

ESTABLECIMIENTO Y PRODUCCION DE GRAMINEAS Y LEGUMINOSAS FORRAJERAS  
EN VILLAVICENCIO, META, COLOMBIA

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## SEMILLANO/CIAT

El ensayo se realizó en la finca experimental de la empresa Semillas del Llanó (SEMILLANO), localizada en Villavicencio, Depto. del Meta, situada a 4°13' de latitud norte y 73°34' de longitud oeste, a una elevación de 423 msnm. La precipitación media anual es de 3478 mm y una temperatura media anual de 25.7°C (Fig. 1). La región corresponde al ecosistema de bosque tropical. Las características físicas y químicas del suelo se muestran en el Cuadro 1.

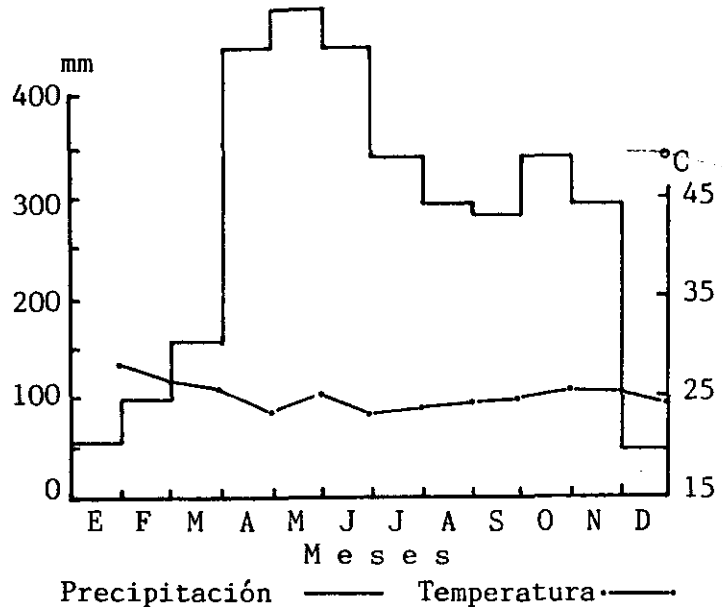


Figura 1. Características climáticas de Villavicencio, Meta, Colombia.

Cuadro 1. Características físicas y químicas del suelo.

Profundidad (cm)	Arena (%)	Limo (%)	Arcilla (%)	pH	MO (%)	CI (meq/100g)				Sat. Al (%)	Micron.(ppm)		
						Al	Ca	Mg	K		P	S	Cu
0-20	53	19	28	4.2	2.0	2.3	0.3	0.13	0.09	81	8.9	32.4	1.74
20-40	45	19	36	4.3	0.8	2.2	0.2	0.05	0.06	89	9.1	32.8	1.70

Exp., Illus.

En los períodos que aparecen en el Cuadro 2, se evaluaron 19 ecotipos de leguminosas y 11 de gramíneas. La identificación de los ecotipos y los resultados obtenidos se presentan en los cuadros siguientes.

Cuadro 2. Evaluaciones realizadas durante el establecimiento y en las épocas de mínima y máxima precipitación.

Siembra	En establecimiento	En producción				
		Mínima precipitación	Máxima precipitación	Mínima precipitación	Máxima precipitación	
Desde	5 Sept. 1983	5 Sept. 1983	22 Feb. 1984	19 Dic. 1984	1 Junio 1984	18 Mayo 1985
Hasta		13 Dic. 1983	27 Abril 1984	18 Marzo 1985	27 Agto. 1984	8 Agto. 1985

PERIODO DE ESTABLECIMIENTO PROMEDIO Y COEFICIENTE DE VARIACION DE ALTURA LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	4 SEMANAS		9 SEMANAS		12 SEMANAS			
	ALTURA (CM)	CV (%)	ALTURA (CM)	CV (%)	ALTURA (CM)	CV (%)		
GRAMINEAS :								
BRACHIARIA	BRIZANTH	564	9	27	18	24	37	38
PANICUM	MAXIMUM	673	29	27	44	25	44	24
BRACHIARIA	DICTYONE	6133	9	13	17	27	27	19
PANICUM	MAXIMUM	6179	21	24	30	31	39	38
ANDROPOGON	GAYANUS	6200	13	22	15	23	53	14
BRACHIARIA	BRIZANTH	6294	15	14	12	30	30	19
BRACHIARIA	HUMIDICO	6369	7	21	6	20	6	19
BRACHIARIA	RUZIZIEN	6419	17	37	18	15	20	42
BRACHIARIA	DECUMBEN	6700	9	25	11	21	20	34
BRACHIARIA	HUMIDICO	6705	11	17	11	20	17	43
BRACHIARIA	HUMIDICO	6707	14	15	10	12	10	31
LEGUMINOSAS :								
CENTROSEMA	SP.	~180	6	17	13	20	13	36
CENTROSEMA	HIBRIDO	~181	6	21	12	16	12	59
STYLOSANTHES	LEIOCARP	1057	1	47	6	35	13	31
STYLOSANTHES	GUIANENS	1280	3	26	13	25	24	28
STYLOSANTHES	CAPITATA	1441	2	38	6	41	17	49
STYLOSANTHES	MACROCEP	1582	2	24	8	31	14	58
STYLOSANTHES	MACROCEP	1643	2	34	6	25	9	43
STYLOSANTHES	CAPITATA	2044	2	39	9	42	15	63
STYLOSANTHES	MACROCEP	2133	2	41	9	37	12	48
DESMODIUM	OVALIFOL	3784	2	49	5	35	8	25
CENTROSEMA	MACROCAR	5062	10	16	17	34	23	30
CENTROSEMA	MACROCAR	5065	12	16	21	25	30	37
CENTROSEMA	BRASILIA	5234	5	15	10	32	11	26
CENTROSEMA	SP.	5278	7	16	10	30	14	51
ZORNIA	BRASILIE	7485	1	52	12	27	24	41
ZORNIA	GLABRA	7847	2	13	9	43	22	24
PUERARIA	PHASEOLO	9900	4	19	11	36	20	36
STYLOSANTHES	CAPITATA	10280	2	36	9	23	22	42
DESMODIUM	INCANUM	13932	2	47	4	42	6	32

PERIODO DE ESTABLECIMIENTO

PORCENTAJE DE COBERTURA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	4 SEMANAS		9 SEMANAS		12 SEMANAS	
	COBERTURA	DUNCAN	COBERTURA	DUNCAN	COBERTURA	DUNCAN
=====	=====	=====	=====	=====	=====	=====
GRAMINEAS :	MEDIA=6	D.E.= 2	MEDIA=23	D.E.= 9	MEDIA=39	D.E.= 17
BRACHIARIA BRIZANTH 664	5	BAC	20	BAC	40	A
PANICUM MAXIMUM 673	10	A	32	BA	37	A
BRACHIARIA DICTYONE 6133	5	BAC	21	BAC	26	A
PANICUM MAXIMUM 6179	8	BA	25	BAC	30	A
ANDROPOGON GAYANUS 6200	6	BAC	33	BA	33	A
BRACHIARIA BRIZANTH 6294	5	BC	20	BAC	56	A
BRACHIARIA HUMIDICO 5369	3	C	9	C	38	A
BRACHIARIA RUZIZIEN 6419	6	BAC	16	BC	36	A
BRACHIARIA DECUMBEN 6700	6	BAC	35	A	51	A
BRACHIARIA HUMIDICO 6705	5	BC	25	BAC	48	A
BRACHIARIA HUMIDICO 6707	6	BAC	20	BAC	30	A
LEGUMINOSAS :	MEDIA=1	D.E.= 0	MEDIA=4	D.E.= 2	MEDIA=22	D.E.= 12
CENTROSEMA SP. -180	2	A	4	BAC	36	BAC
CENTROSEMA HIBRIDO -181	1	B	6	BAC	38	BA
STYLOSANTHES LEUCARP 1087	1	B	1	C	6	E
STYLOSANTHES GUIANENS 1280	1	B	6	BAC	33	BDAC
STYLOSANTHES CAPITATA 1441	1	B	1	C	13	DE
STYLOSANTHES MACROCEP 1542	1	B	2	C	9	E
STYLOSANTHES MACROCEP 1543	1	B	1	C	4	E
STYLOSANTHES CAPITATA 2044	1	B	1	C	8	E
STYLOSANTHES MACROCEP 2133	1	B	3	BC	9	E
DESMODIUM OVALIFOL 3784	1	B	3	BC	13	DE
CENTROSEMA MACROCAR 5062	2	A	4	BAC	16	BDEC
CENTROSEMA MACROCAR 5065	2	A	7	BA	25	BDEC
CENTROSEMA BRASILIA 5234	2	A	9	A	53	A
CENTROSEMA SP. 5278	1	B	2	BC	11	DE
ZORNIA BRASILIE 7485	1	B	5	BAC	15	DEC
ZORNIA GLABRA 7947	1	B	9	A	50	A
PUEARIA PHASEOLO 9900	2	A	9	A	51	A
STYLOSANTHES CAPITATA 10280	1	B	2	C	20	BDEC
DESMODIUM INCANUM 13032	1	B	1	C	3	E

