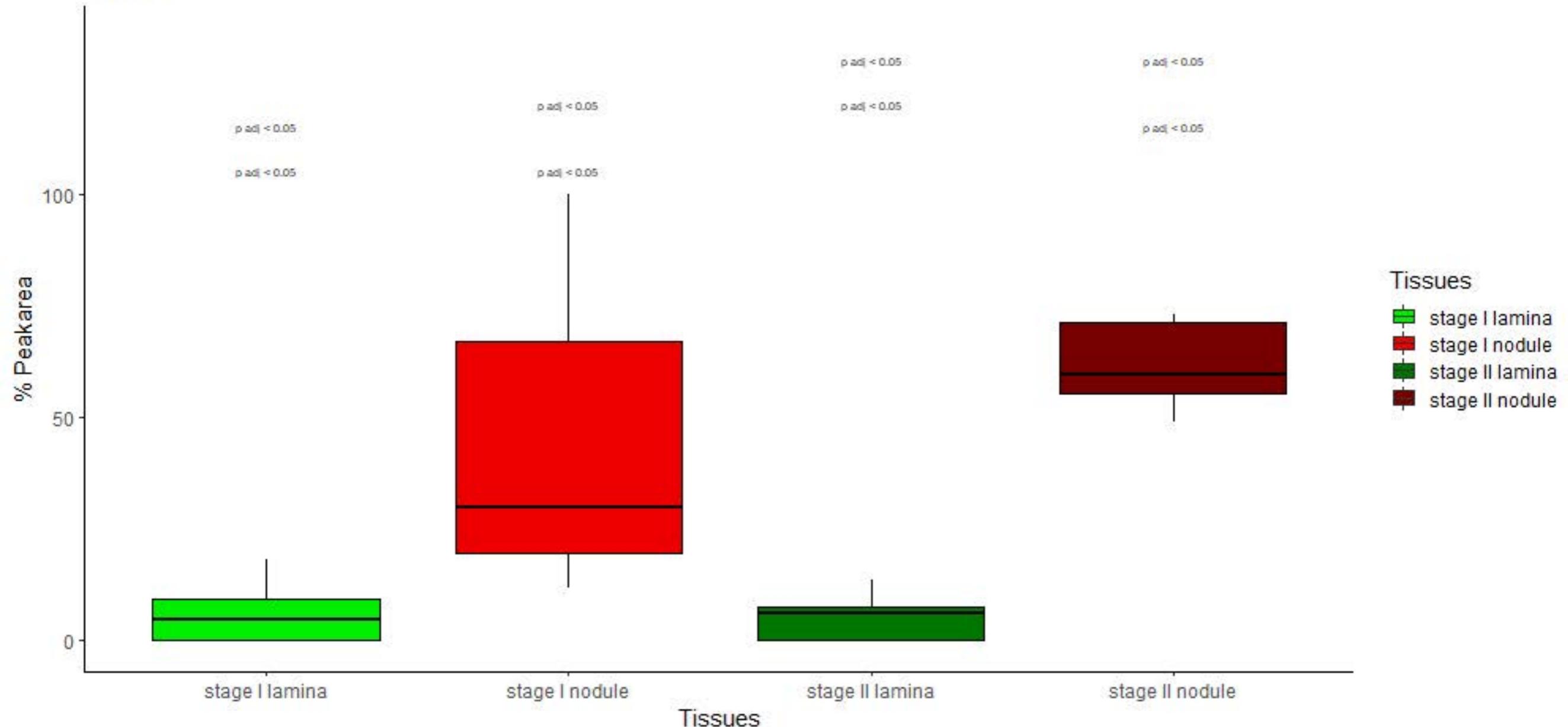


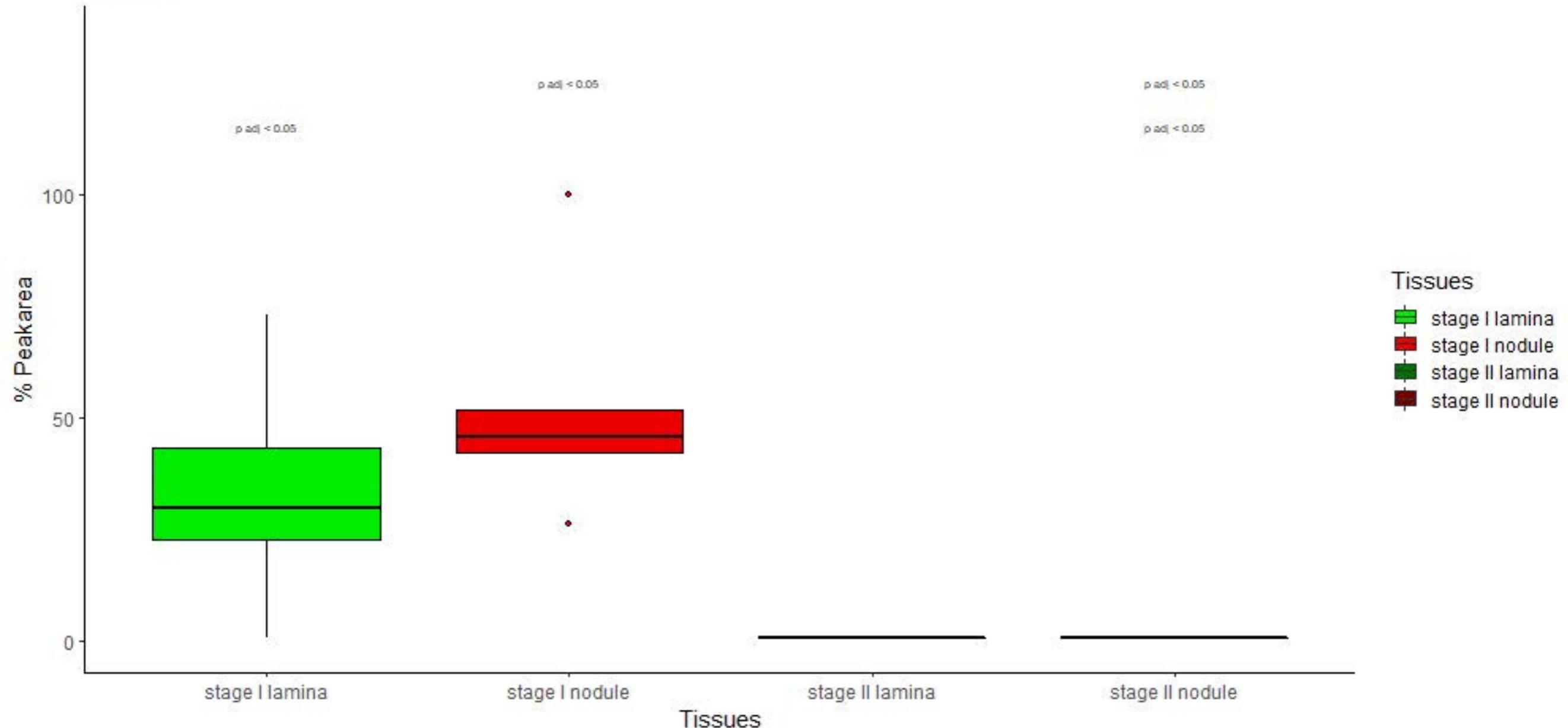
