

Harvard Forest Data Archive HF459-03

Data File:

Name = hf459-03-al-lignin.csv

Description = Arthur Brook Lower lignin phenol measurements

Rows = 12 Columns = 11

MD5 checksum = 96c5f79aa699adad123cf408dd53511f

Variables:

date = date of sample

P_nM = lignin P-hydroxyphenols, including p-hydroxybenzaldehyde (PAL), p-hydroxyacetophenone (PON), and p-hydroxybenzoic acid (PAD), summed as P = PAL + PON + PA (nanomolePerLiter)

V_nM = vanillyl group phenols (V), containing vanillin (VAL), acetovanillone (VON), and vanillic acid (VAD), with V = VAL + VON + VAD (nanomolePerLiter)

S_nM = syringyl group phenols (S) including syringaldehyde (SAL), acetosyringone (SON), and syringic acid (SAD), summed as S = SAL + SON + SAD (nanomolePerLiter)

C_nM = cinnamyl group (C) consisted of p-coumaric acid (CAD) and ferulic acid (FAD), with C = CAD + FAD (nanomolePerLiter)

P_V = ratio of P to V phenols concentration (dimensionless)

S_V = ratio of S to V phenols concentration (dimensionless)

C_V = ratio of C to V phenols concentration (dimensionless)

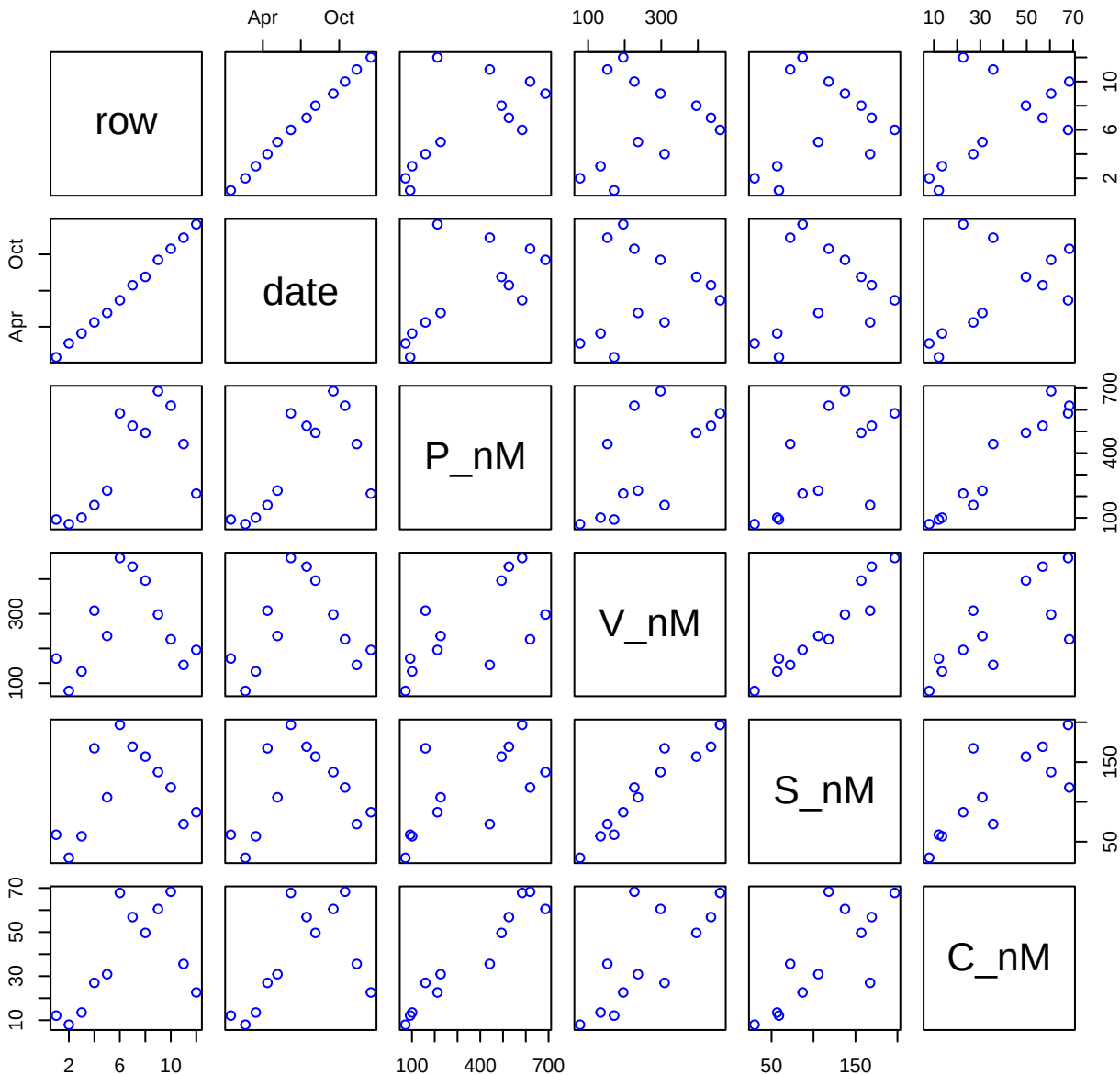
adalV = ratio of vanillic acid to vanillin concentration (dimensionless)

adalS = ratio of syringic acid to syringaldehyde concentration (dimensionless)