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ESTABLECIMIENTO			EVALUACION DE INSECTOS				LOCALIDAD: VILLAVICENCIO COLOMBIA			
ECOTIPO			TRIPS AC.	PULGUILLA CONEDOR	HEMIPTERO SALIVAZO	BARRENAD.	PERFORAD.	OTRO1	OTRO2	
GRAMINEAS :										
BRACHIARIA	BRIZANTH	664	0.00	1.22	0.89	0.00	0.00	0.00	0.00	
PANICUM	MAXIMUM	673	0.00	1.14	1.00	0.00	0.00	0.00	0.00	
BRACHIARIA	DICTYONE	6133	0.00	1.00	0.89	0.00	0.00	0.00	0.00	
PANICUM	MAXIMUM	6179	0.00	1.00	0.78	0.00	0.00	0.00	0.00	
ANDROPOGON	GAYANUS	6200	0.00	1.00	0.56	0.00	0.00	0.00	0.00	
BRACHIARIA	BRIZANTH	6294	0.00	1.00	0.89	0.00	0.00	0.00	0.00	
BRACHIARIA	HUMIDICO	6369	0.00	1.00	1.00	0.00	0.00	0.00	0.00	
BRACHIARIA	RUZIZIEN	6419	0.00	1.00	0.89	0.00	0.00	0.00	0.00	
BRACHIARIA	DECUMEN	6700	0.00	1.11	0.89	0.00	0.00	0.00	0.00	
BRACHIARIA	HUMIDICO	6705	0.00	0.67	1.00	0.00	0.00	0.00	0.00	
BRACHIARIA	HUMIDICO	6707	0.00	1.00	0.78	0.00	0.00	0.00	0.00	
LEGUMINOSAS :										
CENTROSEMA	SP.	-180	0.22	1.22	3.11	0.00	0.00	0.00	0.00	
CENTROSEMA	HIBRIDO	-181	0.11	1.33	1.89	0.00	0.00	0.00	0.00	
STYLOSANTHES	LEUCARP	1087	0.00	0.89	1.22	0.00	0.00	0.00	0.00	
STYLOSANTHES	GUIANENS	1290	0.00	0.89	0.89	0.00	0.00	0.00	0.00	
STYLOSANTHES	CAPITATA	1441	0.00	1.33	0.78	0.00	0.00	0.00	0.00	
STYLOSANTHES	MACROCEP	1582	0.00	1.44	0.78	0.00	0.00	0.00	0.00	
STYLOSANTHES	MACROCEP	1643	0.00	1.67	0.56	0.00	0.00	0.00	0.00	
STYLOSANTHES	CAPITATA	2044	0.00	1.11	0.78	0.00	0.00	0.00	0.00	
STYLOSANTHES	MACROCEP	2133	0.00	1.44	1.11	0.00	0.00	0.00	0.00	
DESMODIUM	OVALIFOL	3734	0.00	0.44	0.69	0.00	0.00	0.00	0.00	
CENTROSEMA	MACROCAR	5062	0.00	1.00	2.67	0.00	0.00	0.00	0.00	
CENTROSEMA	MACROCAR	5065	0.00	1.33	2.33	0.00	0.00	0.00	0.00	
CENTROSEMA	BRASILIA	5234	0.11	1.33	2.11	0.00	0.00	0.00	0.00	
CENTROSEMA	SP.	5278	0.11	1.44	2.22	0.00	0.00	0.00	0.00	
ZORNIA	BRASILIE	7485	0.11	1.33	0.33	0.00	0.00	0.00	0.00	
ZORNIA	GLABRA	7847	0.56	1.33	0.89	0.00	0.00	0.00	0.00	
PUERARIA	PHASEOLO	9900	0.44	0.89	1.78	0.00	0.00	0.00	0.00	
STYLOSANTHES	CAPITATA	10280	0.00	1.11	0.78	0.00	0.00	0.00	0.00	
DESMODIUM	INCANUM	13032	0.00	0.89	1.11	0.00	0.00	0.00	0.00	

ESTABLECIMIENTO

EVALUACION DE ENFERMEADES

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	HOJA						TALLO			OTROS				
	NEGRA	MARRON	NARAN.	CREMA	MARRP.	NARAP.	NEGRA	MARRON	CHANC.	MARCN.	CLORO.	I.PEG.	I.G.PG	
GRAMINEAS :														
BRACHIARIA	BRIZANTH	664	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PANICUM	MAXIMUM	673	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	DICTYONE	6133	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PANICUM	MAXIMUM	6179	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANDROPOGON	GAYANUS	6200	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	BRIZANTH	6294	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0
BRACHIARIA	HUMIDICO	6369	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	FUZIZIEN	6419	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	DECUMBEN	6700	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6705	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6707	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEGUMINOSAS :														
CENTROSEMA	SP.	-180	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	HIPRIDO	-181	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
STYLOSANTHES	LEIDOCARP	1097	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	GUIANENS	1260	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	1441	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	MACROCEP	1592	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
STYLOSANTHES	MACROCEP	1643	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
STYLOSANTHES	CAPITATA	2044	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
STYLOSANTHES	MACROCEP	2133	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
DESMODIUM	OVALIFOL	3784	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5062	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
CENTROSEMA	MACROCAR	5065	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
CENTROSEMA	BRASILIA	5234	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	SP.	5279	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
ZORNIA	BRASILIE	7485	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
ZORNIA	GLABRA	7647	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUERARIA	PHASELO	9900	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
STYLOSANTHES	CAPITATA	10280	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DESMODIUM	INCANUM	13032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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## EVALUACION 1 1

MINIMA PRECIPITACION

PRODUCCION DE MATERIA SECA KG/HA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN
GRAMINEAS :	MEDIA=258 D.E.=165		MEDIA=876 D.E.=300		MEDIA=1395 D.E.=328			
BRACHIARIA BRIZANTH	664	170	BDC	561	BC	1352	5A	
PANICUM MAXIMUM	673	476	BA	1391	A	1498	BA	
BRACHIARIA DICTYONE	6133	316	BDAC	981	BAC	1499	BA	
PANICUM MAXIMUM	6179	210	BDC	583	BC	906	B	
ANDROPOGON GAYANUS	6200	592	A	1308	A	1056	A	
BRACHIARIA BRIZANTH	6294	190	BDC	930	BAC	1806	A	
BRACHIARIA HUMIDICO	6369	73	D	505	C	1001	B	
BRACHIARIA RUZIZIEN	6419	130	DC	519	C	1058	B	
BRACHIARIA DECUMBEN	6700	166	BDC	966	BAC	1462	BA	
BRACHIARIA HUMIDICO	6705	406	BAC	1134	BA	1380	BA	
BRACHIARIA HUMIDICO	6707	110	DC	710	BC	1428	BA	
LEGUMINOSAS :	MEDIA=112 D.E.=67		MEDIA=490 D.E.=186		MEDIA=794 D.E.=313			
CENTROSEMA SP.	-180	170	BC	735	BA	1168	BDAC	
CENTROSEMA HIRRIDO	-181	80	ECO	541	BDC	714	GFDEC	
STYLOSANTHES LEUCARP	1087	116	BECD	306	FGEDC	466	GFIEH	
STYLOSANTHES GUIANENS	1280	223	BA	925	A	1660	A	
STYLOSANTHES CAPITATA	1441	36	ECO	163	FGE	336	GFIEH	
STYLOSANTHES MACROCEP	1582	123	BECD	691	BA	1056	BDEC	
STYLOSANTHES MACROCEP	1643	30	ED	290	FGED	93	IH	
STYLOSANTHES CAPITATA	2044	23	ED	146	FG	213	GIH	
STYLOSANTHES MACROCEP	2133	90	BECD	520	BECD	740	GFDEC	
DESMODIUM OVALIFOL	3784	30	ED	220	FGED	613	GFCEH	
CENTROSEMA MACROCAR	5052	110	BECD	404	FBEDC	730	GFDEC	
CENTROSEMA MACROCAR	5065	156	RCD	664	BAC	1304	BAC	
CENTROSEMA BRASILIA	5234	63	ECO	649	BAC	824	FDEC	
CENTROSEMA SP.	5276	126	BECD	508	BECD	732	GFDEC	
ZORNIA BRASILIE	7485	222	BA	893	A	1190	BDAC	
ZORNIA GLABRA	7347	296	A	935	A	1572	BA	
PUFERARIA PHASEOLO	9900	106	BECD	317	FGEDC	955	DEC	
STYLOSANTHES CAPITATA	10280	100	BECD	400	FBEDC	716	GFDEC	
DESMODIUM INCANUM	13032	16	E	0	G	0	I	