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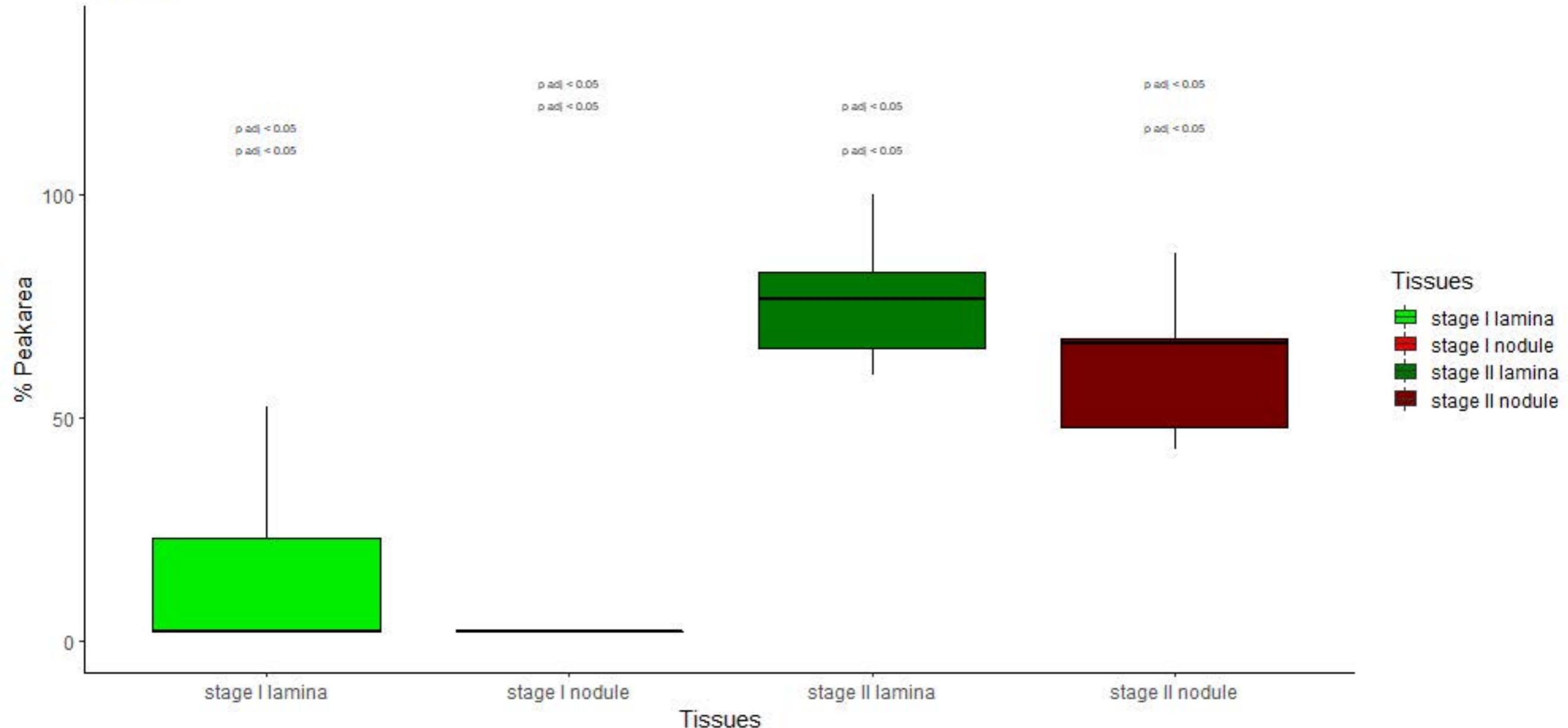




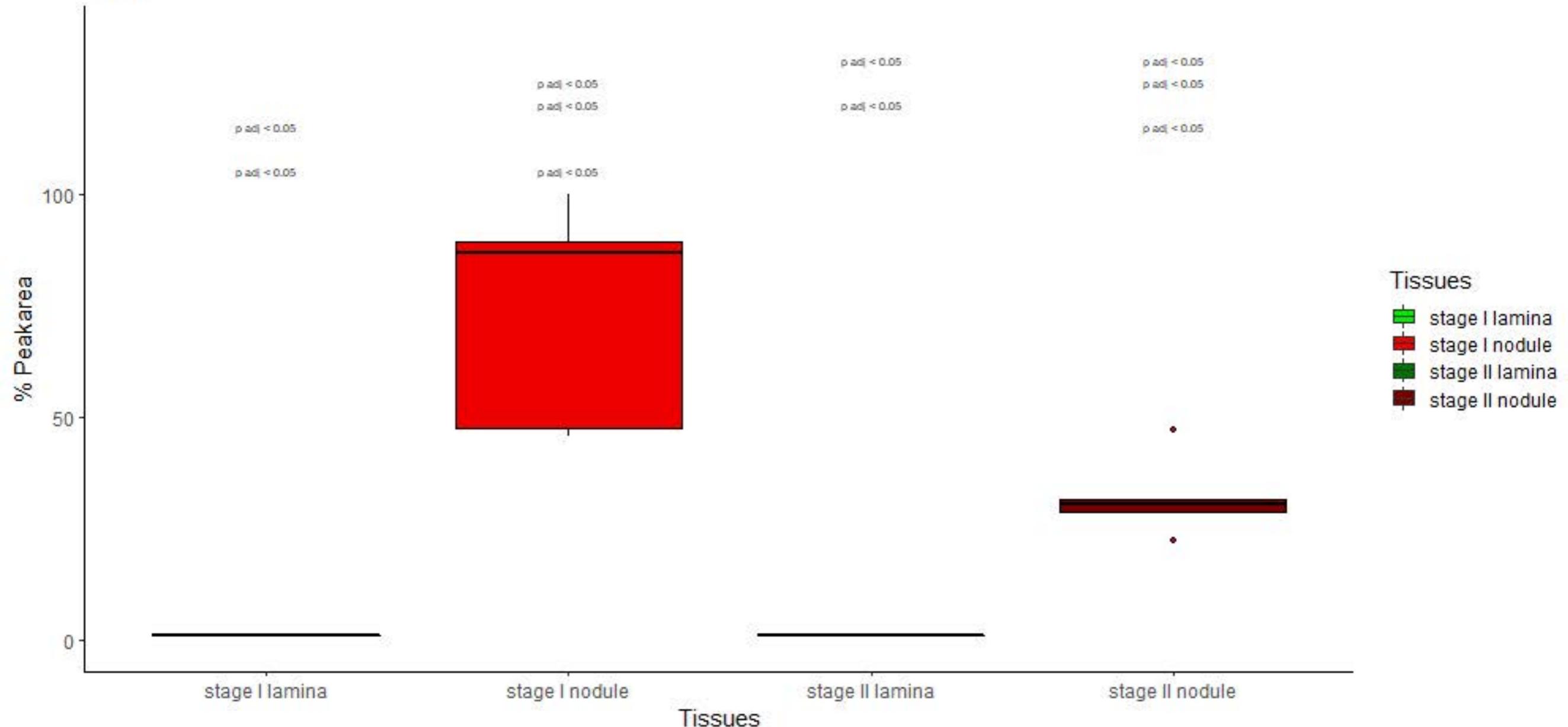




