Table 3. Hyperspectral Indices Extracted

1	NDVI705	$\frac{\rho_{750} - \rho_{705}}{\rho_{750} + \rho_{705}}$	Red Edge Normalized Difference Vegetation Index [1]
2	mNDVI705	$\frac{\rho_{750} - \rho_{705}}{\rho_{750} + \rho_{705} - 2\rho_{445}}$	Modified Red Edge Normalized Difference Vegetation Index. [1]
3	mSR705	$\frac{\rho_{750} - \rho_{445}}{\rho_{705} - \rho_{445}}$	Modified Red Edge Simple Ratio Index [2]
4	GNDVI	$\frac{\rho_{750} - \rho_{550}}{\rho_{750} + \rho_{550}}$	Green Difference Vegetation Index [2]
5	RNDVI	$\frac{\rho_{800} - \rho_{670}}{\rho_{800} + \rho_{670}}$	Relative Normalized Difference Vegetation Index [3]
6	NDCI	$\frac{\rho_{762} - \rho_{527}}{\rho_{762} + \rho_{527}}$	Normalized Difference Chlorophyll Index [4]
7	Datt1	$\frac{\rho_{850} - \rho_{710}}{\rho_{850} - \rho_{680}}$	Datt Water Content Index [5]
8	Datt2	$\frac{\rho_{850}}{\rho_{710}}$	Datt Water Content Index [5]
9	Datt3	$\frac{\rho_{754}}{\rho_{704}}$	Datt Water Content Index [5]
10	Carte1	$\frac{\rho_{695}}{\rho_{420}}$	Carte Ratios of Leaf Reflectance [6]
11	Carte2	$\frac{\rho_{695}}{\rho_{760}}$	Carte Ratios of Leaf Reflectance [6]
12	Carte3	$\frac{\rho_{605}}{\rho_{760}}$	Carte Ratios of Leaf Reflectance [6]
13	Carte4	$\frac{\rho_{710}}{\rho_{760}}$	Carte Ratios of Leaf Reflectance [6]
14	Carte5	$\frac{\rho_{695}}{\rho_{670}}$	Carte Ratios of Leaf Reflectance [6]
15	SR800680	$\frac{\rho_{800}}{\rho_{680}}$	Simple Band Ratio [7]
16	SR675700	$\frac{\rho_{675}}{\rho_{700}}$	Simple Band Ratio [7]
17	SR700670	$\frac{\rho_{700}}{\rho_{670}}$	Simple Band Ratio [7]
18	SR750700	$\frac{\rho_{750}}{\rho_{700}}$	Simple Band Ratio [7]
19	SR752690	$\frac{\rho_{752}}{\rho_{690}}$	Simple Band Ratio [7]
20	SR750550	$\frac{\rho_{750}}{\rho_{550}}$	Simple Band Ratio [7]
21	SR750710	$\frac{\rho_{750}}{\rho_{710}}$	Simple Band Ratio [7]
22	NVI	$\frac{\rho_{777} - \rho_{747}}{\rho_{673}}$	Normalized Vegetation Index [8]

