

Quality Indicators of Maize Hybrids

OSEVA, a. s. 2006

Locality			Chorušice	KřeCHOř	KřeCHOř	Měcholupy u Žatce		Černíkov	Třebostice	Staré Sedliště				Chomutice	Bystřice
Sampling Date			12. 9.	18. 9.	18. 9.	21. 9.	21. 9.	17. 9.	28. 9.	3. 10.	3. 10.	3. 10.	3. 10.	11. 9.	14. 9.
Hybrid			CENZUS	CENTIS 350	CESLAV	CELIO 250	CEFIN	SAN	CEMET 260	CEMILK 222	CEKLAD 235	CESTER 230	CELUX 225	CELIDO	MOSCHUS
Dry Matter	Whole Plant	%	32,87	32,37	34,31	44,99	38,17	27,71	28,50	28,31	29,59	28,64	27,98	32,09	34,55
	Ear	%	50,08	52,69	56,27	66,62	59,74	46,95	43,25	58,58	56,32	55,39	60,37	55,44	59,54
	Green Matter	%	22,20	23,59	21,13	28,47	25,06	19,97	22,91	19,18	20,49	19,95	19,48	19,85	22,37
Dry Matter Yield	Whole Plant	t/ha	17,87	17,55	21,03	20,09	17,89	25,03	27,32	17,13	24,25	23,42	20,02	21,40	25,82
	Ear	t/ha	10,41	8,60	12,85	12,90	10,59	12,14	11,36	8,19	11,73	11,05	8,98	12,71	14,52
Content in Green Matter	Fiber	%	29,88	26,20	30,88	32,09	30,24	27,84	26,02	27,68	27,37	26,61	26,39	29,58	28,49
	NDF	%	60,24	54,04	61,64	67,19	65,60	62,71	55,85	58,91	60,37	64,48	55,03	64,19	58,89
Content in Whole Plant	Fiber	%	19,43	19,21	19,25	19,21	19,45	20,16	20,17	20,18	19,92	19,73	19,92	19,14	19,14
	NDF	%	41,68	41,38	41,12	42,24	43,54	46,01	44,38	44,29	44,85	45,78	43,04	42,87	41,57
Starch Content of Dry Matter of Whole Plant		%	34,89	29,41	36,81	38,52	35,50	29,14	24,99	28,71	29,03	28,33	26,92	35,64	33,85
Dry Matter Proportion of Ears from Dry Matter of WP		%	58,15	49,02	61,35	64,20	59,17	48,56	41,64	47,86	48,39	47,22	44,87	59,39	56,42
Digestibility of Green Matter	Digestibility Fiber	%	51,63	41,13	47,73	38,21	37,24	44,69	46,61	43,92	38,50	36,64	30,80	46,59	31,93
	Digestibility NDF	%	44,64	40,94	43,45	34,93	35,24	43,82	45,04	41,70	36,47	38,12	27,62	42,90	28,76
	DOM	%	55,03	58,46	53,91	43,71	44,96	52,54	63,27	57,01	53,92	53,79	52,73	52,72	46,71
Digestibility in Whole Plant	Digestibility Fiber	%	58,21	50,01	56,29	51,05	49,24	52,04	52,39	51,39	47,68	46,27	41,40	55,33	45,39
	Digestibility NDF	%	54,82	50,81	54,68	50,05	48,63	51,64	51,65	50,53	46,74	47,41	40,15	53,51	44,62
	DOM	%	68,70	68,38	68,96	66,08	64,89	65,16	69,53	67,34	65,86	65,49	64,38	68,00	64,81
Yield	Digestibility Fiber	t/ha	3,84	3,71	3,91	2,75	2,69	5,77	7,42	3,93	4,81	4,53	3,40	4,04	3,62
	Digestibility NDF	t/ha	3,33	3,71	3,55	2,53	2,54	5,65	7,16	3,76	4,59	4,70	3,06	3,72	3,26
	DOM	t/ha	4,11	5,26	4,42	3,15	3,25	6,78	10,08	5,11	6,76	6,65	5,80	4,58	5,33
NEL	actual	MJ/kg	6,47	6,29	6,43	6,31	6,27	6,31	6,31	6,29	6,22	6,19	6,08	6,41	6,20
	tab		6,71	6,71	6,71	6,71	6,71	6,70	6,70	6,70	6,70	6,71	6,70	6,71	6,71
Yield	NEL	1000 MJ/ha	115,56	110,47	135,18	126,82	112,02	157,88	172,43	107,76	150,86	144,94	121,66	137,13	160,05
Dry Matter Yield of Grain + Digestibility Fiber of Green Matter		t/ha	14,26	12,30	16,76	15,65	13,29	17,91	18,77	12,12	16,54	15,58	12,38	16,75	18,14
Dry Matter Yield of Grain + Digestibility NDF of Green Matter		t/ha	13,74	12,30	16,40	15,42	13,13	17,79	18,52	11,95	16,32	15,75	12,04	16,44	17,79