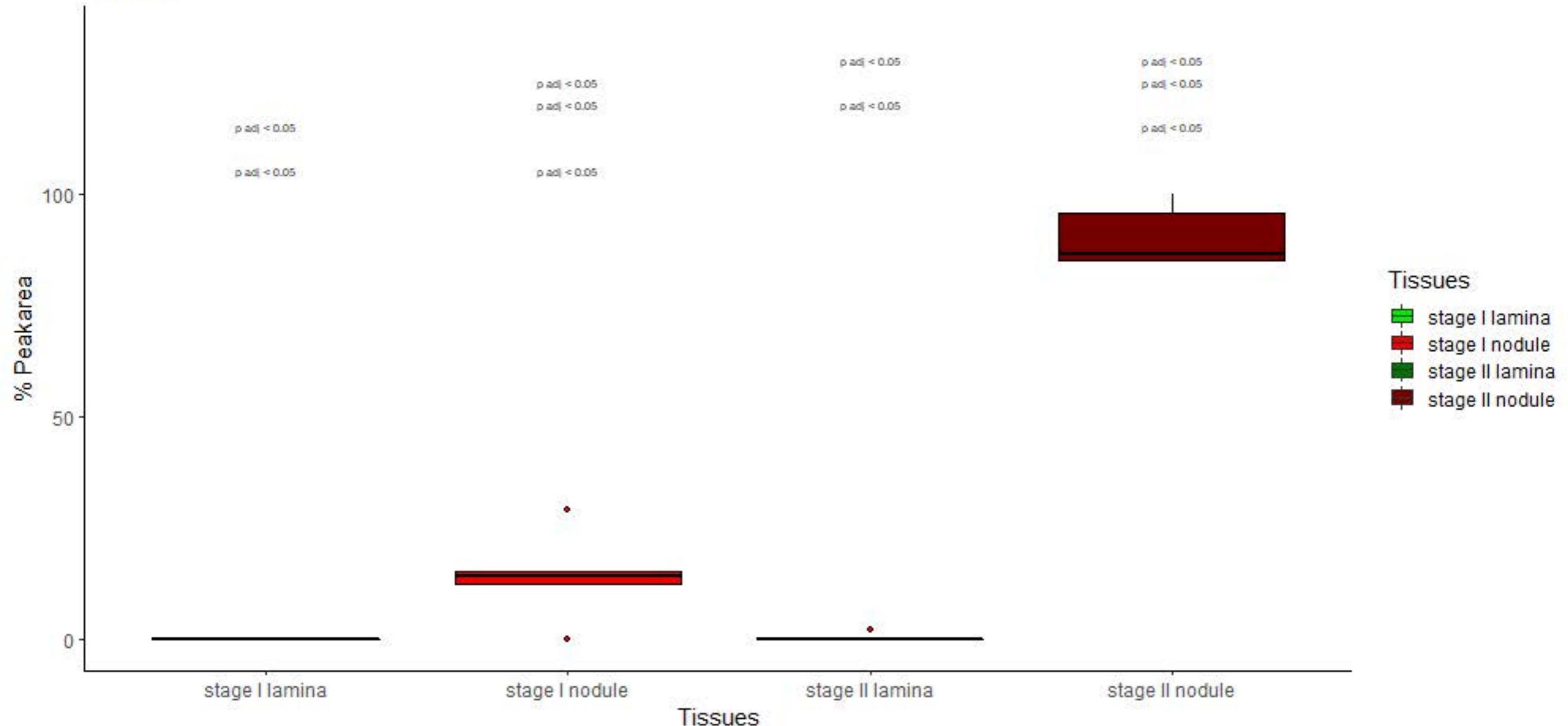


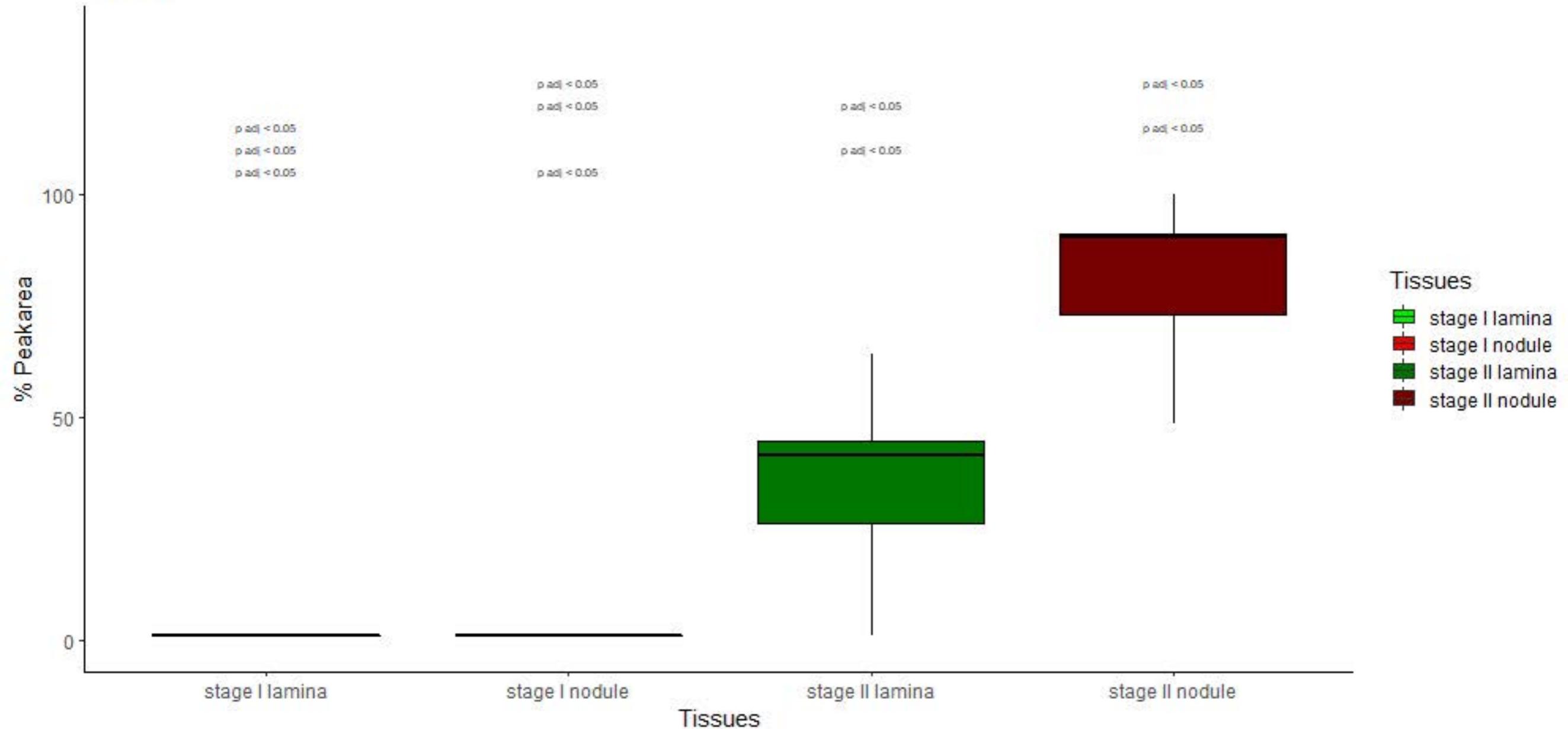


