

Supplementary Table 1. Spectral Knowledge (SK-UTAL): available spectral reflectance indices.

N°	Name	Index	Formula	Reference
1	Anthocyanin Reflectance Index (550;700)p	ARI (550;700)	$(1 / R_{550}) - (1 / R_{700})$	Gitelson et al., 2001
2	Aphid Index (740;887;691;698)	AI (740;887;691;698)	$(R_{740} - R_{887}) / (R_{691} - R_{698})$	Mirik et al., 2006a
3	BI (460;660)	BI (460;660)	$6 * (R_{460} / R_{660})$	Inoue et al., 2008
4	Blue Green Index (400;550)	BGI (400;550)	$R_{400} / R_{550}$	Zarco-Tejada et al., 2005
5	Blue Green Index (450;550)	BGI (450;550)	$R_{450} / R_{550}$	Zarco-Tejada et al., 2005
6	Blue Red Index (400;690)	BRI (400;690)	$R_{400} / R_{690}$	Zarco-Tejada et al., 2005
7	Blue Red Index (450;690)	BRI (450;690)	$R_{450} / R_{690}$	Zarco-Tejada et al., 2005
8	Canopy index (415;695)	CI (415;695)	$R_{415} / R_{695}$	Read et al., 2002
9	Canopy Water Mass Index (850;725)	CWMI (850;725)	$R_{850} / R_{725}$	Winterhalter et al., 2011
10	Canopy Water Mass Index (890;715)	CWMI (890;715)	$R_{890} / R_{715}$	Winterhalter et al., 2011
11	Canopy Water Mass Index (980;715)	CWMI (980;715)	$R_{980} / R_{715}$	Winterhalter et al., 2011
12	Carter (605;760)	Ctr (605;760)	$R_{605} / R_{760}$	Carter, 1994
13	Carter (695;420)	Ctr (695;420)	$R_{695} / R_{420}$	Carter, 1994
14	Carter (695;670)	Ctr (695;670)	$R_{695} / R_{670}$	Carter, 1994
15	Carter (695;760)	Ctr (695;760)	$R_{695} / R_{760}$	Carter, 1994
16	Carter (710;760)	Ctr (710;760)	$R_{710} / R_{760}$	Carter, 1994
17	Curvature Index (675;690;683)	CI (675;690;683)	$(R_{675} * R_{690}) / (R_{683} * R_{683})$	Zarco-Tejada et al., 2003a
18	Damage Sensitive Spectral Index (719;873;509;537)	DSSI (719;873;509;537)	$(R_{719} - R_{873} - R_{509} - R_{537}) / ((R_{719} - R_{873}) + (R_{509} - R_{537}))$	Mirik et al., 2006b
19	Damage Sensitive Spectral Index (747;901;537;572)	DSSI (747;901;537;572)	$(R_{747} - R_{901} - R_{537} - R_{572}) / ((R_{747} - R_{901}) + (R_{537} - R_{572}))$	Mirik et al., 2006b
20	Datt (672;550;708)	Datt (672;550;708)	$R_{672} / (R_{550} * R_{708})$	Datt, 1999
21	Datt (672;550)	Datt (672;550)	$R_{672} / R_{550}$	Datt, 1998
22	Datt (754;704)	Datt (754;704)	$R_{754} / R_{704}$	Datt, 1999
23	Datt (780;710;680)	Datt (780;710;680)	$(R_{780} - R_{710}) / (R_{780} - R_{680})$	Datt, 1999
24	Datt (850;710;680)	Datt (850;710;680)	$(R_{850} - R_{710}) / (R_{850} - R_{680})$	Datt, 1999
25	Datt (850;710)	Datt (850;710)	$R_{850} / R_{710}$	Datt, 1999
26	Datt (860;550;708)	Datt (860;550;708)	$R_{860} / (R_{550} * R_{708})$	Datt, 1998
27	Difference LAI (1725;970)	DLAI (1725;970)	$R_{1725} - R_{970}$	Le Maire et al., 2008
28	Double Difference Index (749;720;701;672)	DD (749;720;701;672)	$(R_{749} - R_{720}) - (R_{701} - R_{672})$	Le Maire et al., 2004
29	Double Difference Index (750;720;700;670)	DD (750;720;700;670)	$(R_{750} - R_{720}) - (R_{700} - R_{670})$	Le Maire et al., 2004
30	Enhanced Vegetation Index (830;660;460)	EVI (830;660;460)	$2.5 * (R_{830} - R_{660}) / (1 + R_{830} + 6 * R_{660} - 7.5 * R_{460})$	Huete et al., 1997
31	Enhanced Vegetation Index (830;660;485)	EVI (830;660;485)	$2.5 * (R_{830} - R_{660}) / (1 + R_{830} + 6 * R_{660} - 7.5 * R_{485})$	Huete et al., 1997
32	Gitelson and Merzlyak (750;550)	GM (750;550)	$R_{750} / R_{550}$	Gitelson and Merzlyak, 1997
33	Gitelson and Merzlyak (750;700)	GM (750;700)	$R_{750} / R_{700}$	Gitelson and Merzlyak, 1997

34	Green Model Index (800;550)	G-M (800;550)	$(R800 / R550) - 1$	Gitelson et al., 2005
35	Green Ratio Index (830;550)	GRI (830;550)	$R830 / R550$	Inoue et al., 2008
36	Greenness Index (554;677)	GI (554;677)	$R554 / R677$	Smith et al., 1995