WP – Whole Plant, **NDF** – Neutral Detergent Fiber, **DOM** – Digestibility Organic Matter, **NEL** – Net Energy of Lactation, **Green Matter** – Plant without Ear

Digestibility of Organic Matter is determined by method in vitro – nylon bag

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Locality			Městečko Trnávka	Zálší		Hostovice	Dub nad Moravou		Unčovice	Velké Pavlovice				
Sampling Date			14. 9.	19. 9.	19. 9.	21. 9.	14. 9.	22. 9.	18. 9.	7. 9.	7. 9.	14. 9.	14. 9.	14. 9.
Hybrid			CEMAX 245	ALOMBO	BALARIUS	CEVAHA	CELIVE	CEPLAN	CEFRAN	CENZUS	CESLAV	CEFRAN	CEPLAN	CEVAHA
Dry Matter	Whole Plant	%	31,87	33,71	33,87	35,75	41,64	42,87	40,37	33,88	34,96	36,49	37,50	35,66
	Ear	%	52,81	57,75	57,63	52,60	59,57	60,66	63,86	53,47	55,18	59,06	58,60	59,36
	Green Matter	%	22,32	22,47	21,80	25,28	24,63	27,88	22,45	22,49	22,44	22,10	22,84	23,14
Dry Matter Yield	Whole Plant	t/ha	21,16	21,33	20,26	21,48	16,33	18,71	23,63	18,43	20,56	20,43	19,17	25,89
	Ear	t/ha	10,98	11,59	11,55	12,14	11,37	12,14	16,16	10,70	12,39	12,86	12,29	14,91
Content in Green Matter	Fiber	%	25,10	26,18	25,25	29,23	32,67	29,49	30,95	29,47	29,91	29,98	29,22	26,70
	NDF	%	58,19	59,13	56,15	66,70	67,27	64,12	63,56	63,76	65,39	65,29	59,17	59,17
Content in Whole Plant	Fiber	%	18,34	18,47	17,64	19,51	18,25	18,15	18,01	19,34	19,18	18,65	18,17	18,24
	NDF	%	42,75	42,45	40,22	45,05	40,12	40,90	39,46	43,19	43,05	41,99	39,38	41,40
Starch Content of Dry Matter of Whole Plant		%	31,11	32,68	34,35	33,88	41,81	38,91	40,98	34,79	36,15	37,81	38,46	34,53
Dry Matter Proportion of Ears from Dry Matter of WP		%	51,85	54,46	57,25	56,47	69,69	64,85	68,30	57,98	60,24	63,01	64,10	57,55
Digestibility of Green Matter	Digestibility Fiber	%	39,76	44,06	45,20	42,04	42,41	38,36	31,79	41,04	36,07	34,00	32,07	36,26
	Digestibility NDF	%	38,60	39,72	39,56	39,35	38,33	33,98	28,01	38,25	37,02	30,97	24,44	34,89
	DOM	%	53,32	55,83	58,12	49,63	46,05	45,65	43,21	48,96	46,60	43,01	42,79	50,44
Digestibility in Whole Plant	Digestibility Fiber	%	50,08	53,15	54,91	51,86	55,10	51,94	49,15	51,38	49,07	48,60	48,15	49,03
	Digestibility NDF	%	49,39	50,89	51,94	50,32	54,01	50,24	48,46	50,23	50,06	47,52	45,41	48,71
	DOM	%	66,36	68,10	69,74	65,96	68,63	66,97	67,30	66,08	65,82	65,42	65,73	66,59
Yield	Digestibility Fiber	t/ha	4,05	4,26	3,95	3,91	2,12	2,52	2,37	3,12	2,96	2,56	2,21	4,00
	Digestibility NDF	t/ha	3,94	3,89	3,49	3,66	1,92	2,23	2,07	2,92	3,02	2,33	1,69	3,84
	DOM	t/ha	5,44	5,42	5,08	4,63	2,29	3,00	3,23	3,74	3,80	3,25	2,95	5,55
NEL	actual	MJ/kg	6,32	6,38	6,45	6,32	6,43	6,37	6,31	6,32	6,27	6,28	6,35	6,30
	tab		6,72	6,72	6,73	6,71	6,72	6,72	6,73	6,71	6,71	6,72	6,72	6,72
Yield	NEL	1000 MJ/ha	133,82	136,02	130,60	153,80	105,00	119,19	149,23	116,25	126,82	128,33	121,73	163,25
Dry Matter Yield of Grain + Digestibility Fiber of Green Matter		t/ha	15,03	15,85	15,50	16,06	13,49	14,66	18,53	13,81	15,65	15,42	14,50	18,91
Dry Matter Yield of Grain + Digestibility NDF of Green Matter		t/ha	14,92	15,48	15,04	15,80	13,29	14,37	12,23	13,62	15,42	15,19	13,97	18,76

WP – Whole Plant, NDF – Neutral Detergent Fiber, DOM – Digestibility Organic Matter, NEL – Net Energy of Lactation, Green Matter – Plant without Ear

Digestibility of Organic Matter is determined by method in vitro – nylon bag