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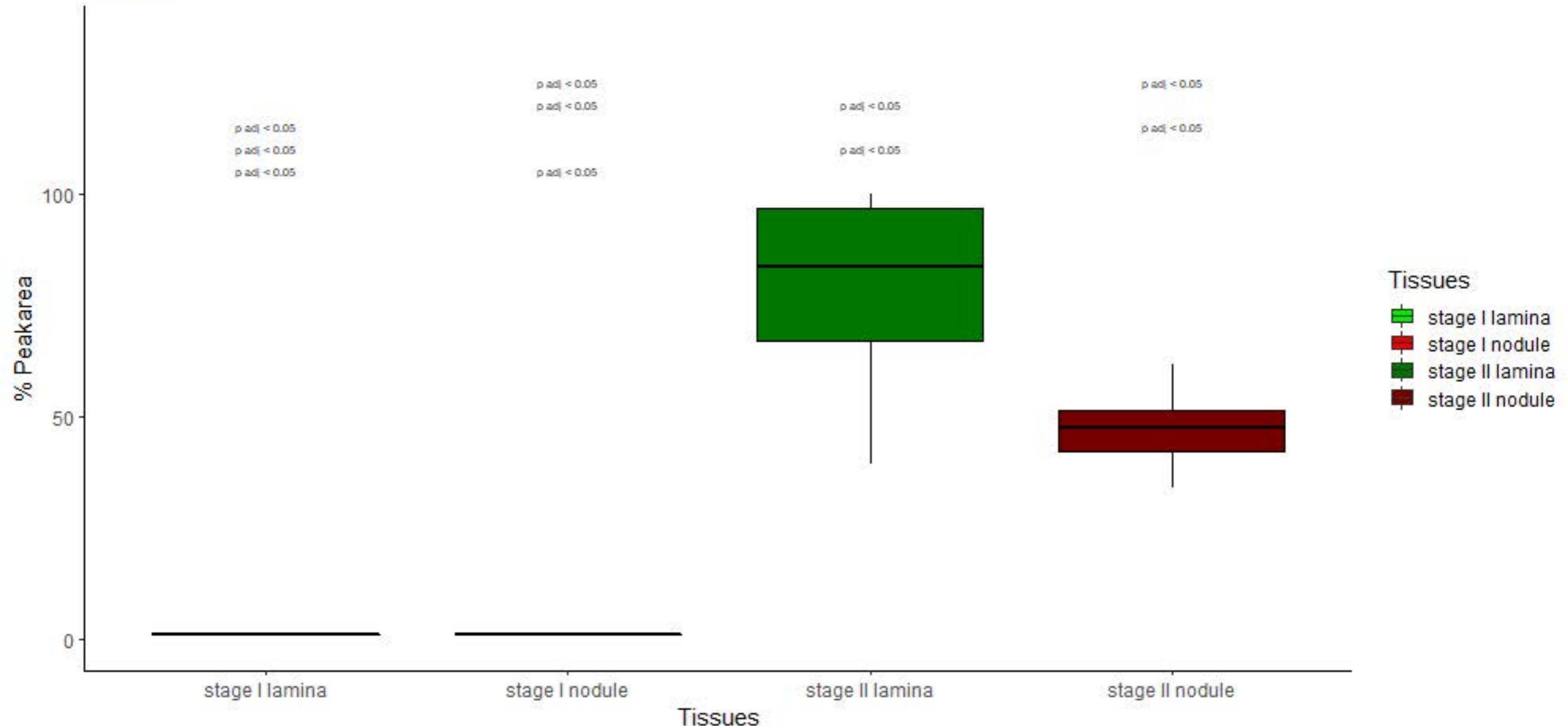


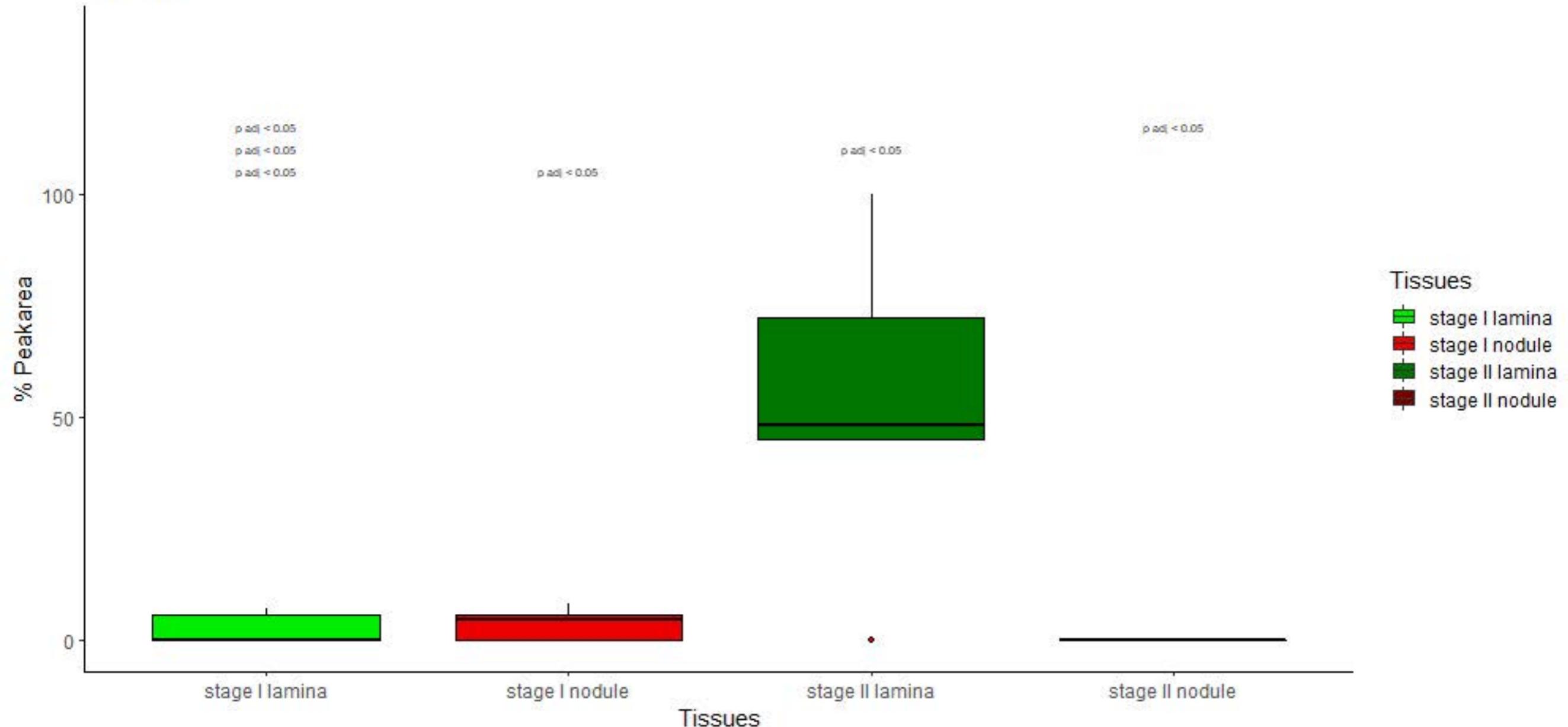
