

Supplementary Table 2 Collinearity diagnostics for vegetation indices and turfgrass parameters.

Variable Pair	VIF
NDRE/NDVI	2.899
SIPI/NDVI	250
SIPI/NDRE	6.289
PSRI/NDVI	90.909
PSRI/NDRE	1.035
PSRI/SIPI	40
DGCI/NDVI	5.319
DGCI/NDRE	3.04
DGCI/SIPI	3.745
DGCI/PSRI	4.651
TQ/NDVI	5.747
TQ/NDRE	2.933
TQ/SIPI	6.024
TQ/PSRI	2.688
TQ/DGCI	3.311
SWC/NDVI	3.268
SWC/NDRE	1.095
SWC/SIPI	3.096
SWC/PSRI	4.831
SWC/DGCI	1.832
SWC/TQ	1.504

Values represent the Variance Inflation Factor (VIF) for variable pairs. Higher VIF values (e.g., SIPI/NDVI) indicate significant redundancy, while lower values (e.g., SWC/TQ) indicate independent contribution to the regression models.