37	Hyperspectral Red Edge Index (855;720)	HREI (855;720)	$(R855 - R720) / (R855 + R720)$	Thenkabail et al., 2014
38	Hyperspectral Red Edge Index (910;705)	HREI (910;705)	$(R910 - R705) / (R910 + R705)$	Thenkabail et al., 2014
39	Hyperspectral Water and Moisture Index (855;970)	HWMI (855;970)	$(R855 - R970) / (R855 + R970)$	Thenkabail et al., 2014
40	MCARI / OSAVI (750;705;550)	MCARI / OSAVI (750;705;550)	$((R750 - R705) - 0.2 * (R750 - R550)) * (R750 / R705) / (1 + 0.16) * (R750 - R705) / (R750 + R705 + 0.16)$	Wu et al., 2008b
41	MERIS Terrestrial Chlorophyll Index (750;710;680)	MTCI (750;710;680)	$(R750 - R710) / (R710 - R680)$	Dash and Curran, 2004
42	MERIS Terrestrial Chlorophyll Index (754;709;681)	MTCI (754;709;681)	$(R754 - R709) / (R709 - R681)$	Dash and Curran, 2004
43	MERIS Terrestrial Chlorophyll Index (800;750;670)	MTCI (800;750;670)	$(R800 - R750) / (R750 - R670)$	Dash and Curran, 2004
44	Modified Carotenoid Concentration Index (510;550;780)	mCRI (510;550;780)	$((1 / R510) - (1 / R550)) * R780$	Gitelson et al., 2006
45	Modified Carotenoid Concentration Index (510;700;770)	mCRI (510;700;770)	$((1 / R510) - (1 / R700)) * R770$	Gitelson et al., 2003
46	Modified Chlorophyll Absorption in Reflectance Index (700; 670;550)	MCARI (700; 670;550)	$((R700 - R670) - (0.2 * (R700 - R550))) * (R700 / R670)$	Daughtry et al., 2000
47	Modified Chlorophyll Absorption in Reflectance Index (750;705;550)	MCARI (750;705;550)	$((R750 - R705) - (0.2 * (R750 - R550))) * (R750 / R705)$	Wu et al., 2008b
48	Modified Chlorophyll Absorption in Reflectance Index (800;670;550)	MCARI (800;670;550)	$1.5 * (2.5 * (R800 - R670) - 1.3 * (R800 - R550)) / \sqrt{((2 * R800 + 1) * 2 - (6 * R800 - 5 * \sqrt{R670})) - 0.5}$	Haboudane et al., 2004
49	Modified Red Edge Normalized Difference Vegetation Index (750;705;445)	mNDVI (750;705;445)	$(R750 - R705) / (R750 + R705 - 2 * R445)$	Sims and Gamon, 2002
50	Modified Red Edge Normalized Difference Vegetation Index (800;680;445)	mNDVI (800;680;445)	$(R800 - R680) / (R800 + R680 - 2 * R445)$	Sims and Gamon, 2002
51	Modified Simple Ratio (600;680)	mSR (600;680)	$((R600 / R680) - 1) / (\sqrt{R600 / R680} + 1)$	Chen, 1996
52	Modified Simple Ratio (750;705)	mSR (750;705)	$((R750 / R705) - 1) / (\sqrt{R750 / R705} + 1)$	Chen, 1996
53	Modified Simple Ratio (800;445;680)	mSR (800;445;680)	$(R800 - R445) / (R680 - R445)$	Sims and Gamon, 2002
54	Modified Simple Ratio (845;665)	mSR (845;665)	$((R845 / R665) - 1) / (\sqrt{R845 / R665} + 1)$	Chen, 1996
55	Modified Simple Red Edge Ratio Index (750;445;705)	mSR (750;445;705)	$(R750 - R445) / (R705 - R445)$	Sims and Gamon, 2002
56	Modified Soil Adjusted Vegetation Index (800;670)	MSAVI (800;670)	$(0.5 * (2 * R800 + 1 - \sqrt{((2 * R800 + 1) * (2 * R800 + 1))}) - (8 * (R800 - R670)))$	Qi et al., 1994
57	Modified Soil Adjusted Vegetation Index (830;660)	MSAVI (830;660)	$(1 + 0.5) * (R830 - R660) / (R830 + R660 + 0.5)$	Inoue et al., 2008
58	Modified Triangular Vegetation Index (800;550;670)	MTVI (800;550;670)	$1.2 * (1.2 * (R800 - R550) - 2.5 * (R670 - R550))$	Haboudane et al., 2004
59	Modified Triangular Vegetation Index (880;554;758)	MTVI (880;554;758)	$1.2 * (1.2 * (R880 - R554) - 2.5 * (R758 - R554))$	Rodríguez-Pérez et al., 2007
60	Modified Vegetation Stress Ratio (723;700)	MVSR (723;700)	$R723 / R700$	White et al., 2008
61	Moister Stress Index (1650;835)	MSI (1650;835)	$R1650 / R835$	Hunt and Rock, 1989
62	Moister Stress Index (1662;927)	MSI (1662;927)	$R1662 / R927$	Thenkabail et al., 2000
63	Moister Stress Index (870;1350)	MSI (870;1350)	$R870 / R1350$	Rodríguez-Pérez et al., 2007
64	Moisture Stress Index (1650;850)	MSI (1650;850)	$R1650 / R850$	Hunt and Rock, 1989