MAXIMA PRECIPITACION

PRODUCCION DE MATERIA SECA KG/HA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	MS, KG/HA	DUNCAN	MS, KG/HA	DUNCAN	MS, KG/HA	DUNCAN	MS, KG/HA	DUNCAN
GRAMINEAS :	MEDIA=602	D.E.=278	MEDIA=1492	D.E.=517	MEDIA=1358	D.E.=413	MEDIA=1617	D.E.=353
BRACHIARIA BRIZANTH	664   463	BC	1239	CB	1222	BDC	1223	EDC
PANICUM MAXIMUM	673   454	BC	1624	B	1191	BDC	1581	BDC
BRACHIARIA DICTYONE	6133   579	BC	1688	B	1529	RDAC	2482	A
PANICUM MAXIMUM	6179   250	C	471	C	833	D	693	E
ANDROPOGON GAYANUS	6200   434	PC	1634	B	1278	BDC	2440	A
BRACHIARIA BRIZANTH	6294   416	BC	1206	CB	1653	BAC	1841	BAC
BRACHIARIA HUMIDICO	6369   393	BC	933	CB	1295	BDC	1076	ED
BRACHIARIA RUZIZIEN	6419   864	BA	1311	CB	999	BDC	1606	BCC
BRACHIARIA DECUMBEN	6700   593	BC	1868	B	962	DC	1542	BDC
BRACHIARIA HUMIDICO	6705   1315	A	2787	A	2172	A	2033	BA
BRACHIARIA HUMIDICO	6797   887	BA	1646	B	1900	BA	1274	FCC
LEGUMINOSAS :	MEDIA=43	D.E.=32	MEDIA=117	D.E.=73	MEDIA=441	D.E.=338	MEDIA=533	D.E.=287
CENTROSEMA SP.	-160   40	BA	120	EBDAC	348	BAC	574	BDAC
CENTROSEMA HIRRIDO	-181   10	B	125	EBDAC	244	BAC	225	DC
STYLOSANTHES LEUCARP	1037   10	B	0	E				
STYLOSANTHES GUIANENS	1280   60	BA	210	BA	921	A	658	BDAC
STYLOSANTHES CAPITATA	1441   90	A	76	EBDC	350	BAC	480	BCC
STYLOSANTHES MACROCEP	1592   40	BA	56	EDC	146	BC		
STYLOSANTHES MACROCEP	1643   50	BA	16	ED	320	BAC		
STYLOSANTHES CAPITATA	2044   53	BA	106	EBDAC	200	BC	320	BDC
STYLOSANTHES MACROCEP	2133   13	B	93	EBDAC	153	BC	130	D
DESMODIUM OVALIFOL	3784   56	BA	230	A	817	BA	867	BA
CENTROSEMA MACROCAR	5062   45	BA	206	BA	363	BAC	337	BCC
CENTROSEMA MACROCAR	5065   50	BA	156	BDAC	625	BAC	664	RDAC
CENTROSEMA BRASILIA	5234   33	BA	164	BAC	539	BAC	625	RCAC
CENTROSEMA SP.	5278   20	BA	170	BAC	647	BAC	790	BAC
ZORNIA BRASILIE	7485   10	B	83	EBDC	731	BA	1071	A
ZORNIA GLABRA	7647   70	BA	176	BAC	551	BAC	276	BDC
PUERARIA PHASEOLO	9900   30	BA	73	EBDC	336	BAC	240	DC
STYLOSANTHES CAPITATA	10280   66	BA	156	BDAC	420	BAC	478	BDC
DESMODIUM INCANUM	13032   30	BA	13	ED	0	C		

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## EVALUACION : 1

MINIMA PRECIPITACION

PORCENTAJE DE COBERTURA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECCTIPOG	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN
GRAMINEAS :	MEDIA=55	D.E.=15	MEDIA=59	D.E.=13	MEDIA=70	D.E.=9		
BRACHIARIA BRIZANTH 664	50	BDC	50	BDC	63	DEC		
PANICUM MAXIMUM 673	23	EF	45	DC	58	DE		
BRACHIARIA DICTYONE 6133	43	ED	45	DC	50	E		
PANICUM MAXIMUM 6179	13	F	30	D	46	E		
ANDROPPOGON GAYANUS 6200	50	EDC	76	A	80	BAC		
BRACHIARIA BRIZANTH 6294	45	FD	60	BAC	75	BDC		
BRACHIARIA HUMIDICO 6369	90	A	70	BAC	95	A		
BRACHIARIA RUIZIIEN 6419	39	EDF	55	BDAC	58	DE		
BRACHIARIA DECUMBEN 6700	76	BAC	75	BA	78	BAC		
BRACHIARIA HUMIDICO 6705	90	A	70	BAC	76	BDAC		
BRACHIARIA HUMIDICO 6707	81	BA	76	A	89	BA		
LEGUMINOSAS :	MEDIA=39	D.E.=20	MEDIA=50	D.E.=13	MEDIA=66	D.E.=15		
CENTROSEMA SP. -180	53	BAC	66	BAC	91	A		
CENTROSEMA HIRRIDO -181	43	EBDAC	63	BDAC	80	A		
STYLOSANTHES LEIDCARP 1087	53	BAC	45	FDEC	48	BC		
STYLOSANTHES GULANENS 1280	56	BA	66	BAC	90	A		
STYLOSANTHES CAPITATA 1441	38	EBDAC	27	GFEN	47	RC		
STYLOSANTHES MACROCEP 1582	26	EBDC	43	GFDEC	66	BA		
STYLOSANTHES MACROCEP 1643	12	ED	18	GH	18	D		
STYLOSANTHES CAPITATA 2044	15	EDC	21	GFH	25	DC		
STYLOSANTHES MACROCEP 2133	26	EBDC	38	GFOE	68	BA		
DESMODIUM OVALIFOL 3784	69	A	83	A	86	A		
CENTROSEMA MACROCAR 5062	36	EBDAC	53	BDEC	61	BA		
CENTROSEMA MACROCAR 5065	38	EBDAC	70	BAC	80	A		
CENTROSEMA BRASILIA 5234	61	BA	70	BAC	86	A		
CENTROSEMA SP. 5278	50	BDAC	58	BDAC	83	A		
ZORNIA BRASILIE 7495	31	EBDAC	56	BDAC	70	BA		
ZORNIA GLABRA 7447	50	BDAC	76	BA	90	A		
PUERARIA PHASEOLO 9900	50	BDAC	63	BDAC	90	A		
STYLOSANTHES CAPITATA 10280	33	EBDAC	30	GFEN	65	BA		
DESMODIUM INCANUM 13032	6	E	5	H	5	D		

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MAXIMA PRECIPITACION

PORCENTAJE DE COBERTURA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN
GRAMINEAS :	MEDIA=53	D.E.=14	MEDIA=72	D.E.=11	MEDIA=68	D.E.=15	MEDIA=81	D.E.=13
BRACHIARIA BRIZANTH 664	55	BDEC	68	DC	71	BA	85	A
PANICUM MAXIMUM 673	30	FE	53	ED	61	BA	75	A
BRACHIARIA DICTYONE 6133	33	FDE	66	EDC	63	BA	95	A
PANICUM MAXIMUM 6179	21	F	28	F	30	C	36	B
ANDROPOGON GAYANUS 6200	36	FDE	76	BAC	58	B	76	A
BRACHIARIA BRIZANTH 6294	56	BDEC	46	EF	75	BA	75	A
BRACHIARIA HUMIDICO 6369	86	A	95	A	91	A	96	A
BRACHIARIA RUZIZIEN 6419	50	DEC	71	BDC	65	BA	86	A
BRACHIARIA DECUMBEN 6700	60	BDAC	91	BA	80	BA	81	A
BRACHIARIA HUMIDICO 6705	75	BAC	96	A	76	BA	95	A
BRACHIARIA HUMIDICO 6707	80	BA	96	BA	78	BA	89	A
LEGUMINOSAS :	MEDIA=10	D.E.=5	MEDIA=26	D.E.=13	MEDIA=46	D.E.=23	MEDIA=48	D.E.=21
CENTROSEMA SP. -180	14	CEBD	18	CB	37	BDEC	22	BC
CENTROSEMA HIBRIDO -181	4	FCED	25	CB	27	BDEC	22	BC
STYLOSANTHES LEIOCARP 1087	8	FCEBD	2	D				
STYLOSANTHES GUIANENS 1290	11	FCEBD	38	B	68	BAC	65	BAC
STYLOSANTHES CAPITATA 1441	16	CB	36	B	47	BDEC	50	BAC
STYLOSANTHES MACROCEP 1592	8	FCEBD	16	CB	17	DE		
STYLOSANTHES MACROCEP 1643	2	FE	3	D	8	E		
STYLOSANTHES CAPITATA 2044	4	FCED	23	CB	29	BDEC	25	BC
STYLOSANTHES MACROCEP 2133	6	FCED	8	CD	20	DEC	21	C
DESMODIUM OVALIFOL 3754	46	A	100	A	100	A	80	A
CENTROSEMA MACROCAR 5062	6	FCED	33	CB	50	BDEC	38	BAC
CENTROSEMA MACROCAR 5065	9	FCEBD	33	CB	75	BA	68	BA
CENTROSEMA BRASILIA 5234	10	FCEED	36	B	63	BDAC	56	BAC
CENTROSEMA SP. 5278	4	FED	21	CB	68	BAC	63	BAC
ZORNIA BRASILIE 7485	5	FCED	25	CB	36	BDEC	50	BAC
ZORNIA GLABRA 7487	18	B	33	CB	43	BDEC	36	BAC
PUERARIA PHASEOLO 9900	7	FCEBD	15	CB	48	BDEC	50	BAC
STYLOSANTHES CAPITATA 10280	15	CB	21	CB	46	BDEC	50	BAC
DESMODIUM INCANUM 13032	2	F	6	CD	5	E		

