

Table 2. Percentage in cross-sectional area and wall thickness (μm) of different cell types of plant parts of eight forage species, means of 2 years and of early and later harvesting

Plant part and species	Percentage in cross-sectional area			Wall thickness			
	Thick-walled cells	Thin-walled cells	Epidermal cells	Thick-walled cells	Thin-walled cells	Epidermal cells	
						Inner wall	Outer wall
Leaflets or leaf blades							
<i>Trifolium repens</i> *	3.3	78.7	18.0	0.86	0.310	0.35	1.27
<i>Medicago sativa</i>	4.6	78.0	17.4	1.46	0.233	0.29	1.70
<i>Desmodium intortum</i> *	5.9	78.6	15.5	1.12	0.219	0.28	1.43
<i>Lolium perenne</i>	19.8	57.7	22.5	0.85	0.145	0.22	0.87
<i>Festuca arundinacea</i>	22.5	56.5	21.0	1.21	0.269	0.27	4.02
<i>Chloris gayana</i>	36.8	30.8	32.4	1.28	0.226	0.29	3.41
<i>Cenchrus ciliaris</i>	46.5	13.3	40.2	1.30	0.238	0.45	3.22
<i>Zea mays</i> *	26.4	41.2	32.4	1.44	0.343	0.98	5.03
S.E. (15 D.F.)	1.26	1.05	1.06	0.043	0.0160	0.021	0.119
Mean	20.7	54.4	24.9	1.19	0.248	0.39	2.62
Leaf midribs							
<i>Trifolium repens</i>	10.0	78.6	11.4	1.58	0.326	0.95	2.61
<i>Desmodium intortum</i>	15.6	76.5	7.9	1.65	0.251	0.69	2.40
<i>Zea mays</i>	20.4	73.8	5.8	2.21	0.527	2.13	6.40
S.E. (5 D.F.)	0.81	1.10	0.76	0.046	0.0270	0.036	0.094
Mean	15.3	76.3	8.4	1.81	0.368	1.26	3.80
Petioles							
<i>Trifolium repens</i>	11.8	81.8	6.4	1.98	0.381	0.87	2.63
<i>Desmodium intortum</i>	16.1	78.9	5.0	1.57	0.325	0.72	2.68
S.E. (3 D.F.)	1.17	1.16	0.09	0.046	0.0077	0.021	0.093
Mean	14.0	80.4	5.7	1.77	0.353	0.79	2.65
Leaf sheaths							
<i>Lolium perenne</i>	21.6	60.9	17.5	1.12	0.251	0.97	3.77
<i>Festuca arundinacea</i>	17.0	71.9	11.1	1.45	0.298	0.66	5.10
<i>Chloris gayana</i>	17.4	70.7	11.9	1.39	0.332	0.88	4.90
<i>Cenchrus ciliaris</i>	24.7	61.9	13.4	1.14	0.215	0.25	2.94
<i>Zea mays</i>	15.4	76.4	8.2	2.33	0.598	2.15	6.92
S.E. (9 D.F.)	0.60	1.35	1.10	0.078	0.0309	0.106	0.392
Mean	19.2	68.4	12.4	1.49	0.339	0.98	4.73
Stems							
<i>Trifolium repens</i>	22.6	73.5	3.9	2.23	0.333	1.01	2.88
<i>Medicago sativa</i>	36.6	59.9	3.5	1.84	0.354	1.05	4.43
<i>Desmodium intortum</i>	28.3	69.0	2.8	1.68	0.313	0.71	3.06
<i>Chloris gayana</i>	42.3	54.8	3.0	1.88	0.424	1.36	5.85
<i>Cenchrus ciliaris</i>	56.5	39.5	4.0	1.83	0.165	1.65	6.20
<i>Zea mays</i>	18.3	80.8	1.0	2.03	0.576	1.72	5.11
S.E. (11 D.F.)	3.28	3.43	0.30	0.117	0.0242	0.104	0.318
Mean	34.1	62.9	3.0	1.92	0.361	1.25	4.59

* Excluding midribs.