



Essais variétaux de soja 2016 Sortenversuche Soja 2016

Auteurs

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Soja - *Soja*

> *Changins*
> *Goumoëns*
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Collaborations: Cécile Brabant, Carine Oberson et d'autres collaborateurs (IPV) pour les analyses qualitatives de grains, Claude-Alain Betrix (IPV) pour l'évaluation de la tolérance au froid des variétés, Rainer Messmer et son équipe (DSP Delley) pour leur participation dans les essais.

Lexique

Description

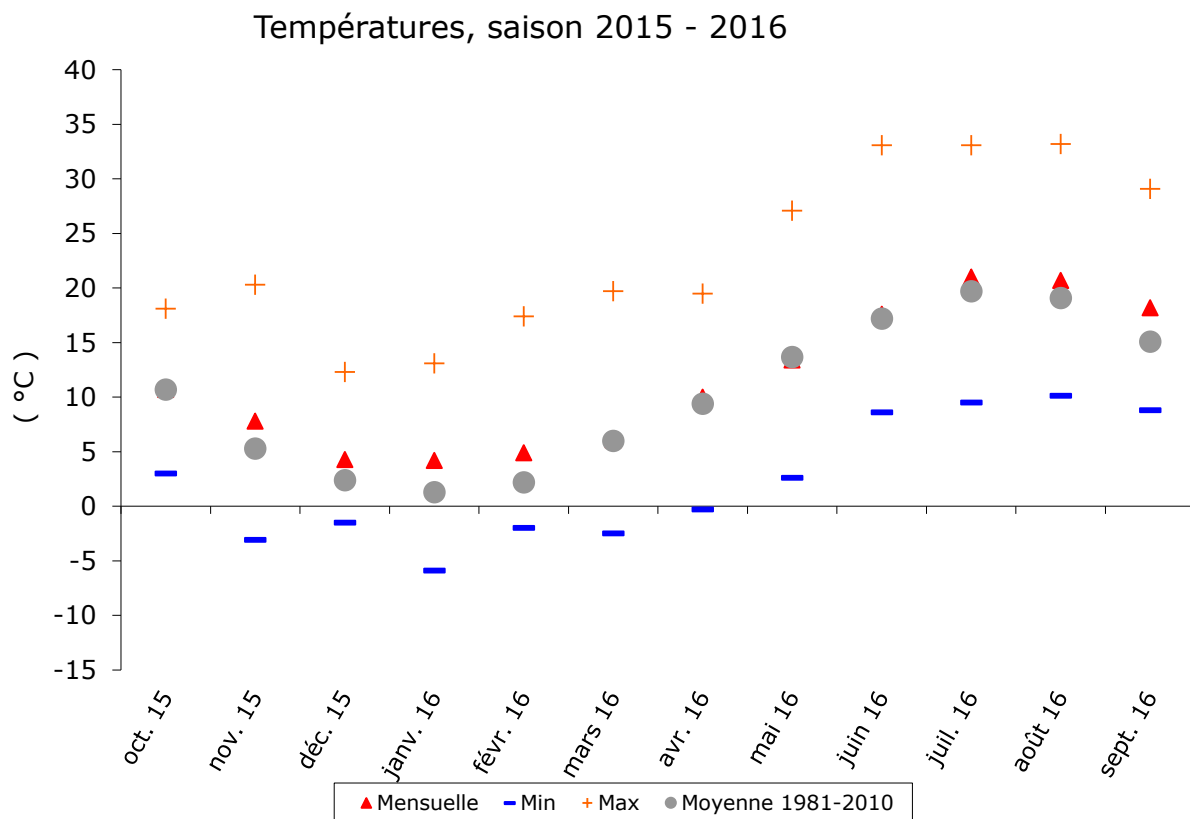