65	Narrow Band Normalized Difference Vegetation Index (850;680)	NBNDVI (850;680)	$(R850 - R680) / (R850 + R680)$	Thenkabail et al., 2000
66	Nitrogen Reflectance Index (1510;660)	NRI (1510;660)	$(R1510 - R660) / (R1510 + R660)$	Herrmann et al., 2010
67	Nitrogen Reflectance Index (570;670)	NRI (570;670)	$(R570 - R670) / (R570 + R670)$	Filella et al., 1995
68	Normalized Difference Chlorophyll Index (762;527)	NDCI (762;527)	$(R762 - R527) / (R762 + R527)$	Marshak et al., 2000

69	Normalized Difference Green Blue (573;440)	NDg-b (573;440)	$(R573 - R440) / (R573 + R440)$	Hansen and Schjoerring, 2003
70	Normalized Difference Infrared Index (835;1650)	NDII (835;1650)	$(R835 - R1650) / (R835 + R1650)$	Hardisky et al., 1983
71	Normalized Difference Infrared Index (860;1650)	NDII (860;1650)	$(R860 - R1650) / (R860 + R1650)$	Hardisky et al., 1983
72	Normalized Difference Lignin Index (1754;1680)	NDLI (1754;1680)	$(\log(1 / R1754) - \log(1 / R1680)) / (\log(1 / R1754) + \log(1 / R1680))$	Serrano et al., 2002
73	Normalized Difference Moisture Index (1649;1722)	NDMI (1649;1722)	$(R1649 - R1722) / (R1649 + R1722)$	Wang et al., 2011a
74	Normalized Difference Moisture Index (1650;850)	NDMI (1650;850)	$(R1650 - R850) / (R1650 + R850)$	Inoue et al., 2008
75	Normalized Difference Moisture Index (2200;1100)	NDMI (2200;1100)	$(R2200 - R1100) / (R2200 + R1100)$	Inoue et al., 2008
76	Normalized Difference Nitrogen Index (1754;1680)	NDNI (1510;1680)	$(\log(1 / R1510) - \log(1 / R1680)) / (\log(1 / R1510) + \log(1 / R1680))$	Fourty et al., 1996
77	Normalized Difference Red Edge Index (790;720)	NDRE (790;720)	$(R790 - R720) / (R790 + R720)$	Barnes et al., 2000
78	Normalized Difference Spectral Index (1050;1122)	NDSI (1050;1122)	$(R1050 - R1122) / (R1050 + R1122)$	Inoue et al., 2008
79	Normalized Difference Spectral Index (1053;1058)	NDSI (1053;1058)	$(R1053 - R1058) / (R1053 + R1058)$	Inoue et al., 2008
80	Normalized Difference Spectral Index (1060;1118)	NDSI (1060;1118)	$(R1060 - R1118) / (R1060 + R1118)$	Inoue et al., 2008
81	Normalized Difference Spectral Index (1107;1110)	NDSI (1107;1110)	$(R1107 - R1110) / (R1107 + R1110)$	Inoue et al., 2008
82	Normalized Difference Spectral Index (1220;710)	NDSI (1220;710)	$(R1220 - R710) / (R1220 + R710)$	Zhu et al., 2007
83	Normalized Difference Spectral Index (1650;830)	NDSI (1650;830)	$(R1650 - R830) / (R1650 + R830)$	Inoue et al., 2007
84	Normalized Difference Spectral Index (2215;830)	NDSI (2215;830)	$(R2215 - R830) / (R2215 + R830)$	Inoue et al., 2007
85	Normalized Difference Spectral Index (403;830)	NDSI (403;830)	$(R403 - R830) / (R403 + R830)$	Inoue et al., 2008
86	Normalized Difference Spectral Index (410;550)	NDSI (410;550)	$(R410 - R550) / (R410 + R550)$	Inoue et al., 2008
87	Normalized Difference Spectral Index (410;710)	NDSI (410;710)	$(R410 - R710) / (R410 + R710)$	Inoue et al., 2008
88	Normalized Difference Spectral Index (413;416)	NDSI (413;416)	$(R413 - R416) / (R413 + R416)$	Inoue et al., 2008
89	Normalized Difference Spectral Index (420;970)	NDSI (420;970)	$(R420 - R970) / (R420 + R970)$	Inoue et al., 2008
90	Normalized Difference Spectral Index (422;406)	NDSI (422;406)	$(R422 - R406) / (R422 + R406)$	Inoue et al., 2008
91	Normalized Difference Spectral Index (422;416)	NDSI (422;416)	$(R422 - R416) / (R422 + R416)$	Inoue et al., 2008
92	Normalized Difference Spectral Index (422;419)	NDSI (422;419)	$(R422 - R419) / (R422 + R419)$	Inoue et al., 2008
93	Normalized Difference Spectral Index (442;435)	NDSI (442;435)	$(R442 - R435) / (R442 + R435)$	Inoue et al., 2008
94	Normalized Difference Spectral Index (442;438)	NDSI (442;438)	$(R442 - R438) / (R442 + R438)$	Inoue et al., 2008