23	EVI	$\frac{2.5(\rho_{800}-\rho_{670})}{\rho_{800}+6\rho_{670}+7.5\rho_{475}+1}$	Enhanced Vegetation Index [9]
24	OSAVI	$\frac{1.16(\rho_{800}-\rho_{670})}{0.16+\rho_{800}+\rho_{670}}$	Optimized Soil-Adjusted Vegetation Index [10]
25	OSAVI2	$\frac{1.16(\rho_{750}-\rho_{705})}{0.16+\rho_{750}+\rho_{705}}$	Optimized Soil-Adjusted Vegetation Index [10]
26	TCARI	$0.5+3[(\rho_{700}-\rho_{670})-0.2(\rho_{700}-\rho_{550})*\left(\frac{\rho_{700}}{\rho_{670}}\right)]$	Transformed chlorophyll absorption in reflectance [11]
27	TCARI2	$3[(\rho_{750}-\rho_{705})-0.2(\rho_{750}-\rho_{550})*\left(\frac{\rho_{750}}{\rho_{705}}\right)]$	Transformed chlorophyll absorption in reflectance [11]
28	MCARI	$[(\rho_{700}-\rho_{670})-0.2(\rho_{700}-\rho_{550})]*\left(\frac{\rho_{700}}{\rho_{670}}\right)$	Modified chlorophyll absorption in reflectance index [12]
29	TVI	$0.5\left[\begin{array}{c}120(\rho_{750}-\rho_{550})\\-2.5(\rho_{670}-\rho_{550})\end{array}\right]$	Triangular vegetation index [13]
30	SPVI	$0.4*3.7(\rho_{800}-\rho_{670})-1.2\lvert(\rho_{530}-\rho_{670})\rvert$	Spectral Polygon Vegetation Index [14]
31	REP	$700+40*[\frac{(\rho_{670}-\rho_{780})}{2}-\left(\frac{\rho_{700}}{\rho_{740}-\rho_{700}}\right)]$	Red Edge Position Index [15]
32	PRI	$\frac{\rho_{531}-\rho_{570}}{\rho_{531}+\rho_{570}}$	Photochemical Reflectance Index [16]
33	RI1db	$\frac{\rho_{735}}{\rho_{720}}$	Ratio Index [17]
34	VOG1	$\frac{\rho_{740}}{\rho_{720}}$	Vogelmann Red Edge Index [18]
35	VOG2	$\frac{\rho_{734}-\rho_{747}}{\rho_{715}+\rho_{726}}$	Vogelmann Red Edge Index [18]
36	VOG3	$\frac{\rho_{734}-\rho_{747}}{\rho_{715}+\rho_{720}}$	Vogelmann Red Edge Index [18]
37	RDVI	$\frac{\rho_{800}-\rho_{670}}{\sqrt{\rho_{800}+\rho_{670}}}$	Renormalized Difference Vegetation Index [19]
38	MSAVI	$0.5[2\left(\rho_{800}+1-\sqrt{(2\rho_{800}+1)^2}\right)-1.2\lvert(\rho_{530}-\rho_{670})\rvert$	Modified Soil Adjusted Vegetation Index [20]
39	MCARI2	$[(\rho_{750}-\rho_{705})-0.2(\rho_{700}-\rho_{550})]*\left(\frac{\rho_{750}}{\rho_{705}}\right)$	Modified chlorophyll absorption in reflectance inde [12]
40	MCARI2/ OSAVI2	MCARI2/ OSAVI2	MCARI2/ OSAVI2 [21]
41	PSRI	$\frac{\rho_{678}-\rho_{500}}{\rho_{750}}$	Plant Senescence Reflectance Index [22]
42	HBSI1	$\frac{\rho_{855}-\rho_{682}}{\rho_{855}+\rho_{682}}$	Hyperspectral biomass and structural index [23]
43	HBSI2	$\frac{\rho_{910}-\rho_{682}}{\rho_{910}+\rho_{682}}$	Hyperspectral biomass and structural index [23]

44	HBSI3	$\frac{\rho_{550}-\rho_{682}}{\rho_{550}+\rho_{682}}$	Hyperspectral biomass and structural index [23]
45	DCNI	$(\rho_{720}-\rho_{700})/(\rho_{700}-\rho_{7670})/$ $(\rho_{720}-\rho_{670}+0.03)$	Double-peak Canopy Nitrogen Index [24]
46	HBCI8	$\frac{\rho_{550}-\rho_{515}}{\rho_{550}+\rho_{515}}$	Hyperspectral Biochemical Indices [23]
47	HBCI9	$\frac{\rho_{550}-\rho_{490}}{\rho_{550}+\rho_{490}}$	Hyperspectral Biochemical Indices [23]
48	HREI15	$\frac{\rho_{855}-\rho_{720}}{\rho_{855}+\rho_{720}}$	Hyperspectral Red Edge Indices [23]
49	HREI16	$\frac{\rho_{910}-\rho_{705}}{\rho_{910}+\rho_{705}}$	Hyperspectral Red Edge Indices [23]
50	NDRE	$\frac{\rho_{790}-\rho_{720}}{\rho_{790}+\rho_{720}}$	Normalized Difference Vegetation Indexes [25]