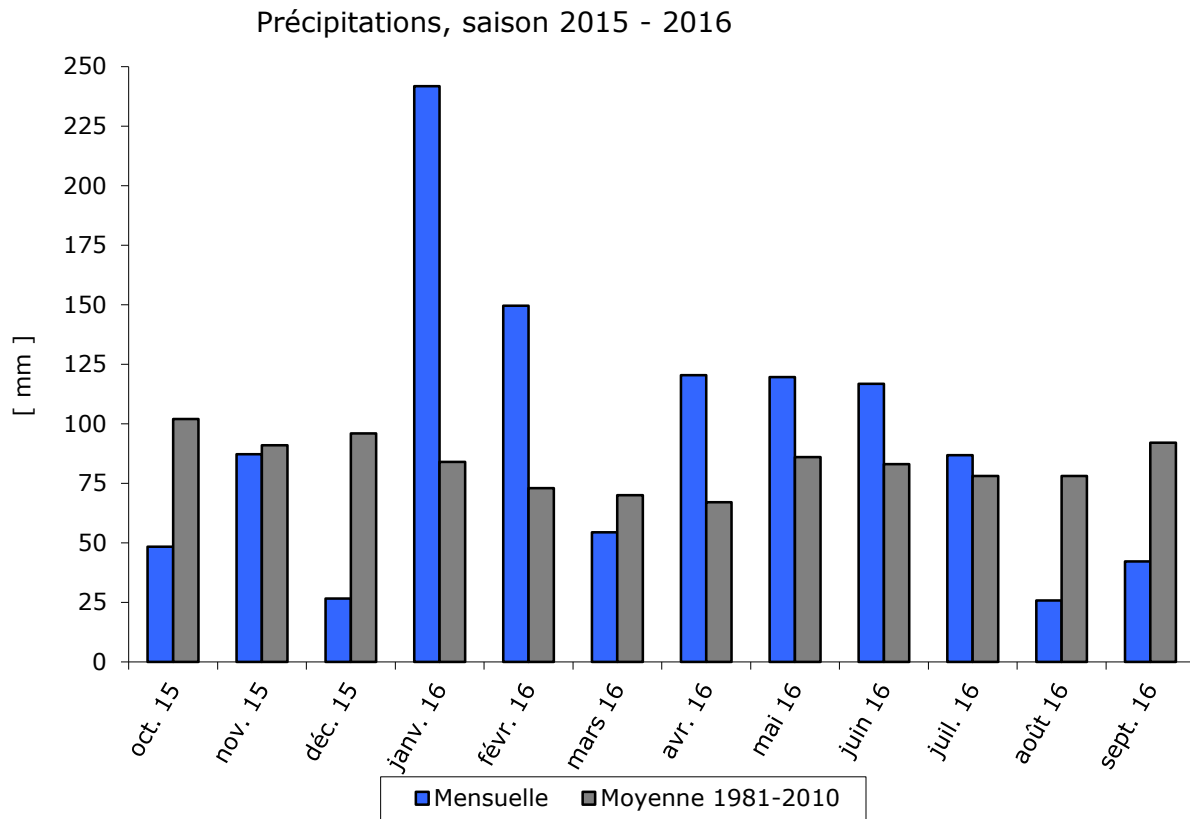
Floraison	précocité à la floraison nombre de nœuds portant une fleur à une date donnée
Hauteur	hauteur du couvert végétal (cm)
Humidité	humidité du grain à la récolte (%)
PMG	poids de mille grains (g)
Protéines	teneur en protéines (%ms)
Protéines val.rel.	teneur en protéines en valeur relative par rapport aux témoins (%)
Rendement	rendement en grains à humidité standard (dt/ha)
Rendement val.rel.	rendement en valeur relative par rapport aux témoins (%)
Verse	résistance à l'affaissement; note de 1 à 9 (1 = dressé)