95	Normalized Difference Spectral Index (450;1330)	NDSI (450;1330)	$(R450 - R1330) / (R450 + R1330)$	Inoue et al., 2008
96	Normalized Difference Spectral Index (503;483)	NDSI (503;483)	$(R503 - R483) / (R503 + R483)$	Stroppiana et al., 2009
97	Normalized Difference Spectral Index (518;676)	NDSI (518;676)	$(R518 - R676) / (R518 + R676)$	Inoue et al., 2008
98	Normalized Difference Spectral Index (520;710)	NDSI (520;710)	$(R520 - R710) / (R520 + R710)$	Inoue et al., 2008
99	Normalized Difference Spectral Index (530;550)	NDSI (530;550)	$(R530 - R550) / (R530 + R550)$	Inoue et al., 2008
100	Normalized Difference Spectral Index (542;550)	NDSI (542;550)	$(R542 - R550) / (R542 + R550)$	Inoue et al., 2008
101	Normalized Difference Spectral Index (543;548)	NDSI (543;548)	$(R543 - R548) / (R543 + R548)$	Inoue et al., 2008
102	Normalized Difference Spectral Index (550;410)	NDSI (550;410)	$(R550 - R410) / (R550 + R410)$	Inoue et al., 2008
103	Normalized Difference Spectral Index (620;623)	NDSI (620;623)	$(R620 - R623) / (R620 + R623)$	Inoue et al., 2008

104	Normalized Difference Spectral Index (620;637)	NDSI (620;637)	$(R_{620} - R_{637}) / (R_{620} + R_{637})$	Inoue et al., 2008
105	Normalized Difference Spectral Index (682;553)	NDSI (682;553)	$(R_{682} - R_{553}) / (R_{682} + R_{553})$	Gandia et al., 2004
106	Normalized Difference Spectral Index (720;420)	NDSI (720;420)	$(R_{720} - R_{420}) / (R_{720} + R_{420})$	Inoue et al., 2008
107	Normalized Difference Spectral Index (750;761)	NDSI (750;761)	$(R_{750} - R_{761}) / (R_{750} + R_{761})$	Inoue et al., 2008
108	Normalized Difference Spectral Index (760;550)	NDSI (760;550)	$(R_{760} - R_{550}) / (R_{760} + R_{550})$	Wang et al., 2011b
109	Normalized Difference Spectral Index (801;550)	NDSI (801;550)	$(R_{801} - R_{550}) / (R_{801} + R_{550})$	Daughtry et al., 2000
110	Normalized Difference Spectral Index (860;720)	NDSI (860;720)	$(R_{860} - R_{720}) / (R_{860} + R_{720})$	Yao et al., 2010
111	Normalized Difference Spectral Index (870;1450)	NDSI (870;1450)	$(R_{870} - R_{1450}) / (R_{870} + R_{1450})$	Pimstein et al., 2011
112	Normalized Difference Spectral Index (933;940)	NDSI (933;940)	$(R_{933} - R_{940}) / (R_{933} + R_{940})$	Inoue et al., 2008
113	Normalized Difference Spectral Index (933;948)	NDSI (933;948)	$(R_{933} - R_{948}) / (R_{933} + R_{948})$	Inoue et al., 2008
114	Normalized Difference Spectral Index (940;1122)	NDSI (940;1122)	$(R_{940} - R_{1122}) / (R_{940} + R_{1122})$	Inoue et al., 2008
115	Normalized Difference Spectral Index (962;964)	NDSI (962;964)	$(R_{962} - R_{964}) / (R_{962} + R_{964})$	Inoue et al., 2008
116	Normalized Difference Spectral Index (971;973)	NDSI (971;973)	$(R_{971} - R_{973}) / (R_{971} + R_{973})$	Inoue et al., 2008
117	Normalized Difference Spectral Index(565;533)	NDSI (565;533)	$(R_{565} - R_{533}) / (R_{565} + R_{533})$	Tian et al., 2011
118	Normalized Difference Tillage Index (1650;2215)	NDTI (1650;2215)	$(R_{1650} - R_{2215}) / (R_{1650} + R_{2215})$	van Deventer et al., 1997
119	Normalized Difference Vegetation Index (750;705)	NDVI (750;705)	$(R_{750} - R_{705}) / (R_{750} + R_{705})$	Gitelson and Merzlyak, 1994
120	Normalized Difference Vegetation Index (755;664)	NDVI (755;664)	$(R_{755} - R_{664}) / (R_{755} + R_{664})$	Rouse, 1974
121	Normalized Difference Vegetation Index (760;660)	NDVI (760;660)	$(R_{760} - R_{660}) / (R_{760} + R_{660})$	Rouse et al., 1973
122	Normalized Difference Vegetation Index (760;708)	NDVI (760;708)	$(R_{760} - R_{708}) / (R_{760} + R_{708})$	Steddom et al., 2003
123	Normalized Difference Vegetation Index (780;670)	NDVI (780;670)	$(R_{780} - R_{670}) / (R_{780} + R_{670})$	Raun et al., 2001
