

CHAPTER 6

Appendix A

Table 5.1. Wavelengths identified by various researchers sensitive towards different biochemical and biophysical attribute

Biochemical / biophysical parameter	Wavelength (nm)	Reference
Lignin	1120	Serrano et al., 2002
	1200	Serrano et al., 2002
	1420	Serrano et al., 2002
	1450	Serrano et al., 2002
	1580	Koklay et al., 2001
	1590	Kokaly et al., 2001
	1659	Thenkabail et al., (2004)
	1675	Thenkabail et al., (2004)
	1690	Serrano et al., 2002
	1725	Thenkabail et al., (2004)
	1745	Serrano et al., 2002
	1940	Serrano et al., 2002
	2235	Thenkabail et al., (2004)
	2262	Serrano et al., 2002
	2345	Thenkabail et al., (2004)
	2380	Serrano et al., 2002
Cellulose	1215	Curran et al., (1989)
	1490	Curran et al., (1989)
	1490	Curran et al., (1989)
	1540	Curran et al., (1989)
	1540	Curran et al., (1989)
	1580	Kokaly et al., 2001
	1590	Kokaly et al., 2001
	1725	Thenkabail et al., (2004)
	1780	Curran et al., (1989)
	1820	Curran et al., (1989)
	1940	Curran et al., (1989)
	2100	Curran et al., (1989)
	2280	Curran et al., (1989)
	2340	Curran et al., (1989)
	2350	Curran et al., (1989)
Nitrogen	500	Asner, 2008
	530	Asner, 2008
	705	Asner, 2008
	730	Asner, 2008
	762	Martin et al., 2008
	813	Martin et al., 2008
	984	Martin et al., 2008
	1020	Serrano et al., 2002
	1225	Martin et al., 2008

	1497	Martin et al., 2008
	1510	Serrano et al., 2002
	1580	Asner, 2008
	1695	Asner, 2008
	1730	Serrano et al., 2002
	1790	Asner, 2008
	1980	Serrano et al., 2002
	2050	Asner, 2008
	2060	Serrano et al., 2002
	2125	Asner, 2008
	2130	Serrano et al., 2002
	2173	Martin et al., 2008
	2180	Serrano et al., 2002
	2180	Asner, 2008
	2240	Serrano et al., 2002
	2240	Asner, 2008
	2300	Serrano et al., 2002
	2315	Asner, 2008
	2359	Curran et al., (1989)
Plant moisture	970	Serrano et al., 2002
	985	Thenkabail et al., (2004)
	1200	Serrano et al., 2002
	1215	Thenkabail et al., (2004)
	1400	Serrano et al., 2002
	1445	Thenkabail et al., (2004)
	1450	Serrano et al., 2002
	1518	Jensen (2000)
	1710	Jensen (2000)
	1940	Serrano et al., 2002
	2005	Thenkabail et al., (2004)
	2035	Thenkabail et al., (2004)
Biomass	655	Thenkabail et al., (2004)
	885	Thenkabail et al., (2004)
	915	Thenkabail et al., (2004)
	1085	Thenkabail et al., (2004)
	1135	Thenkabail et al., (2004)
	1245	Thenkabail et al., (2004)
	1285	Thenkabail et al., (2004)
	1659	Gausman, (1985)
	2235	Thenkabail et al., (2004)
Leaf mass /LAI	740	Horler et al., (1983)
	786	Guyot and Baret, (1988)
	895	Schreiff et al., (2005)
	885	Thenkabail et al., (2004)
	915	Thenkabail et al., (2004)

	1085	Thenkabail et al., (2004)
	1135	Thenkabail et al., (2004)
	1245	Thenkabail et al., (2004)
	1285	Thenkabail et al., (2004)

Table 5.2. Best performing spectral subset in PLS regression models in present study for different biochemical and biophysical attributes

Biochemical attributes	Best performing spectral subset in PLS regression models
EWT	1538-2284
Nitrogen (foliage)	984-2000
lignin (Canopy)	1467-1770
cellulose (Canopy)	1490-1725
Lignin (Stem)	1467-1770
cellulose (stem)	1490-1725
Chlorophyll	600-750
Biophysical attributes	
LAI	1000-1510
Biomass	427-1500
canopy spread	1500-2345