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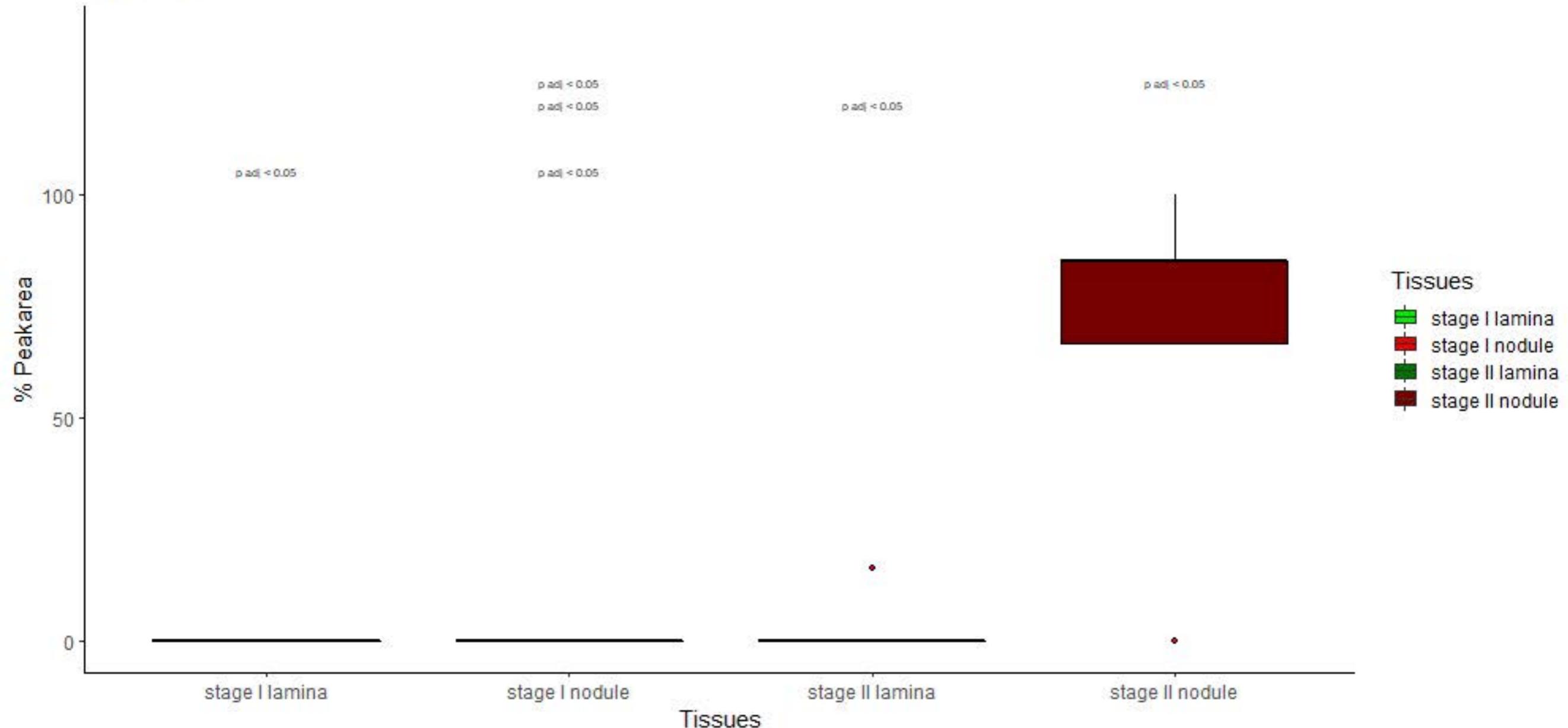