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EVALUACION : 1

MINIMA PRECIPITACION REGRESIONES DE PRODUCCION MEDIA DE MATERIA SECA VS. EDAD LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	LINEAL			CUADRATICO				
	R CUADRADO	CONSTA. LINEAL	NIVEL DE SIGNIFI.	R CUADRADO	CONSTA. LINEAL	NIVEL DE SIGNIFI.	CONSTA. CUADRAT.	NIVEL DE SIGNIFI.
GRAMINEAS :								
BRACHIARIA BRIZANTH 564	0.88	127.4	0.001	0.93	-3.7	0.950	16.99	0.050
PANICUM MAXIMUM 673	0.94	184.6	0.001	0.94	249.7	0.010	-8.43	0.390
BRACHIARIA DICTYONE 6133	0.97	161.4	0.001	0.98	112.6	0.020	6.32	0.240
PANICUM MAXIMUM 6179	0.97	97.5	0.001	0.97	71.0	0.030	3.44	0.320
ANDROPOGON GAYANUS 6200	0.95	216.2	0.001	0.95	202.1	0.040	1.33	0.260
BRACHIARIA BRIZANTH 6234	0.92	130.2	0.001	0.95	37.5	0.600	18.50	0.070
BRACHIARIA HUMIDICO 6369	0.86	97.4	0.001	0.91	3.5	0.950	12.17	0.100
BRACHIARIA PUZIZIEN 6419	0.93	103.4	0.001	0.97	14.5	0.620	11.53	0.010
BRACHIARIA DECUMBEN 6700	0.94	154.4	0.001	0.96	73.4	0.210	10.50	0.160
BRACHIARIA HUMIDICO 6705	0.89	162.3	0.001	0.89	187.8	0.080	-3.31	0.780
BRACHIARIA HUMIDICO 6707	0.89	139.5	0.001	0.94	4.1	0.950	17.42	0.050
LEGUMINOSAS :								
CENTROSEMA SP. 7190	0.97	122.6	0.001	0.95	60.2	0.050	9.08	0.040
CENTROSEMA HIBRIDO 7191	0.93	79.9	0.001	0.94	62.8	0.160	2.19	0.670
STYLOSANTHES LEUCARP 1087	0.66	50.7	0.001	0.66	40.2	0.510	1.36	0.860
STYLOSANTHES GUYANENS 1280	0.95	168.0	0.001	0.97	53.5	0.270	14.84	0.030
STYLOSANTHES CAPITATA 1441	0.59	32.7	0.010	0.62	2.9	0.950	3.86	0.490
STYLOSANTHES MACROCEP 1582	0.87	111.3	0.001	0.88	52.2	0.450	7.67	0.380
STYLOSANTHES MACROCEP 1643	0.46	21.2	0.030	0.56	62.0	0.100	-5.29	0.250
STYLOSANTHES CAPITATA 2044	0.52	22.8	0.020	0.53	11.7	0.750	1.43	0.750
STYLOSANTHES MACROCEP 2133	0.96	79.8	0.001	0.97	45.7	0.020	4.42	0.160
DESMODIUM OVALIFOL 3734	0.62	54.0	0.010	0.70	-22.4	0.730	10.03	0.240
CENTROSEMA MACROCAR 5042	0.93	74.0	0.001	0.95	26.1	0.370	6.21	0.110
CENTROSEMA MACROCAR 5065	0.99	128.6	0.001	0.93	22.5	0.720	13.75	0.110
CENTROSEMA BRASILIA 5234	0.91	91.3	0.001	0.92	56.8	0.230	4.47	0.440
CENTROSEMA SP. 5278	0.71	79.5	0.001	0.71	54.0	0.530	3.31	0.760
ZORNIA BRASILIE 7485	0.93	132.9	0.001	0.93	107.7	0.100	3.27	0.660
ZORNIA GLABRA 7347	0.93	163.9	0.001	0.94	87.0	0.240	9.96	0.280
PUERARIA PHASEOLO 9700	0.88	85.9	0.001	0.97	-24.3	0.390	14.28	0.001
STYLOSANTHES CAPITATA 10290	0.93	72.6	0.001	0.95	24.1	0.390	6.29	0.100
DESMODIUM INCANUM 13032	0.02	0.4	0.670	0.18	4.5	0.270	-0.54	0.290

MAXIMA PRECIPITACION

REGRESIONES DE PRODUCCION MEDIA DE MATERIA SECA VS. EDAD LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	LINEAL			CUADRATICO						
	R	CONSTA.	NIVEL DE	R	CONSTA.	NIVEL DE	CONSTA.	NIVEL DE		
	CUADRADO	LINEAL	SIGNIFI.	CUADRADO	LINEAL	SIGNIFI.	CUADRAT.	SIGNIFI.		
GRAMINEAS :										
BRACHIARIA	BRIZANTH	664	0.87	127.9	0.001	0.92	253.9	0.001	-12.61	0.030
PANICUM	MAXIMUM	573	0.82	151.1	0.001	0.85	278.3	0.010	-12.72	0.150
BRACHIARIA	DICTYONE	6133	0.93	205.3	0.001	0.93	246.4	0.010	-4.11	0.580
PANICUM	MAXIMUM	6179	0.91	71.9	0.001	0.93	116.2	0.001	-4.44	0.110
ANDROPOGON	GAYANUS	6200	0.93	192.3	0.001	0.93	200.0	0.010	-0.77	0.910
BRACHIARIA	BRIZANTH	6294	0.77	168.4	0.001	0.98	219.6	0.001	-3.01	0.170
BRACHIARIA	HUMIDICO	6369	0.90	116.0	0.001	0.93	213.3	0.001	-9.72	0.030
BRACHIARIA	RUZIZIEN	6419	0.81	143.5	0.001	0.84	263.2	0.010	-11.97	0.170
BRACHIARIA	DECUMBEN	6700	0.80	148.6	0.001	0.87	320.3	0.001	-17.16	0.050
BRACHIARIA	HUMIDICO	6705	0.80	239.3	0.001	0.93	629.2	0.001	-38.99	0.001
BRACHIARIA	HUMIDICO	6707	0.83	163.1	0.001	0.95	424.6	0.001	-26.15	0.001
LEGUMINOSAS :										
CENTROSEMA	SP.	-180	0.82	38.6	0.001	0.88	-1.5	0.940	4.19	0.050
CENTROSEMA	MIRRIDO	-181	0.52	21.6	0.010	0.52	19.9	0.530	0.18	0.950
STYLOSANTHES	LEIOCARP	1087	0.14	0.5	0.460	1.00	6.7	0.001	-1.10	0.001
STYLOSANTHES	GUIANENS	1280	0.68	13.2	0.001	0.69	57.4	0.330	5.57	0.900
STYLOSANTHES	CAPITATA	1441	0.82	35.7	0.001	0.85	8.0	0.690	2.77	0.130
STYLOSANTHES	MACROCEP	1582	0.34	14.1	0.080	0.35	4.5	0.890	1.25	0.760
STYLOSANTHES	MACROCEP	1643	0.52	16.8	0.110	0.86	-39.4	0.170	7.93	0.090
STYLOSANTHES	CAPITATA	2044	0.55	23.2	0.010	0.56	10.8	0.770	1.30	0.650
STYLOSANTHES	MACROCEP	2133	0.75	13.1	0.001	0.76	17.8	0.100	-0.47	0.630
DESODIUM	OVALIFOL	3794	0.75	71.6	0.001	0.76	31.2	0.570	4.04	0.450
CENTROSEMA	MACROCAR	5062	0.77	32.4	0.001	0.77	42.0	0.130	-0.95	0.710
CENTROSEMA	MACROCAR	5065	0.81	54.4	0.001	0.83	21.5	0.520	3.29	0.320
CENTROSEMA	BRASILIA	5234	0.84	49.8	0.001	0.86	16.3	0.540	3.30	0.230
CENTROSEMA	SP.	5278	0.73	61.3	0.001	0.76	11.9	0.820	4.91	0.340
ZORNIA	BRASILIE	7465	0.79	75.6	0.001	0.86	-27.2	0.600	10.11	0.070
ZORNIA	GLABRA	7847	0.62	35.4	0.001	0.64	59.5	0.130	-2.41	0.500
PUERRARIA	PHASOLO	9900	0.76	24.7	0.001	0.76	19.4	0.310	0.55	0.770
STYLOSANTHES	CAPITATA	10280	0.91	39.5	0.001	0.81	24.3	0.350	1.52	0.540
DESODIUM	INCANUM	13032	0.15	1.5	0.350	0.48	10.5	0.100	-1.20	0.130