124	Normalized Difference Vegetation Index (800;600)	NDVI (800;600)	$(R_{800} - R_{600}) / (R_{800} + R_{600})$	Ma et al., 1996
125	Normalized Difference Vegetation Index (800;670)	NDVI (800;670)	$(R_{800} - R_{670}) / (R_{800} + R_{670})$	Tucker, 1979
126	Normalized Difference Vegetation Index (800;680)	NDVI (800;680)	$(R_{800} - R_{680}) / (R_{800} + R_{680})$	Peñuelas et al., 1997
127	Normalized Difference Vegetation Index (801;670)	NDVI (801;670)	$(R_{801} - R_{670}) / (R_{801} + R_{670})$	Daughtry et al., 2000
128	Normalized Difference Vegetation Index (807;736)	NDVI (807;736)	$(R_{807} - R_{736}) / (R_{807} + R_{736})$	Yao et al., 2011
129	Normalized Difference Vegetation Index (830;660)	NDVI (830;660)	$(R_{830} - R_{660}) / (R_{830} + R_{660})$	Tucker, 1979
130	Normalized Difference Vegetation Index (845;665)	NDVI (845;665)	$(R_{845} - R_{665}) / (R_{845} + R_{665})$	Rouse, 1974
131	Normalized Difference Vegetation Index (870;673)	NDVI (870;673)	$(R_{870} - R_{673}) / (R_{870} + R_{673})$	Rodríguez-Pérez et al., 2007
132	Normalized Difference Vegetation Index (880;673)	NDVI (880;673)	$(R_{880} - R_{673}) / (R_{880} + R_{673})$	Zhao et al., 2005
133	Normalized Difference Vegetation Index (884;680)	NDVI (884;680)	$(R_{884} - R_{680}) / (R_{884} + R_{680})$	Rodríguez-Pérez et al., 2007
134	Normalized Difference Vegetation Index (895;675)	NDVI (895;675)	$(R_{895} - R_{675}) / (R_{895} + R_{675})$	Peñuelas et al., 1997
135	Normalized Difference Vegetation Index (900;680)	NDVI (900;680)	$(R_{900} - R_{680}) / (R_{900} + R_{680})$	Peñuelas et al., 1993b
136	Normalized Difference Vegetation Index (927;687)	NDVI (927;687)	$(R_{927} - R_{687}) / (R_{927} + R_{687})$	Thenkabail et al., 2000
137	Normalized Difference Water Index (860;1240)	NDWI (860;1240)	$(R_{860} - R_{1240}) / (R_{860} + R_{1240})$	Gao, 1996
138	Normalized Difference Water Index (870;1260)	NDWI (870;1260)	$(R_{870} - R_{1260}) / (R_{870} + R_{1260})$	Rodríguez-Pérez et al., 2007

139	Normalized Difference Water Index (970;850)	NDWI (970;850)	$(R970 - R850) / (R970 + R850)$	Babar et al., 2006b
140	Normalized Difference Water Index (970;880)	NDWI (970;880)	$(R970 - R880) / (R970 + R880)$	Prasad et al., 2007
141	Normalized Difference Water Index (970;900)	NDWI (970;900)	$(R970 - R900) / (R970 + R900)$	Babar et al., 2006b
142	Normalized Difference Water Index (970;920)	NDWI (970;920)	$(R970 - R920) / (R970 + R920)$	Prasad et al., 2007
143	Normalized Green Red Ratio 1 (673;554)	NGRR 1 (673;554)	$(R673 - R554) / (R673 + R554)$	Rodríguez-Pérez et al., 2007
144	Normalized Green Red Ratio 2 (673;554)	NGRR 2 (673;554)	$(R673 + R554) / (R673 - R554)$	Rodríguez-Pérez et al., 2007
145	Normalized Phaeophytinization Index (415;435)	NPQI (415;435)	$(R415 - R435) / (R415 + R435)$	Barnes et al., 1992
146	Normalized Pigments Chlorophyll Index (680;430)	NPCI (680;430)	$(R680 - R430) / (R680 + R430)$	Peñuelas et al., 1994
147	Optimized Soil Adjusted Vegetation Index (750;705)	OSAVI (750;705)	$(1 + 0.16) * (R750 - R705) / (R750 + R705 + 0.16)$	Main et al., 2011
148	Optimized Soil Adjusted Vegetation Index (800;670)	OSAVI (800;670)	$(1 + 0.16) * (R800 - R670) / (R800 + R670 + 0.16)$	Rondeaux et al., 1996
149	Orange Red Chlorophyll Absorption Ratio (630;680)	OCAR (630;680)	$R630 / R680$	Schlemmer et al., 2005
150	Photochemical Reflectance Index (512;531)	PRI (512;531)	$(R512 - R531) / (R512 + R531)$	Hernández-Clemente et al., 2011
151	Photochemical Reflectance Index (528;567)	PRI (528;567)	$(R528 - R567) / (R528 + R567)$	Gamon et al., 1992