Lexikon

Beschreibung

Blüte	Frühreife zum Blühzeitpunkt Anzahl Knoten mit einer Blüte zu einem bestimmten Datum
Höhe	Bestandeshöhe (cm)
Feuchtigkeit	Feuchtigkeit der Körner bei der Ernte (%)
TKG	Tausendkorngewicht (g)
Protein	Proteingehalt (%)
Relativer Proteingehalt	relativer Proteingehalt im Vergleich zu den Standardsorten (%)
Ertrag	Körnerertrag bei standard Feuchtigkeit (dt/ha)
Relativer Ertrag	relativer Ertrag im Vergleich zu den Standardsorten
Standfestigkeit	Standfestigkeit, Note 1 bis 9 (1 = nicht gelagert, 9 = totale Lagerung)

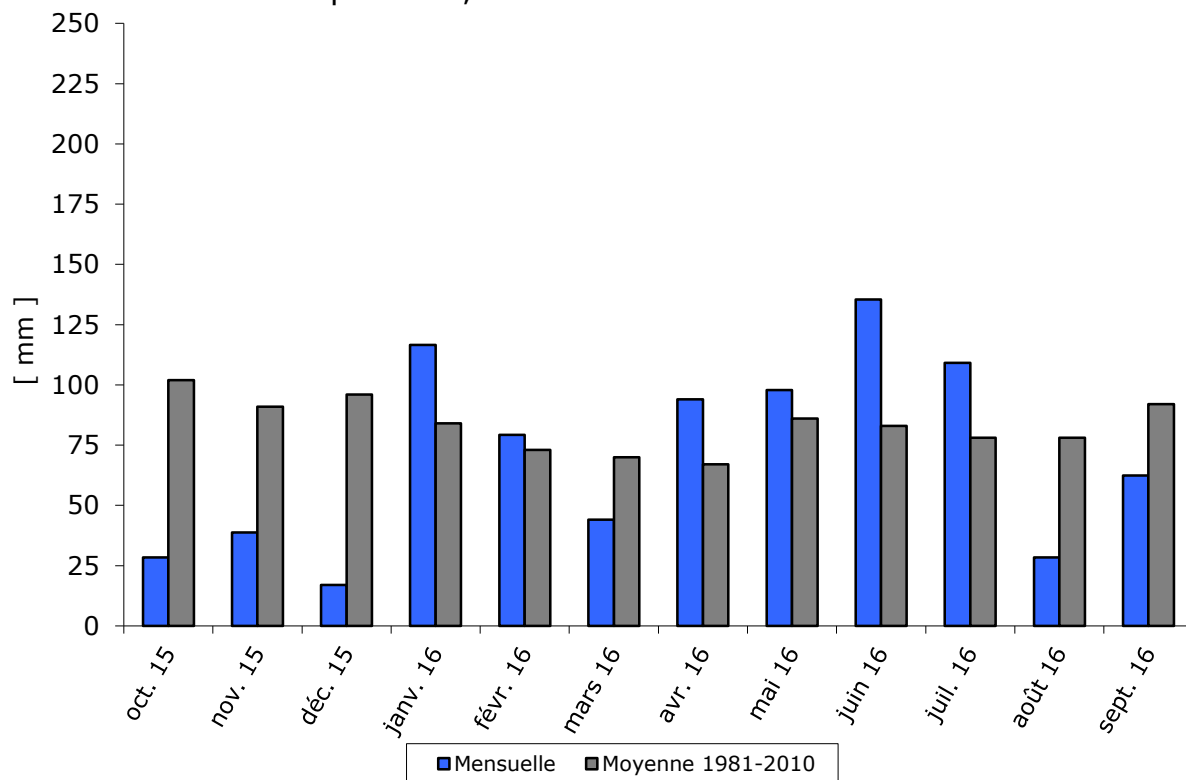
Météo selon les lieux d'essai en 2016 - Changins, Alt. : 430 m



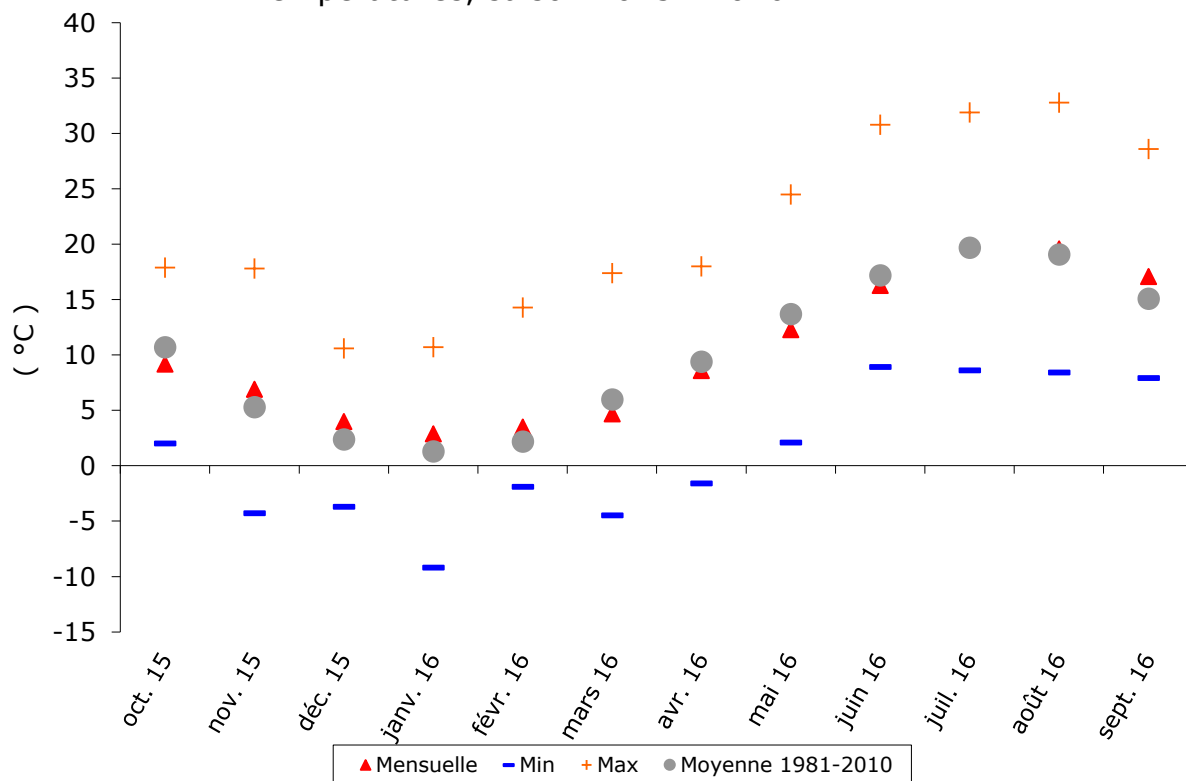
Météo selon les lieux d'essai en 2016 - Goumoëns, Alt. : 640 m