## EVALUACION : 1

MINIMA PRECIPITACION			EVALUACION DE INSECTOS				LOCALIDAD: VILLAVICENCIO COLOMBIA			
ECOTIPO			TRIPS AC.	PULGUILLA	COMEDOR	HEMIPTERO SALIVAZO	BARRENAD.	PERFORAD.	QTR01	QTR02
GRAMINEAS :										
BRACHIARIA	BRIZANTH	664	0.00	1.00	1.00	0.00	0.33	0.00	0.00	0.00
PANICUM	MAXIMUM	673	0.11	0.89	0.89	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	DICTYONE	6133	0.00	0.78	0.78	0.00	0.33	0.00	0.00	0.00
PANICUM	MAXIMUM	6179	0.11	0.89	0.89	0.00	0.00	0.00	0.00	0.00
ANDROPOGON	GAYANUS	6200	0.11	0.78	1.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	RHIZANTH	6294	0.33	1.00	1.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6369	0.00	0.89	0.89	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	PUZIZIEN	6419	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	DECUMEN	6700	0.00	1.00	1.00	0.00	0.44	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6705	0.00	1.00	0.89	0.00	0.11	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6707	0.00	0.89	0.89	0.00	0.11	0.00	0.00	0.00
LEGUMINOSAS :										
CENTROSEMA	SP.	-180	0.89	1.67	1.56	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	HEPRID	-191	0.33	1.22	1.11	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	LEUCARP	1087	0.00	0.67	0.78	0.00	0.00	0.00	0.44	0.00
STYLOSANTHES	GUANENS	1280	0.00	1.00	0.78	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	1441	0.00	2.33	0.78	0.22	0.00	0.00	0.56	0.00
STYLOSANTHES	MACROCEP	1582	0.00	2.44	0.89	0.22	0.00	0.00	0.78	0.00
STYLOSANTHES	MACROCEP	1643	0.00	1.78	0.89	0.00	0.00	0.00	0.56	0.00
STYLOSANTHES	CAPITATA	2044	0.00	2.00	0.78	0.22	0.00	0.00	0.56	0.00
STYLOSANTHES	MACROCEP	2133	0.00	2.56	0.89	0.11	0.00	0.00	0.22	0.00
DESODIUM	OVALIFOL	3784	0.00	0.56	1.11	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5062	0.00	1.56	2.22	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5055	0.11	1.56	1.78	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	BRASILIA	5234	0.78	1.78	1.33	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	SP.	5278	0.33	1.56	2.00	0.00	0.00	0.00	0.00	0.00
ZORNIA	BRASILIE	7485	0.33	0.89	0.22	0.00	0.00	0.00	0.00	0.00
ZORNIA	GLASSA	7847	0.44	1.44	1.00	0.00	0.00	0.00	0.00	0.00
PUERARIA	PHASEOLO	9900	1.67	1.56	1.67	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	10280	0.00	2.33	1.00	0.11	0.00	0.00	0.56	0.00
DESODIUM	INCANUM	13332	0.00	1.00	1.22	0.00	0.00	0.00	0.00	0.00

MAXIMA PRECIPITACION			EVALUACION DE INSECTOS					LOCALIDAD: VILLAVICENCIO COLOMBIA			
ECOTIPO			TRIPS AC.	PULGUILLA	COMEDOR	HEMIPTERO	SALIVAZO	BARRENAD.	PERFORAD.	OTRO1	OTRO2
GRAMINEAS :											
BRACHIARIA	BRIZANTH	664	0.25	0.75	0.75	0.00	0.50	0.00	0.00	0.00	0.00
PANICUM	MAXIMUM	673	0.25	0.83	0.67	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	DICTYONE	6133	0.25	0.75	0.67	0.00	0.08	0.00	0.00	0.00	0.00
PANICUM	MAXIMUM	6179	0.25	1.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
ANDROPOGON	GAYANUS	6200	0.25	0.75	0.67	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	BRIZANTH	6294	0.25	0.92	0.83	0.00	0.33	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6369	0.17	0.83	0.83	0.00	0.17	0.00	0.00	0.00	0.00
BRACHIARIA	RUZIZIEN	6419	0.25	1.00	0.75	0.00	0.17	0.00	0.00	0.00	0.00
BRACHIARIA	DECUMHEN	6700	0.17	0.83	0.83	0.00	1.00	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6705	0.25	0.75	0.67	0.00	0.42	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6707	0.25	0.92	0.58	0.00	0.25	0.00	0.00	0.00	0.00
LEGUMINOSAS :											
CENTROSEMA	SP.	-180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	HIBRIDO	-181	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	LEILOCARP	1087	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	GUIANENS	1280	0.00	0.92	0.92	0.00	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	1441	0.00	1.42	1.00	0.00	0.00	0.00	0.17	0.00	0.00
STYLOSANTHES	MACROCEP	1582	0.00	1.11	0.67	0.78	0.11	0.00	0.00	0.00	0.00
STYLOSANTHES	MACROCEP	1643	0.00	1.00	0.86	0.43	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	2044	0.00	1.27	1.00	0.09	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	MACROCEP	2133	0.00	1.67	0.92	0.50	0.00	0.00	0.00	0.00	0.00
DESMODIUM	OVALIFOL	3784	0.00	0.50	2.08	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5062	0.25	1.33	2.25	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5065	0.17	1.08	1.92	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	BRASILIA	5234	0.09	1.33	1.42	0.09	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	SP.	5278	0.17	1.33	2.08	0.00	0.00	0.00	0.00	0.00	0.00
ZORNIA	BRASILIE	7495	0.18	1.09	1.00	0.00	0.00	0.00	0.00	0.00	0.00
ZORNIA	GLABRA	7947	0.00	1.17	1.00	0.00	0.00	0.00	0.00	0.00	0.00
PUERARIA	PHASEOLO	9700	0.36	1.27	2.36	0.00	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	10280	0.00	1.58	1.08	0.42	0.00	0.00	0.00	0.00	0.00
DESMODIUM	INCANUM	13032	0.29	0.71	0.71	0.00	0.00	0.00	0.00	0.00	0.00

OTRO

## EVALUACION : 1

MINIMA PRECIPITACION

EVALUACION DE ENFERMEDADES

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	HOJA						TALLO			OTROS				
	NEGRA	MARRON	NARAN.	CREMA	MARRP.	NARAP.	NEGRA	MARRON	CHANC.	MARCN.	CLCRO.	I.PEG.	I.G.PG	
GRAMINEAS :														
BRACHIARIA	BRIZANTH	654	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PANICUM	MAXIMUM	673	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	DICTYONE	6133	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PANICUM	MAXIMUM	6179	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANDROPOGON	GAYANUS	6200	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	BRIZANTH	6294	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6369	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	RUZIZIEN	6419	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	DECUMBEN	6700	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6705	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6707	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEGUMINOSAS :														
CENTROSEMA	SP.	-190	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	HIBRIDO	-191	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	LLIOCARP	1087	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	GUIANENS	1290	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	1441	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	MACROCEP	1582	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	MACROCEP	1643	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	2044	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	MACROCEP	2133	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DESMODIUM	OVALIFOL	3784	0.6	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5062	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5065	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	BHASILIA	5234	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	SP.	5278	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ZORNIA	BRASILIE	7485	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ZORNIA	GLABRA	7847	0.0	0.7	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUERARIA	PHASELO	9900	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	10280	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DESMODIUM	INCANUM	13032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

