Supplementary 1

Table S1: Definitions and Equations for GLCM texture measures[1]

Factor	Equation	Description
Contrast	$\sum_{ij=0}^{M-1} Pij\ (i-j)^2$	Overall amount of local grey level variation within a window (Yuan *et al*., 1991).
Correlation	$\sum_{ij=0}^{M-1} Pij \left[\frac{(i-\mu_i)(i-u_j)}{(\sigma_i^2)(\sigma_j^2)}\right]$	Measurement of linear dependency of grey levels within an image (Kayitakire et al. 2006).
Entropy	$\sum_{ij=0}^{M-1} Pij\ (-lnP_{ij})$	Measure of uncertainty within an image (Yuan *et al*., 1991).
Dissimilarity	$\sum_{ij=0}^{M-1} Pij\lvert i-j\rvert$	Measure of the local variation (Rubner et al. 2001).
Homogeneity	$\sum_{ij=0}^{M-1} \frac{Pij}{1+(i-j)^2}$	Measures the smoothness of the image texture (grey level distributions) (Tuttle et al. 2006).
Mean	$\mu_i = \sum_{ij=0}^{M-1} i(Pij)$ $\mu_j = \sum_{ij=0}^{M-1} j(Pij)$	Average grey levels present in the small neighbourhood (Materka and Stralecki 1998).
Second moment	$\sum_{ij=0}^{M-1} P_{ij^2}$	Provides indication of local homogeneity (Yuan *et al*., 1991).
Variance	$\sigma_i^2 = \sum_{ij=0}^{M-1} Pij\ (i-\mu_i)^2$ $\sigma_j^2 = \sum_{ij=0}^{M-1} Pij\ (i-\mu_j)^2$	Variability of pixels spectral response (Materka and Stralecki 1998).

"*Where* $P(i,j)$ *is the normalised co-occurrence matrix where the sum of* $(i,j=0,M-1)$ $(P(i,j))=1$"

[1] Adapted from Hlatshwayo *et al*. (2019)