(Les moyennes de 30 ans sont celles de Changins)

Précipitations, saison 2015 - 2016



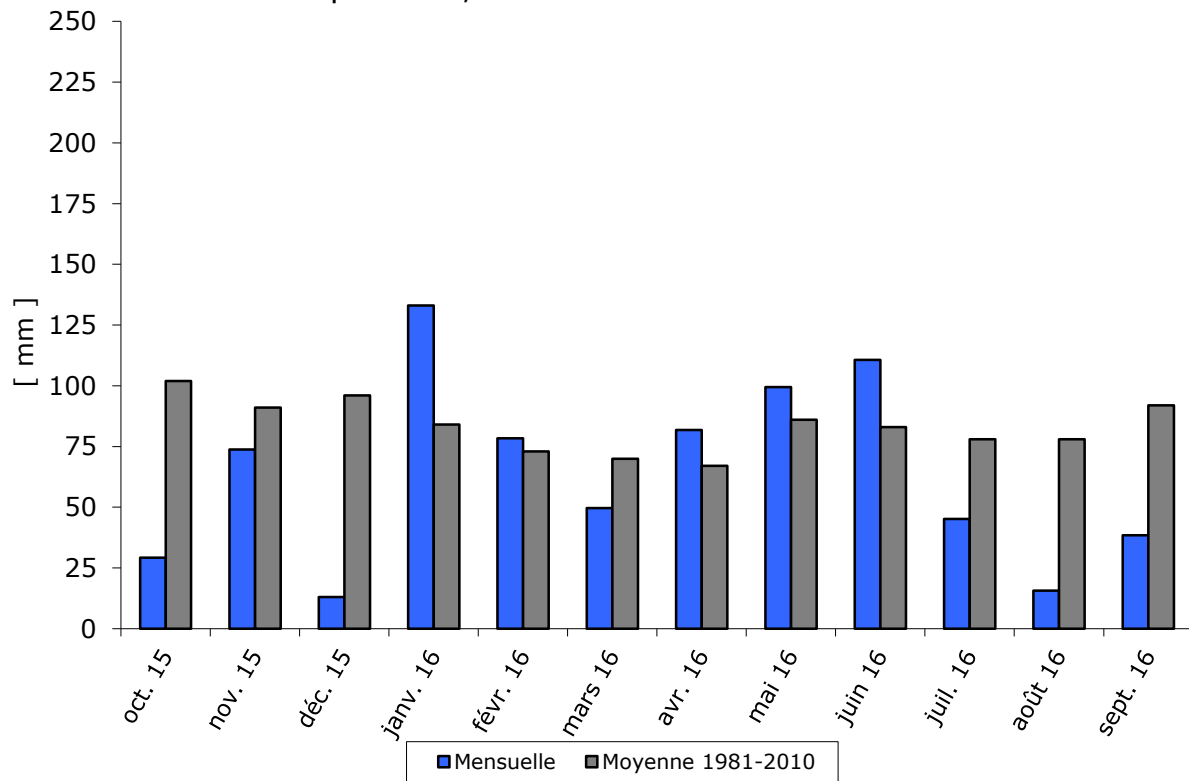
Températures, saison 2015 - 2016



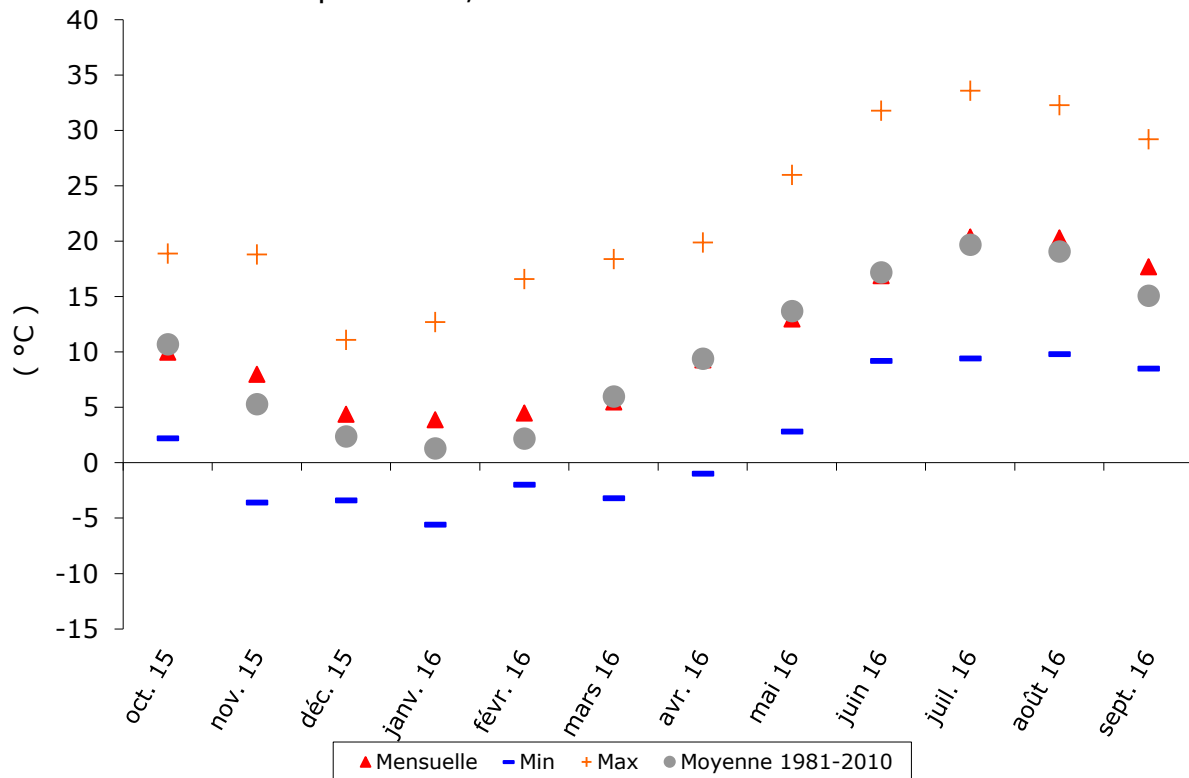
Météo selon les lieux d'essai en 2016 - Giez, Alt. : 580 m

(Les moyennes de 30 ans sont celles de Changins; les données annuelles sont celles de Champagne)