879





## EVALUACION : 2

MINIMA PRECIPITACION

PRODUCCION DE MATERIA SECA KG/HA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN
GRAMINEAS :	MEDIA=545	D.E.=183	MEDIA=458	D.E.=268	MEDIA=767	D.E.=204	MEDIA=1048	D.E.=356
BRACHIARIA BRIZANTH	664	56	50	D	266	D	693	RC
PANICUM MAXIMUM	573	819	486	CBD	1201	BA	1315	RA
BRACHIARIA DICTYONE	6133	726	677	B	802	C	1256	BA
PANICUM MAXIMUM	6179		0	D				
ANDROPOGON GAYANUS	6200	1013	1410	A	1502	A	1420	A
BRACHIARIA BRIZANTH	6294	732	545	CBD	1249	BA	1648	A
BRACHIARIA HUMIDICO	6369	634	491	CBD	711	C	1351	BA
BRACHIARIA RUZIZIEN	6419	0	16	D	0	D	0	D
BRACHIARIA DECUMBEN	6700	136	70	CD	280	D	476	DC
BRACHIARIA HUMIDICO	6705	425	360	CBD	726	C	1005	BAC
BRACHIARIA HUMIDICO	6707	936	628	CB	938	BC	1315	RA
LEGUMINOSAS :	MEDIA=127	D.E.=86	MEDIA=154	D.E.=160	MEDIA=219	D.E.=244	MEDIA=162	D.E.=196
STYLOSANTHES GUIANENS	1280	203	320	A	1034	A	320	RA
STYLOSANTHES CAPITATA	1441	23	0	A	0	B	0	B
STYLOSANTHES CAPITATA	2044	0	0	A				
DESMODIUM OVALIFOL	3784	343	304	A	126	B	0	B
CENTROSEMA MACROCAR	5052	85	90	A	120	B	275	BA
CENTROSEMA MACROCAR	5065	90	136	A	153	B	290	BA
CENTROSEMA BRASILIA	5234	160	190	A	205	B	145	BA
CENTROSEMA SP.	5278	55	155	A	205	B	467	A
ZORNIA BRASILIE	7425	150	250	A	150	B	210	RA
ZORNIA GLABRA	7847	470	320	A				
PUERRARIA PHASEOLO	9900	0	36	A	16	B	0	R
STYLOSANTHES CAPITATA	10280	30	0	A	66	B	0	R

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MAXIMA PRECIPITACION

PRODUCCION DE MATERIA SECA KG/HA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN	MS,KG/HA	DUNCAN
GRAMINEAS :	MEDIA=240	D.E.=67	MEDIA=800	D.E.=178	MEDIA=1030	D.E.=284	MEDIA=1608	D.E.=435
BRACHIARIA BRIZANTH	664	206	436	EF	390	ED	901	DC
PANICUM MAXIMUM	573	311	709	ED	929	BDC	1112	DC
BRACHIARIA DICTYONE	6133	263	1133	BAC	1255	BAC	2625	A
ANDROPOGON GAYANUS	6200	226	805	DC	1274	BAC	1642	BC
BRACHIARIA BRIZANTH	6294	225	922	BDC	924	BDC	1707	BC
BRACHIARIA HUMIDICO	6369	353	1313	A	1239	BAC	2145	RA
BRACHIARIA RUZIZIEN	6419	20	195	F	321	E	496	D
BRACHIARIA DECUMBEN	6700	100	459	EF	676	EDC	1191	DC
BRACHIARIA HUMIDICO	6705	283	869	BDC	1319	BA	2188	RA
BRACHIARIA HUMIDICO	6707	413	1162	BA	1545	A	2077	BA
LEGUMINOSAS :	MEDIA=82	D.E.=78	MEDIA=277	D.E.=201	MEDIA=480	D.E.=316	MEDIA=429	D.E.=244
STYLOSANTHES GUIANENS	1280	65	255	BA			150	DC
STYLOSANTHES CAPITATA	1441	0					0	D
STYLOSANTHES CAPITATA	2044	100						
STYLOSANTHES MACROCEP	2133						0	D
DESMODIUM OVALIFOL	3784	180	658	A	972	A	1000	A
CENTROSEMA MACROCAR	5052	103	236	BA	381	BA	642	BAC
CENTROSEMA MACROCAR	5065	120	226	BA	435	BA	630	BAC
CENTROSEMA BRASILIA	5234	13	70	B	176	B	110	DC
CENTROSEMA SP.	5278	136	432	BA	772	BA	834	A
ZORNIA BRASILIE	7425				260	B	120	DC
ZORNIA GLABRA	7847		280	BA			741	BA
PUERRARIA PHASEOLO	9900	36	56	B	293	B	203	BDC
STYLOSANTHES CAPITATA	10280	0					75	DC

## EVALUACION : 2

MINIMA PRECIPITACION

PORCENTAJE DE COBERTURA

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN
GRAMINEAS :	MEDIA=70	D.E.=15	MEDIA=46	D.E.=12	MEDIA=66	D.E.=10	MEDIA=73	D.E.=16
BRACHIARIA BRIZANTH 664	73	BAC	33	DC	56	DC	76	BA
PANICUM MAXIMUM 673	50	C	30	D	52	DC	70	BA
BRACHIARIA DICTYONE 6133	81	BA	60	BA	70	BC	86	A
PANICUM MAXIMUM 6179			15	ED				
ANDROPOGON GAYANUS 6200	48	C	40	BDC	46	D	53	B
BRACHIARIA BRIZANTH 6294	66	BC	56	BAC	70	BC	70	BA
BRACHIARIA HUMIDICO 6369	96	BA	73	A	100	A	100	A
BRACHIARIA RUZIZIEN 6419	6	D	3	E	2	E	7	C
BRACHIARIA DECUMBEN 6700	88	BA	38	BDC	83	BA	75	BA
BRACHIARIA HUMIDICO 6705	96	BA	71	A	94	A	93	A
BRACHIARIA HUMIDICO 6707	100	A	68	A	90	A	98	A
LEGUMINOSAS :	MEDIA=24	D.E.=11	MEDIA=20	D.E.=12	MEDIA=24	D.E.=8	MEDIA=31	D.E.=17
STYLOSANTHES GUIANENS 1250	24	CB	21	B	26	CB	31	RDAC
STYLOSANTHES CAPITATA 1441	21	CB	10	B	22	CB	20	BDC
STYLOSANTHES CAPITATA 2044	15	C	10	B				
DESMODIUM OVALIFOL 3794	100	A	66	A	81	A	70	A
CENTROSEMA MACROCAR 5362	14	C	10	B	10	CD	50	BAC
CENTROSEMA MACROCAR 5065	15	C	15	B	10	CD	38	RDAC
CENTROSEMA BRASILIA 5234	15	C	22	B	32	B	35	RDAC
CENTROSEMA SP. 5278	19	C	22	B	22	CB	55	BA
ZORNIA BRASILIE 7485	7	C	13	B	9	CD	15	DC
ZORNIA GLABRA 7347	45	B	25	B				
PUERRARIA PHASEOLO 9200	5	C	6	B	1	D	3	D
STYLOSANTHES CAPITATA 10250	12	C	10	B	23	CB	18	BDC

MAXIMA PRECIPITACION

PORCENTAJE DE COBERTURA

LOCALIDAD: VILLAVICENCIO COLOMBIA

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ECOTIPO	3 SEMANAS		6 SEMANAS		9 SEMANAS		12 SEMANAS	
	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN	COBERTU.	DUNCAN
GRAMINEAS :	MEDIA=54	D.E.=17	MEDIA=66	D.E.=16	MEDIA=69	D.E.=14	MEDIA=72	D.E.=9
BRACHIARIA BRIZANTH 664	53	BAC	50	B	75	BAC	70	BCC
PANICUM MAXIMUM 673	41	BDC	66	BA	50	C	53	D
BRACHIARIA DICTYONE 6133	70	BA	80	BA	81	BA	83	BA
ANDROPOGON GAYANUS 6200	33	DC	63	BA	61	DC	62	DC
BRACHIARIA BRIZANTH 6294	51	BAC	66	BA	76	BAC	80	BAC
BRACHIARIA HUMIDICO 6369	60	A	93	A	96	A	95	A
BRACHIARIA RUZIZIEN 6419	12	D	11	C	13	D	26	F
BRACHIARIA DECUMBEN 6700	46	BAC	55	B	70	BAC	83	BA
BRACHIARIA HUMIDICO 6705	78	A	88	A	91	BA	91	A
BRACHIARIA HUMIDICO 6707	76	A	86	A	83	BA	83	BA
LEGUMINOSAS :	MEDIA=24	D.E.=11	MEDIA=32	D.E.=16	MEDIA=32	D.E.=20	MEDIA=35	D.E.=15
STYLOSANTHES GUIANENS 1250	11	CB	30	BDC			12	DC
STYLOSANTHES CAPITATA 1441	20	CB					3	D
STYLOSANTHES CAPITATA 2044	10	C						
STYLOSANTHES MACROCAR 2133							5	D
DESMODIUM OVALIFOL 3794	76	A	73	A	60	A	83	A
CENTROSEMA MACROCAR 5062	20	CB	28	BDC	36	BA	35	DC
CENTROSEMA MACROCAR 5065	25	CB	20	DC	30	BA	50	BAC
CENTROSEMA BRASILIA 5234	11	CB	8	D	11	B	20	DC
CENTROSEMA SP. 5278	38	B	51	BAC	50	BA	76	BA
ZORNIA BRASILIE 7485					12	B	10	D
ZORNIA GLABRA 7347			60	BA			40	BDC
PUERRARIA PHASEOLO 9200	6	C	8	D	18	BA	15	DC
STYLOSANTHES CAPITATA 10250	6	C					5	D