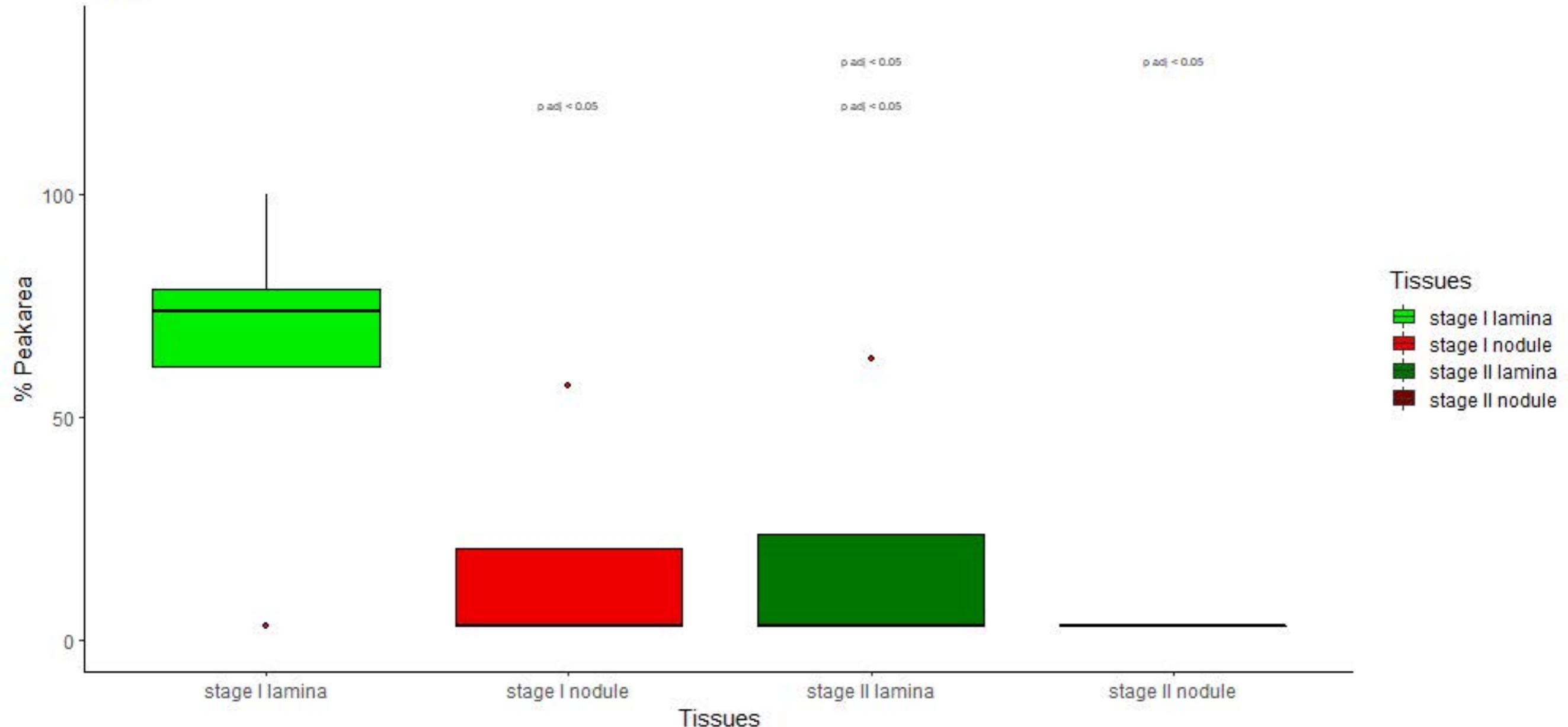
NA 80







NA 3



NA 63