Précipitations, saison 2015 - 2016



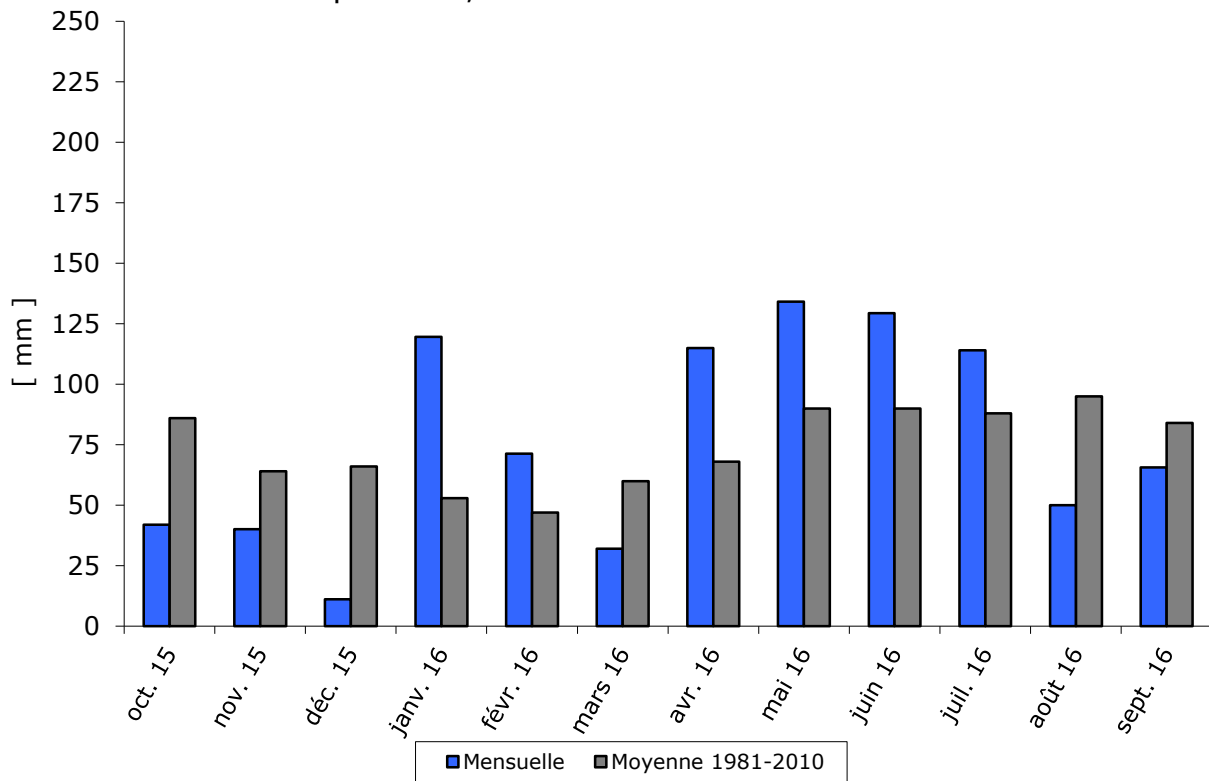
Températures, saison 2015 - 2016



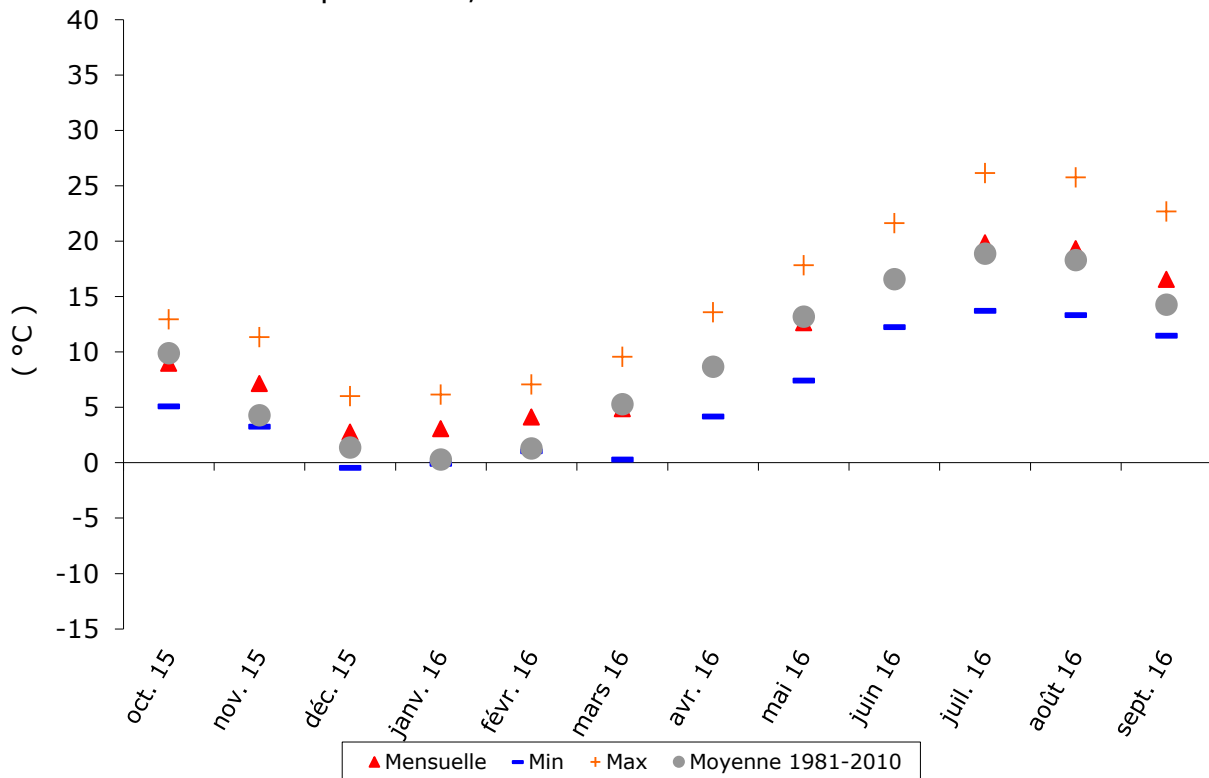
Météo selon les lieux d'essai en 2016 - Delley, Alt. : 500 m

