Table S1. Confusion Matrix of original spectral values classification data.

Species	SA	KC	AA	AI	AC	HL	RE	NV	PA	UA
SA	95.82%	30.93%	10.13%	7.87%	44.20%	36.00%	36.34%	1.26%	95.82%	78.89%
KC	1.05%	62.67%	0.27%	1.07%	3.80%	0.64%	0.00%	0.00%	62.67%	85.45%
AA	1.50%	0.13%	76.80%	1.07%	12.00%	0.16%	3.54%	0.00%	76.80%	77.42%
AI	0.02%	0.00%	6.40%	67.33%	2.40%	4.32%	7.77%	0.00%	67.33%	76.40%
AC	0.36%	3.47%	0.40%	9.60%	8.00%	3.36%	4.69%	0.11%	8.00%	18.18%
HL	0.56%	0.13%	0.27%	5.60%	2.00%	45.12%	2.17%	0.11%	45.12%	73.82%
RE	0.61%	2.67%	5.73%	7.20%	26.80%	10.24%	45.26%	0.46%	45.26%	53.37%
NV	0.07%	0.00%	0.00%	0.27%	0.80%	0.16%	0.23%	98.06%	98.06%	98.62%

Table S2. Confusion Matrix of original spectral values and index features classification data.

Species	SA	KC	AA	AI	AC	HL	RE	NV	PA	UA
SA	96.32%	42.40%	11.60%	6.00%	47.80%	17.28%	32.69%	1.94%	96.32%	79.60%
KC	1.35%	52.27%	0.00%	1.20%	3.80%	0.80%	0.11%	0.00%	52.27%	80.66%
AA	1.01%	0.00%	77.73%	1.47%	8.20%	0.32%	3.20%	0.00%	77.73%	82.11%
AI	0.09%	0.00%	5.07%	70.93%	1.40%	5.28%	7.89%	0.34%	70.93%	77.55%
AC	0.36%	3.87%	0.53%	6.27%	11.20%	3.84%	3.77%	0.00%	11.20%	26.79%
HL	0.38%	1.33%	0.00%	10.00%	4.80%	65.12%	1.60%	0.00%	65.12%	74.41%
RE	0.47%	0.13%	5.07%	4.00%	22.00%	7.36%	50.40%	0.80%	50.40%	63.54%
NV	0.02%	0.00%	0.00%	0.13%	0.80%	0.00%	0.34%	96.91%	96.91%	98.95%

Table S3. Confusion Matrix of original spectral values and derivation features classification data.

Species	SA	KC	AA	AI	AC	HL	RE	NV	PA	UA
SA	96.57%	19.20%	9.87%	3.87%	45.00%	13.12%	26.86%	1.94%	96.57%	84.22%
KC	1.44%	70.40%	0.13%	0.53%	2.40%	1.92%	1.26%	0.69%	70.40%	82.76%
AA	0.94%	0.00%	83.60%	1.07%	8.20%	0.32%	3.77%	0.11%	83.60%	83.16%
AI	0.04%	0.00%	1.60%	71.87%	1.80%	2.56%	9.26%	0.00%	71.87%	81.79%
AC	0.47%	7.60%	1.33%	7.07%	15.00%	5.76%	8.34%	0.00%	15.00%	23.08%
HL	0.20%	1.47%	0.00%	12.27%	6.20%	70.40%	2.29%	0.00%	70.40%	72.97%
RE	0.34%	1.33%	3.47%	3.20%	21.00%	5.76%	47.89%	0.11%	47.89%	65.88%
NV	0.00%	0.00%	0.00%	0.13%	0.40%	0.16%	0.34%	97.14%	97.14%	99.18%

Table S4. Confusion Matrix of original spectral values and textural features classification data.

Species	SA	KC	AA	AI	AC	HL	RE	NV	PA	UA
SA	97.73%	21.07%	2.80%	1.73%	0.20%	3.84%	4.80%	0.00%	97.73%	94.39%
KC	1.68%	72.67%	1.20%	0.67%	0.00%	4.16%	1.49%	0.00%	72.67%	80.98%
AA	0.00%	2.67%	79.33%	13.60%	0.00%	0.00%	2.97%	0.00%	79.33%	80.08%
AI	0.00%	0.00%	11.73%	66.13%	0.80%	0.00%	4.46%	0.00%	66.13%	79.11%
AC	0.54%	1.47%	3.60%	6.40%	92.80%	9.92%	2.06%	0.00%	92.80%	70.95%
HL	0.00%	0.00%	0.00%	0.93%	1.80%	82.08%	0.00%	0.00%	82.08%	96.98%
RE	0.00%	2.13%	1.33%	10.53%	3.60%	0.00%	84.00%	0.00%	84.00%	85.66%
NV	0.04%	0.00%	0.00%	0.00%	0.80%	0.00%	0.23%	100.00%	100.00%	99.09%

Table S5. Confusion Matrix of original spectral values and all feature classification data.

Species	SA	KC	AA	AI	AC	HL	RE	NV	PA	UA
SA	98.18%	18.53%	3.60%	1.07%	0.60%	3.84%	5.14%	0.00%	98.18%	94.68%
KC	1.32%	79.20%	0.13%	0.93%	1.40%	1.12%	1.71%	0.00%	79.20%	86.09%
AA	0.22%	0.27%	87.87%	1.20%	0.00%	0.00%	2.06%	0.00%	87.87%	94.41%
AI	0.00%	0.00%	3.73%	81.47%	0.40%	0.00%	6.06%	0.00%	81.47%	88.04%
AC	0.25%	0.67%	2.27%	6.80%	90.80%	3.20%	3.09%	0.00%	90.80%	77.61%
HL	0.00%	0.00%	0.00%	0.53%	2.40%	91.84%	0.11%	0.00%	91.84%	97.12%
RE	0.00%	1.33%	2.40%	8.00%	4.00%	0.00%	81.71%	0.00%	81.71%	86.88%
NV	0.02%	0.00%	0.00%	0.00%	40.00%	0.00%	0.11%	100.00%	100.00%	99.54%