152	Photochemical Reflectance Index (550;531)	PRI (550;531)	$(R550 - R531) / (R550 + R531)$	Gamon et al., 1992
153	Photochemical Reflectance Index (570;530)	PRI (570;530)	$(R570 - R530) / (R570 + R530)$	Gamon et al., 1992
154	Photochemical Reflectance Index (570;531;670)	PRI (570;531;670)	$(R570 - R531 - R670) / (R570 + R531 + R670)$	Hernández-Clemente et al., 2011
155	Photochemical Reflectance Index (570;531)	PRI (570;531)	$(R570 - R531) / (R570 + R531)$	Gamon et al., 1992
156	Photochemical Reflectance Index (570;539)	PRI (570;539)	$(R570 - R539) / (R570 + R539)$	Gamon et al., 1992
157	Photochemical Reflectance Index * Chlorophyll Index (570;530; 760;700)	PRI * CI (570;530; 760;700)	$(R570 - R530) / ((R570 + R530) * (R760 / (R700 - 1)))$	Garrity et al., 2011
158	Pigment Specific Normalised Difference (800;470)	PSND (800;470)	$(R800 - R470) / (R800 + R470)$	Blackburn, 1998
159	Pigment Specific Normalised Difference (800;635)	PSND (800;635)	$(R800 - R635) / (R800 + R635)$	Blackburn, 1998
160	Pigment Specific Normalised Difference (800;650)	PSND (800;650)	$(R800 - R650) / (R800 + R650)$	Blackburn, 1998
161	Pigment Specific Normalised Difference (800;675)	PSND (800;675)	$(R800 - R675) / (R800 + R675)$	Blackburn, 1998
162	Pigment Specific Simple Ratio (Cholophyll a) (800;680)	PSSRa (800;680)	$R800 / R680$	Blackburn, 1998
163	Pigment Specific Simple Ratio (Cholophyll b) (800;635)	PSSRb (800;635)	$R800 / R635$	Blackburn, 1998
164	Pigment Specific Simple Ratio C2 (800; 470)	PSSRc2 (800; 470)	$R800 / R470$	Blackburn, 1998
165	Pigment Specific Simple Ratio Chlorophyll a (810;676)	PSSRchla (810;676)	$R810 / R676$	Blackburn, 1999
166	PK Index (1645;1715)	PKI (1645;1715)	$(R1645 - R1715) / (R1645 + R1715)$	Pimstein et al., 2011
167	Plant Biochemical Index (810;560)	PBI (810;560)	$R810 / R560$	Rama Rao et al., 2008
168	Plant Senescence Reflectance Index (678;500;750)	PSRI (678;500;750)	$(R678 - R500) / R750$	Merzlyak et al., 1999
169	Plant Senescence Reflectance Index (680;500;750)	PSRI (680;500;750)	$(R680 - R500) / R750$	Merzlyak et al., 1999
170	Ratio Analysis of Reflectance Spectra (746;513)	RARS (746;513)	$R746 / R513$	Chappelle et al., 1992
171	Ratio Analysis of Reflectance Spectra (Car) (760;500)	RARSc (760;500)	$R760 / R500$	Chappelle et al., 1992
172	Ratio Analysis of Reflectance Spectra (Chl a) (675;700)	RARSa (675;700)	$R675 / R700$	Chappelle et al., 1992
173	Ratio Analysis of Reflectance Spectra (Chl b) (675;650;700)	RARSb (675;650;700)	$R675 / (R650 * R700)$	Chappelle et al., 1992

174	Ratio Index 1-dB (735;720)	RI-1 dB (735;720)	$R735 / R720$	Gupta et al., 2003
175	Ratio Index 2-dB (738;720)	RI-2 dB (738;720)	$R738 / R720$	Gupta et al., 2003
176	Ratio Index 3-dB (741;717)	RI-3 dB (741;717)	$R741 / R717$	Gupta et al., 2003
177	Ratio Index Half Power Point (747;708)	RI-half (747;708)	$R747 / R708$	Gupta et al., 2003
178	Ratio Vegetation Index (800;673)	RVI (800;673)	$R800 / R673$	Broge and Mortensen, 2002
179	Reciprocal of Moisture Stress Index (860;1650)	RMSI (860;1650)	$R860 / R1650$	Hunt and Rock, 1989
180	Red Blue Index (695;445)	RBI (695;445)	$R695 / R445$	Rodríguez-Pérez et al., 2007
181	Red Edge (670;780)	RE (670;780)	$(R670 + R780) / 2$	Guyot and Baret, 1988
182	Red Edge Inflection Point (670;780;700;740)	REIP (670;780;700;740)	$(700 + 40 * ((R670 + R780) / (2 - R700))) / (R740 - R700)$	Guyot et al., 1988
183	Red Edge Model Index (750;720)	R-M (750;720)	$(R750 / R720) - 1$	Gitelson et al., 2005
184	Red Edge Reflectance Index (750;800;695;740)	Rirededge (750;800;695;740)	$((R750 - R800) / (R695 - R740)) - 1$	Gitelson et al., 2003
185	Red Edge Triangular Vegetation Index (750;730;550;700;670)	RTVI (750;730;550;700;670)	$(100 * ((R750 - R730) - 10 * (R750 - R550))) * (\sqrt{(R700 / R670)})$	Chen and Cihlar, 1996
