

Introduced forage species herbage dry matter production and chemical composition at two moist savannah sites in Ghana

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Two batches of introduced forage species whose seed were provided by ILCA's gene bank were evaluated for adaptation and dry matter production at two sites, one in the coastal savannah and the other in the guinea savannah zone of Ghana in two years. The first batch of forage materials made up of 20 legumes were evaluated in 1992 at the two sites and the second batch of forage materials made of six legumes and three grasses were evaluated in 1993 again at the two sites. In 1992 chemical analysis of the forages under test was conducted at Nyankpala, the guinea savannah zone site. The evaluation showed that in 1992 at both

sites the highest yielding in herbage production were *Stylosanthes scabra*, *Macrotyloma axillare*, *Stylosanthes hamata*, *Lablab purpureus* and *Stylosanthes guianensis* yielding in excess of 2 tonnes per hectare. In 1993 the same legumes yielded herbage heavily at both sites but among the grasses in that trial *Chloris gayana* and *Brachiaria ruziziensis* were outstanding in yield than *Panicum maximum*. Chemical analysis in the first trial showed that the entries *Centrosema pubescens*, *Lablab purpureus*, *Macrotyloma axillare*, *Neonotonia wightii* and *Stylosanthes guianensis* have high amounts of both macro and micro-nutrients.

Nitrogen content (%) and some macro and micro-elements composition (mg/kg) of forage entries in trial one (1992) at Nyankpala

Entry (species)	ILCA n°	Chemical composition macro and micro-elements, mg/kg (air-dry)									
		N (%)	Ca	P	Na	Mg	Mn	Zn	Cu	Fe	K
<i>Centrosema brasilianum</i>	6773	1.63	9669	1072	62.9	272	285	33	7	331	4261
<i>Centrosema pascuorum</i>	6774	1.47	8106	822	385.4	272	296	30	7	528	5056
<i>Centrosema pubescens</i>	219	2.22	12583	1217	43.0	351	268	40	10	540	4787
<i>Chamaecrista rotundifolia</i>	9288	1.53	7442	837	39.9	262	252	30	-	1093	2800
<i>Clitorea ternatea</i>	9291	1.59	4252	916	395.3	615	342	43	7	438	5996
<i>Desmodium intortum</i>	104	1.58	6898	929	52.8	254	148	40	-	1023	5193
<i>Desmodium uncinatum</i>	6765	1.79	6844	883	42.8	270	220	30	-	1016	4330
<i>Lablab purpureus</i>	147	2.09	8878	1190	46.2	271	92	30	-	373	4987
<i>Macroptilium atropurpureum</i>	69	1.83	6766	768	33.0	412	109	30	-	776	4657
<i>Macrotyloma axillare</i>	6756	2.30	11320	1014	33.0	376	469	49	7	696	4056
<i>Neonotonia wightii</i>	6761	2.48	11993	1557	39.9	409	242	40	-	438	3060
<i>Rhynchosia minima</i>	13935	1.81	7171	899	103.95	326	395	39	7	760	3198
<i>Stylosanthes guianensis</i>	4	1.90	9435	918	-	312	276	40	10	794	6254
<i>Stylosanthes guianensis</i>	163	2.20	9036	1171	36.5	319	289	13	10	860	625
<i>Stylosanthes hamata</i>	75	1.55	11941	682	46.1	263	145	23	-	243	4990
<i>Stylosanthes hamata</i>	167	1.20	9172	606	59.6	232	232	36	6	354	373
<i>stylosanthes scabra</i>	441	1.63	14106	663	1033.1	245	139	70	-	1265	4663
<i>Vigna unguiculata</i>	9333	2.39	11761	1286	697.7	462	385	60	10	601	8511
<i>Zornia latifolia</i>	172	2.29	5265	1365	59.6	252	232	46	7	871	5526