## EVALUACION : 2

MINIMA PRECIPITACION			EVALUACION DE INSECTOS				LOCALIDAD:VILLAVICENCIO COLOMBIA				
ECOTIPO			TRIPS AC.	PULGUILLA	COMEDOR	HEMIPTERO	SALIVAZO	BARRENAD.	PERFORAD.	OTRO1	OTRO2
GRAMINEAS :											
BRACHIARIA	BRIZANTH	664	0.00	1.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00
PANICUM	MAXIMUM	673	0.00	1.33	1.17	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	DICTYONE	6133	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
PANICUM	MAXIMUM	6179	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
ANDROPOGON	GAYANUS	6200	0.00	1.75	0.92	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	BRIZANTH	6294	0.00	1.63	1.33	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6369	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	RUZIZITN	6419	0.00	1.00	1.17	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	DECUMBEN	6700	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6705	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
BRACHIARIA	HUMIDICO	6707	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
LEGUMINOSAS :											
STYLOSANTHES	GUIANENS	1280	0.08	0.75	0.67	0.08	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	1441	0.00	2.50	0.88	0.63	0.00	0.00	0.38	0.00	0.00
STYLOSANTHES	CAPITATA	2044	0.50	3.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00
DESMODIUM	OVALIFOL	3784	0.25	1.00	1.93	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5062	0.25	2.25	3.13	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5065	0.42	2.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	BRASILIA	5234	0.75	2.88	1.50	0.13	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	SP.	5278	0.63	3.00	3.13	0.00	0.00	0.00	0.00	0.00	0.00
ZORNIA	BRASILIE	7485	0.25	1.17	0.83	0.08	0.00	0.00	0.00	0.00	0.00
ZORNIA	GLABRA	7847	0.00	0.50	1.00	0.00	0.00	0.00	0.00	0.00	0.00
PUERARIA	PHASEOLO	9900	0.50	0.58	1.25	0.00	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	10280	0.25	2.33	0.83	0.17	0.00	0.17	0.42	0.00	0.00

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MAXIMA PRECIPITACION			EVALUACION DE INSECTOS				LOCALIDAD:VILLAVICENCIO COLOMBIA				
ECOTIPO			TRIPS AC.	PULGUILLA	COMEDOR	HEMIPTERO	SALIVAZO	BARRENAD.	PERFORAD.	OTRO1	OTRO2
GRAMINEAS :											
BRACHIARIA	BRIZANTH	664	0.00	1.00	1.00	0.00	0.50	0.00	0.00	0.30	0.00
PANICUM	MAXIMUM	673	0.00	1.00	1.00	0.00	0.25	0.00	0.00	0.50	0.00
BRACHIARIA	DICTYONE	6133	0.00	1.00	1.00	0.00	0.42	0.00	0.00	0.67	0.00
ANDROPOGON	GAYANUS	6200	0.00	1.00	1.00	0.00	0.08	0.00	0.00	0.08	0.00
BRACHIARIA	BRIZANTH	6294	0.00	1.00	1.00	0.00	0.50	0.00	0.00	0.17	0.00
BRACHIARIA	HUMIDICO	6369	0.00	0.83	0.83	0.00	0.67	0.00	0.00	0.25	0.00
BRACHIARIA	RUZIZITN	6419	0.00	1.00	1.00	0.00	1.00	0.00	0.00	0.17	0.00
BRACHIARIA	DECUMBEN	6700	0.00	1.00	1.00	0.08	0.58	0.00	0.00	0.17	0.00
BRACHIARIA	HUMIDICO	6705	0.00	1.00	1.00	0.00	0.58	0.00	0.00	0.67	0.00
BRACHIARIA	HUMIDICO	6707	0.00	1.00	1.00	0.00	0.42	0.00	0.00	0.25	0.00
LEGUMINOSAS :											
STYLOSANTHES	GUIANENS	1280	0.14	1.29	1.00	0.00	0.00	0.00	0.00	0.29	0.00
STYLOSANTHES	CAPITATA	1441	0.33	1.00	1.00	0.00	0.00	1.33	0.00	0.67	0.00
STYLOSANTHES	CAPITATA	2044	0.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	MACROCEP	2133	0.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
DESMODIUM	OVALIFOL	3784	0.33	0.83	1.42	0.00	0.00	0.00	0.00	0.83	1.00
CENTROSEMA	MACROCAR	5062	0.93	1.33	2.50	0.17	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	MACROCAR	5065	0.75	1.50	2.08	0.17	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	BRASILIA	5234	0.91	1.55	1.09	0.09	0.00	0.00	0.00	0.00	0.00
CENTROSEMA	SP.	5278	0.67	1.58	1.67	0.08	0.00	0.00	0.00	0.00	0.00
ZORNIA	BRASILIE	7485	0.50	0.75	0.75	0.00	0.00	0.00	0.00	0.25	0.00
ZORNIA	GLABRA	7847	0.00	2.50	1.00	0.00	0.00	0.00	0.00	1.00	0.00
PUERARIA	PHASEOLO	9900	0.58	0.92	1.33	0.08	0.00	0.00	0.00	0.00	0.00
STYLOSANTHES	CAPITATA	10280	0.00	1.25	1.25	0.00	0.00	0.00	0.00	0.25	0.50

EVALUACION : 2

MINIMA PRECIPITACION REGRESIONES DE PRODUCCION MEDIA DE MATERIA SECA VS. EDAD LOCALIDAD:VILLAVICENCIO COLOMBIA

ECOTIPO	LINEAL			CUADRATICO					
	R CUADRADO	CONSTA. LINEAL	NIVEL DE SIGNIFI.	R CUADRADO	CONSTA. LINEAL	NIVEL DE SIGNIFI.	CUADRAT. SIGNIFI.	NIVEL DE SIGNIFI.	
GRAMINEAS :									
BRACHIARIA BRIZANTH 664	0.77	41.4	0.001	0.90	-29.3	0.160	7.08	0.001	
PANICUM MAXIMUM 673	0.79	118.4	0.001	0.80	167.0	0.060	-4.85	0.540	
BRACHIARIA DICTYONE 6133	0.91	108.7	0.001	0.92	156.8	0.001	-5.11	0.220	
ANDROPOGON GAYANUS 6200	0.84	155.8	0.001	0.93	362.3	0.001	-20.65	0.001	
BRACHIARIA BRIZANTH 6294	0.90	135.2	0.001	0.90	136.1	0.040	-0.10	0.690	
BRACHIARIA HUMIDICO 6359	0.92	101.7	0.001	0.92	96.3	0.030	0.54	0.890	
BRACHIARIA RUZIZIFN 6419	0.04	0.4	0.490	0.16	2.8	0.220	-0.24	0.270	
BRACHIARIA DECUMIFN 6700	0.72	33.6	0.001	0.75	7.5	0.750	2.61	0.320	
BRACHIARIA HUMIDICO 6705	0.92	81.6	0.001	0.92	81.5	0.030	0.01	1.000	
BRACHIARIA HUMIDICO 6707	0.85	113.0	0.001	0.87	179.5	0.010	-8.57	0.270	
LEGUMINOSAS :									
STYLOSANTHES GUIANENS 1280	0.50	58.1	0.010	0.56	139.2	0.080	-8.11	0.270	
STYLOSANTHES CAPITATA 1441	0.02	0.3	0.740	0.15	3.4	0.350	-0.31	0.370	
STYLOSANTHES CAPITATA 2044	0.0	0.0	0.001	0.0	0.0	0.001	0.0	0.001	
DESODIUM OVALIFOL 3784	0.25	14.8	0.080	0.88	108.3	0.001	-9.35	0.001	
CENTROSEMA MACROCAR 5062	0.90	19.2	0.001	0.92	9.9	0.360	0.94	0.360	
CENTROSEMA MACROCAR 5065	0.68	22.0	0.001	0.68	19.6	0.340	0.24	0.900	
CENTROSEMA BRASILIA 5234	0.65	19.3	0.010	0.80	56.8	0.020	-3.75	0.080	
CENTROSEMA SP. 5278	0.69	31.7	0.010	0.72	4.8	0.890	2.69	0.440	
ZORNIA BRASILIE 7485	0.70	21.6	0.001	0.80	54.2	0.010	-3.26	0.050	
ZORNIA GLABRA 7647	0.76	74.0	0.320	1.00	260.0	0.001	-34.44	0.001	
PUERARIA PHASEOLO 9900	0.14	1.4	0.210	0.31	7.5	0.090	-0.62	0.140	
STYLOSANTHES CAPITATA 10280	0.11	2.6	0.270	0.17	9.9	0.310	-0.73	0.430	