186	Red Edge Vegetation Stress Index (714;752;733)	RVSI (714;752;733)	$(R714 + R752) / (2 - R733)$	Merton, 1998
187	Red Green Index (690;550)	RGI (690;550)	$R690 / R550$	Zarco-Tejada et al., 2005
188	Red Green Index (695;554)	RGI (695;554)	$R695 / R554$	Gamon and Surfus, 1999
189	Renormalized Difference Vegetation Index (800;670)	RDVI (800;670)	$(R800 - R670) / (\sqrt{(R800 + R670)})$	Rougean and Breon, 1995
190	Renormalized Difference Vegetation Index (880;673)	RDVI (880;673)	$\sqrt{(((R880 - R673) / (R880 + R673)) * (R880 - R673))}$	Rougean and Breon, 1995
191	Shortwave Infrared Normalized Difference Residue Index (2210;2260)	SINDRI (2210;2260)	$(R2210 - R2260) / (R2210 + R2260)$	Serbin et al., 2009
192	Simple Ratio (1070;1340)	SR (1070;1340)	$R1070 / R1340$	Rodríguez-Pérez et al., 2007
193	Simple Ratio (415;685)	SR (415;685)	$R415 / R685$	Read et al., 2002
194	Simple Ratio (415;710)	SR (415;710)	$R415 / R710$	Read et al., 2002
195	Simple Ratio (440;685)	SR (440;685)	$R440 / R685$	McMurtrey et al., 1994
196	Simple Ratio (525;685)	SR (525;685)	$R525 / R685$	McMurtrey et al., 1994
197	Simple Ratio (533;537)	SR (533;537)	$R553 / R537$	Tian et al., 2013
198	Simple Ratio (545;538)	SR (545;538)	$R545 / R538$	Tian et al., 2013
199	Simple Ratio (550;670)	SR (550;670)	$R550 / R670$	Carter, 1994
200	Simple Ratio (678;1070)	SR (678;1070)	$R678 / R1070$	Rodríguez-Pérez et al., 2007
201	Simple Ratio (678;880)	SR (678;880)	$R678 / R880$	Rodríguez-Pérez et al., 2007
202	Simple Ratio (685;655)	SR (685;655)	$R685 / R655$	Zarco-Tejada et al., 2003a
203	Simple Ratio (690;655)	SR (690;655)	$R690 / R655$	Zarco-Tejada et al., 2003a
204	Simple Ratio (700;670)	SR (700;670)	$R700 / R670$	McMurtrey et al., 1994
205	Simple Ratio (700)	SR (700)	$1 / R700$	Gitelson et al., 1999
206	Simple Ratio (750;705)	SR (750;705)	$R750 / R705$	Sims and Gamon, 2002
207	Simple Ratio (752;690)	SR (752;690)	$R752 / R690$	Gitelson and Merzlyak, 1997
208	Simple Ratio (780;740)	SR (780;740)	$R780 / R740$	Mistele and Schmidhalter, 2010

209	Simple Ratio (800;670)	SR (800;670)	R800 / R670	Jordan, 1969
210	Simple Ratio (801;550)	SR (801;550)	R801 / R550	Daughtry et al., 2000
211	Simple Ratio (801;670)	SR (801;670)	R801 / R670	Daughtry et al., 2000
212	Simple Ratio (830;660)	SR (830;660)	R830 / R660	Jordan, 1969
213	Simple Ratio (845;665)	SR (845;665)	R845 / R665	Broge and Mortensen, 2002
214	Simple Ratio (900;680)	SR (900;680)	R900 / R680	Peñuelas and Filella, 1998
215	Simple Ratio (927;687)	SR (927;687)	R927 / R687	Thenkabail et al., 2000
216	Simple Ratio (960;950)	SR (960;950)	R960 / R950	Dzikiti et al., 2010
217	Simple Ratio (990;720)	SR (R990;R720)	R990 / R720	Yao et al., 2010
218	Simple Ratio Pigment Index (430;680)	SRPI (430;680)	R430 / R680	Peñuelas et al., 1993b
219	Simple Ratio Water Index (1350;870)	SRWI (1350;870)	R1350 / R870	Rodríguez-Pérez et al., 2007
220	Simple Ratio Water Index (858;1240)	SRWI (858;1240)	R858 / R1240	Zarco-Tejada et al., 2003b
221	Simple Ratio Water Index (860;1240)	SRWI (860;1240)	R860 / R1240	Zarco-Tejada et al., 2003b
222	Simple Ratio Water Index (880;1265)	SRWI (880;1265)	R880 / R1265	Rodríguez-Pérez et al., 2007
223	Single Band (460)	SB (460)	R460	Curran, 1989
224	Single Band (655)	SB (655)	R655	Richter et al., 2009
225	Soil Adjusted Vegetation Index 1 (800;670)	SAVI 1 (800;670)	$(1 + 0.5) * (R800 - R670) / (R800 + R670 + 0.5)$	Huete, 1988
226	Soil Adjusted Vegetation Index 2 (800;670)	SAVI 2 (800;670)	$R800 / (R670 + (0.0183 / 1.2344))$	Major et al., 1990
227	Soil Adjusted Vegetation Index (807;736)	SAVI (807;736)	$(1 + 0.5) * (R807 - R736) / (R807 + R736 + 0.5)$	Huete, 1988