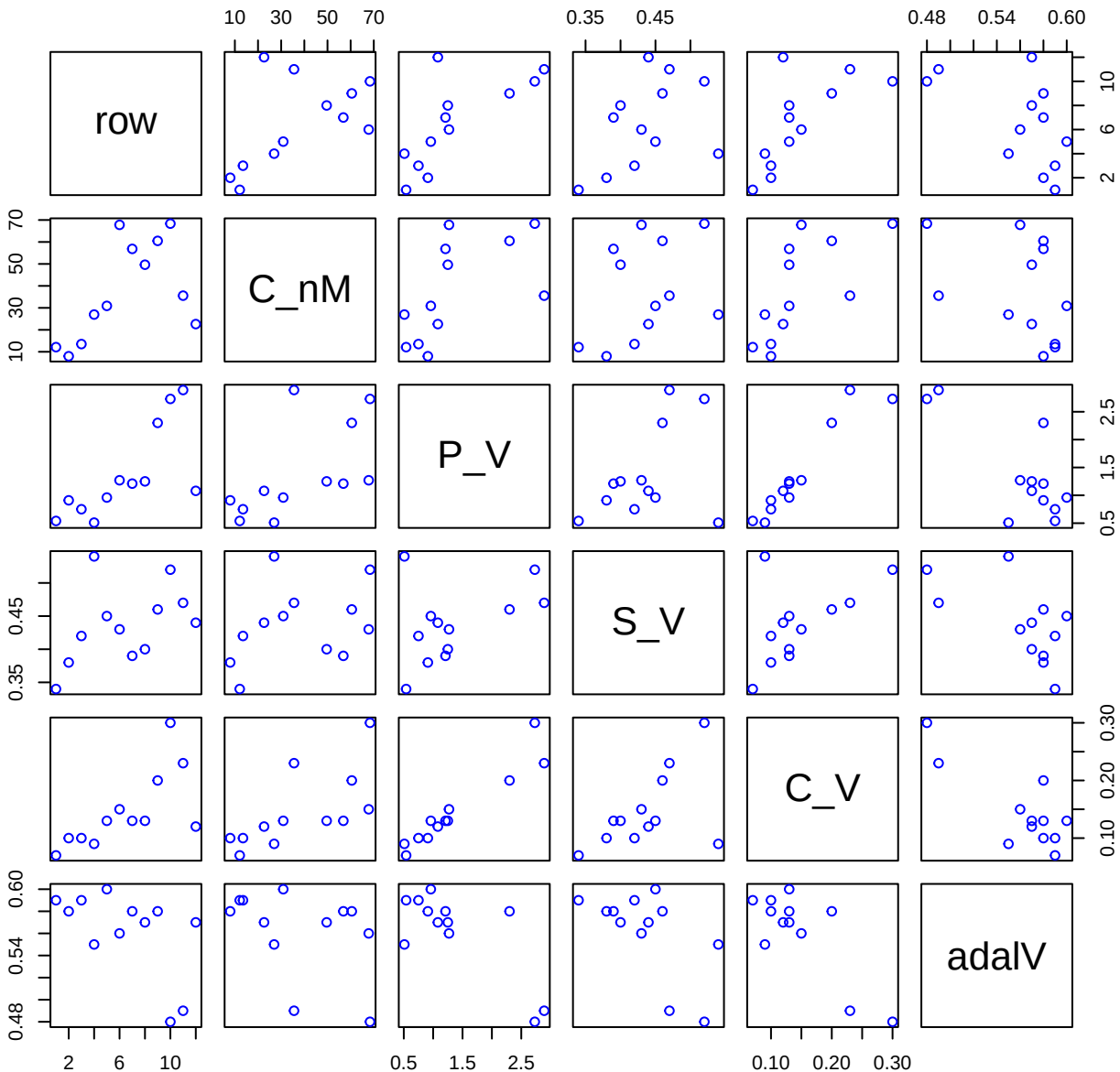
TDLP11.C_perc = the DOC-normalized yield of total dissolved P, C, V, and S lignin phenols (TDLP-11). Calculated by multiplying the number of Cs in each lignin phenol by its respective concentration, then dividing the sum of all phenols by the sample DOC concentration (dimensionless)

Variable	Min	Median	Mean	Max	NAs
date	2024-01-15	2024-06-26	2024-06-28	2024-12-16	0
P_nM	71.060	333.855	351.008	686.670	0
V_nM	77.740	231.340	257.800	460.840	0
S_nM	29.780	111.885	113.013	196.760	0
C_nM	7.980	33.225	37.730	68.350	0
P_V	0.510	1.145	1.367	2.890	0
S_V	0.340	0.435	0.437	0.540	0
C_V	0.070	0.130	0.146	0.300	0
adalV	0.480	0.575	0.562	0.600	0
adals	0.400	0.505	0.492	0.530	0
TDLP11.C_per	0.690	1.065	1.018	1.380	0

HF459-03 Plot 1



HF459-03 Plot 2



HF459-03 Plot 3