MAXIMA PRECIPITACION REGRESIONES DE PRODUCCION MEDIA DE MATERIA SECA VS. EDAD LOCALIDAD:VILLAVICENCIO COLOMBIA

ECOTIPO	LINEAL			CUADRATICO					
	R CUADRADO	CONSTA. LINEAL	NIVEL DE SIGNIFI.	R CUADRADO	CONSTA. LINEAL	NIVEL DE SIGNIFI.	CUADRAT. SIGNIFI.	NIVEL DE SIGNIFI.	
GRAMINEAS :									
BRACHIARIA BRIZANTH 664	0.96	70.5	0.001	0.96	53.8	0.020	1.15	0.560	
PANICUM MAXIMUM 673	0.95	99.6	0.001	0.96	130.9	0.001	-3.13	0.280	
BRACHIARIA DICTYONE 6133	0.94	186.7	0.001	0.96	73.3	0.170	11.34	0.040	
ANDROPOGON GAYANUS 6200	0.84	135.9	0.001	0.84	112.9	0.180	2.30	0.770	
BRACHIARIA BRIZANTH 6294	0.96	129.7	0.001	0.96	95.1	0.020	3.46	0.310	
BRACHIARIA HUMIDICO 6359	0.95	169.8	0.001	0.95	161.4	0.010	0.84	0.870	
BRACHIARIA RUZIZIFN 6419	0.37	37.3	0.001	0.89	14.2	0.430	2.31	0.200	
BRACHIARIA DECUMIFN 6700	0.86	85.8	0.001	0.88	30.7	0.490	5.61	0.210	
BRACHIARIA HUMIDICO 6705	0.97	163.7	0.001	0.99	81.1	0.010	8.26	0.010	
BRACHIARIA HUMIDICO 6707	0.98	174.2	0.001	0.98	178.0	0.001	-0.37	0.900	
LEGUMINOSAS :									
STYLOSANTHES GUIANENS 1280	0.65	18.8	0.020	0.81	50.4	0.020	-3.08	0.090	
STYLOSANTHES CAPITATA 1441	0.0	0.0	0.001	0.0	0.0	0.001	0.0	0.001	
DESODIUM OVALIFOL 3784	0.96	93.5	0.001	0.96	119.3	0.001	-2.59	0.310	
CENTROSEMA MACROCAR 5062	0.82	47.7	0.001	0.84	23.0	0.430	2.47	0.380	
CENTROSEMA MACROCAR 5065	0.82	48.9	0.001	0.83	29.5	0.340	1.94	0.510	
CENTROSEMA BRASILIA 5234	0.77	13.2	0.001	0.78	16.7	0.100	-0.36	0.710	
CENTROSEMA SP. 5278	0.72	74.0	0.001	0.72	75.0	0.240	-0.10	0.990	
ZORNIA BRASILIE 7485	0.44	16.8	0.220	0.57	85.6	0.440	-6.30	0.520	
ZORNIA GLABRA 7647	0.99	58.7	0.070	1.00	31.6	0.001	2.51	0.001	
PUERARIA PHASEOLO 9900	0.74	20.5	0.001	0.74	19.8	0.240	0.07	0.970	
STYLOSANTHES CAPITATA 10280	0.47	5.9	0.200	0.50	-2.1	0.940	-0.69	0.760	

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## EVALUACION : 2

MINIMA PRECIPITACION

EVALUACION DE ENFERMEDADES

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	HOJA							TALLO			OTROS		
	NEGRA	MARRON	NARAN.	CREMA	MARRP.	NARAP.	NEGRA	MARRON	CHANC.	MARRN.	CLORO.	I.PFG.	I.G.PG
GRAMINEAS :													
BRACHIARIA	BRIZANTH	664	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0
PANICUM	MAXIMUM	673	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
BRACHIARIA	DICTYONE	6133	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PANICUM	MAXIMUM	6179	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANDROPOGON	GAYANUS	6200	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	BRIZANTH	6294	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6369	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	RUZIZIEN	6419	0.0	0.2	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
BRACHIARIA	DECUMBEN	6700	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6705	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6707	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEGUMINOSAS :													
STYLOSANTHES	GUIANENS	1280	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	1441	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
STYLOSANTHES	CAPITATA	2044	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DESMODIUM	OVALIFOL	3784	0.3	0.4	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5062	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5065	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	BRASILIA	5234	0.8	0.7	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
CENTROSEMA	SP.	5278	1.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ZORNIA	BRASILIE	7435	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ZORNIA	GLABRA	7847	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PUERARIA	PHASEOLD	9900	0.0	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
STYLOSANTHES	CAPITATA	10290	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0

MAXIMA PRECIPITACION

EVALUACION DE ENFERMEDADES

LOCALIDAD: VILLAVICENCIO COLOMBIA

ECOTIPO	HOJA							TALLO			OTROS		
	NEGRA	MARRON	NARAN.	CREMA	MARRP.	NARAP.	NEGRA	MARRON	CHANC.	MARRN.	CLORO.	I.PFG.	I.G.PG
GRAMINEAS :													
BRACHIARIA	BRIZANTH	664	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PANICUM	MAXIMUM	673	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
BRACHIARIA	DICTYONE	6133	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ANDROPOGON	GAYANUS	6200	0.0	0.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	BRIZANTH	6294	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6359	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	RUZIZIEN	6419	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
BRACHIARIA	DECUMBEN	6700	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6705	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BRACHIARIA	HUMIDICO	6707	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LEGUMINOSAS :													
STYLOSANTHES	GUIANENS	1280	1.0	1.0	0.0	0.0	0.0	1.4	0.2	0.0	0.0	0.2	0.0
STYLOSANTHES	CAPITATA	1441	1.0	0.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	2044	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	MACROCEP	2133	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DESMODIUM	OVALIFOL	3784	0.5	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5062	0.5	0.8	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
CENTROSEMA	MACROCAR	5065	0.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CENTROSEMA	BRASILIA	5234	0.0	1.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
CENTROSEMA	SP.	5278	0.3	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ZORNIA	BRASILIE	7435	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
ZORNIA	GLABRA	7847	1.0	1.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
PUERARIA	PHASEOLO	9900	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STYLOSANTHES	CAPITATA	10290	1.0	1.0	0.0	0.0	0.0	0.5	0.2	0.0	0.0	0.0	0.0

CONDICIONES CLIMATICAS DURANTE LOS PERIODOS DE EVALUACION  
 LOCALIDAD: VILLAVICENCIO COLOMBIA  
 PERIODO DE ESTABLECIMIENTO

BL17

SEMANA	TEMPERATURA			PRECIPI- TACION (MM)	DIAS DE LLUVIA
	MAXIMA (C)	MINIMA (C)	MEDIA (C)		
1	29	20	24	53	7
2	29	20	25	65	6
3	31	20	25	70	4
4	31	21	26	135	4
5	28	20	24	131	5
6	30	21	25	34	6
7	29	20	25	76	2
8	29	19	24	226	6
9	29	20	25	17	5
10	30	20	25	98	3
11	30	21	25	122	5
12	29	21	25	188	7
13	29	20	25	62	3
14	29	21	25	93	6
15	29	21	25	104	3

0-4 SEMANAS :	374	21
0-9 SEMANAS :	858	45
0-12 SEMANAS :	1266	61

CONDICIONES CLIMATICAS DURANTE LOS PERIODOS DE EVALUACION  
 LOCALIDAD: VILLAVICENCIO COLOMBIA  
 PRECIPITACION MINIMA EVALUACION 1

BL17

SEMANA	TEMPERATURA			PRECIPI- TACION (MM)	DIAS DE LLUVIA
	MAXIMA (C)	MINIMA (C)	MEDIA (C)		
1	29	21	25	77	4
2	29	21	25	19	4
3	30	22	26	0	0
4	30	22	25	1	1
5	31	22	26	16	5
6	30	21	25	121	4
7	29	21	25	38	2
8	29	20	25	11	1
9	30	21	26	32	1
10	27	20	23	73	2

0-3 SEMANAS :	98	8
0-6 SEMANAS :	236	18
0-9 SEMANAS :	317	22
0-12 SEMANAS :	390	24