228	Soil Adjusted Vegetation Index (830;660)	SAVI (830;660)	$(1 + 0.5) * (R830 - R660) / (R830 + R660 + 0.5)$	Huete, 1988
229	Spectral Polygon Vegetation Index (800;670;530)	SPVI (800;670;530)	$0.4 * (3.7 * (R800 - R670)) - 1.2 * \sqrt{((R530 - R670) * (R530 - R670))}$	Vincini et al., 2006
230	Spectral Polygon Vegetation Index (800;670;550)	SPVI (800;670;550)	$0.4 * (3.7 * (R800 - R670) - 1.2 *  (R550 - R670) )$	Vincini et al., 2006
231	Structure Independent Pigment Index (800;440;680)	SIPI (800;440;680)	$(R800 - R440) / (R800 - R680)$	Peñuelas et al., 1995
232	Structure Independent Pigment Index (800;445;680)	SIPI (800;445;680)	$(R800 - R445) / (R800 + R680)$	Peñuelas et al., 1995
233	Structure Independent Pigment Index (800;450;650)	SIPI (800;450;650)	$(R800 - R450) / (R800 - R650)$	Peñuelas et al., 1995
234	Structure Independent Pigment Index (800;450;680)	SIPI (800;450;680)	$(R800 - R450) / (R800 - R680)$	Peñuelas and Inoue, 1999
235	TCARI / OSAVI (700;670;550;800;670)	TCARI / OSAVI (700;670;550;800;670)	$3 * ((R700 - R670) - ((0.2 * (R700 - R550)) * (R700 / R670))) / (1 + 0.16) * (R800 - R670) / (R800 + R670 + 0.16)$	Haboudane et al., 2002
236	Transformed Chlorophyll Absorbtion Ratio (700;600;550;850;670)	TCARI (700;600;550;850;670)	$3 * ((R700 - R600) - ((0.2 * (R700 - R550)) * (R700 / (R850 + R670))))$	Haboudane et al., 2002
237	Transformed Chlorophyll Absorbtion Ratio (700;670;550)	TCARI (700;670;550)	$3 * ((R700 - R670) - ((0.2 * (R700 - R550)) * (R700 / R670)))$	Haboudane et al., 2002
238	Transformed Chlorophyll Absorbtion Ratio (750;705;550)	TCARI (750;705;550)	$3 * ((R750 - R705) - ((0.2 * (R750 - R550)) * (R750 / R705)))$	Wu et al., 2008a
239	Transformed Soil Adjusted Vegetation Index (800; 670)	TSAVI (800; 670)	$(1.2344 * (R800 - (1.2344 * R670) - 0.0183)) / ((1.2344 * (R800 + R670)) - (1.2344 * 0.0183))$	Baret et al., 1989
240	Transformed Soil Adjusted Vegetation Index (875;680)	TSAVI (875;680)	$(1.062 * (R875 - (1.062 * R680) - 0.022)) / (R680 + (1.062 * R875) - (1.062 * 0.022) + (0.08 * (1 + (1.062 * 1.062))))$	Rondeaux et al., 1996
241	Triangular Vegetation Index (750;550;670)	TVI (750;550;670)	$0.5 * (120 * (R750 - R550) - 200 * (R670 - R550))$	Broge and Leblanc, 2001
242	Triangular Vegetation Index (758;554;674)	TVI (758;554;674)	$0.5 * (120 * (R758 - R554) - 200 * (R674 - R554))$	Rodríguez-Pérez et al., 2007
243	Vegetation Index (800;694)	VI (800;694)	$(R800 / R694) - 1$	Viña, 2003

244	Vegetation Stress Ratio (725;702)	VSR (725;702)	R725 / R702	White et al., 2008
245	Vogelmann (734;747;715;720)	Vogelmann (734;747;715;720)	$(R734 - R747) / (R715 + R720)$	Vogelmann, et al., 1993
246	Vogelmann (734;747;715;726)	Vogelmann (734;747;715;726)	$(R734 - R747) / (R715 + R726)$	Vogelmann, et al., 1993
247	Vogelmann (740;720)	Vogelmann (740;720)	R740 / R720	Vogelmann, et al., 1993
248	Water Index (900;970)	WI (900;970)	R900 / R970	Peñuelas et al., 1993a
249	Water Index (950;900)	WI (950;900)	R950 / R900	Peñuelas et al., 1993b
250	Water Index (970;900)	WI (970;900)	R970 / R900	Peñuelas et al., 1993a
251	Weighted Difference Vegetation Index (800;670)	WDVI (800;670)	$R800 - (1.2344 * R670)$	Clevers, 1989
252	Weighted Difference Vegetation Index (830;660)	WDVI (830;660)	$R830 - (1.06 * R660)$	Clevers, 1989
253	WI / NDVI (970;900;800;680)	WI / NDVI (970;900;800;680)	$(R970 / R900) / ((R800 - R680) / (R800 + R680))$	Peñuelas and Inoue, 1999
254	Yellow Red Chlorophyll Absorption Ratio (600;680)	YCAR (600;680)	R600 / R680	Schlemmer et al., 2005
255	Zarco and Miller (750;710)	ZM (750;710)	R750 / R710	Zarco-Tejada et al., 2001