(Les moyennes de 30 ans sont celles de Payerne)

Précipitations, saison 2015 - 2016



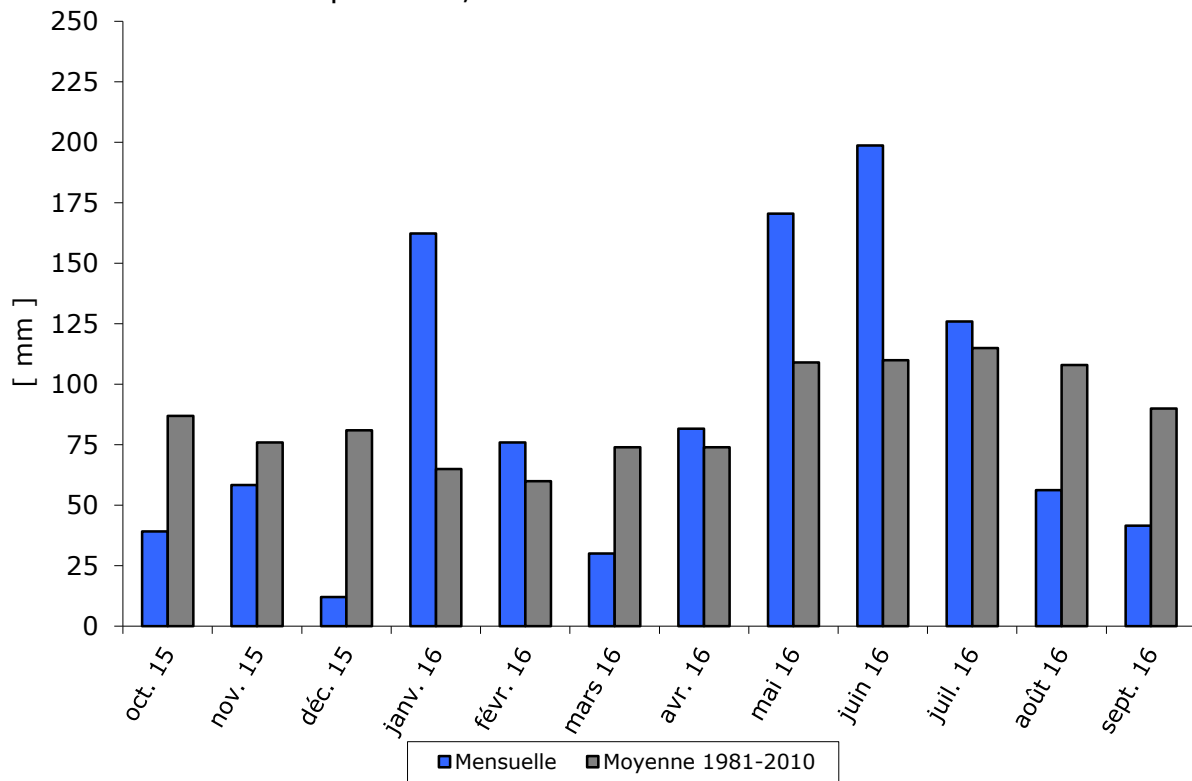
Températures, saison 2015 - 2016



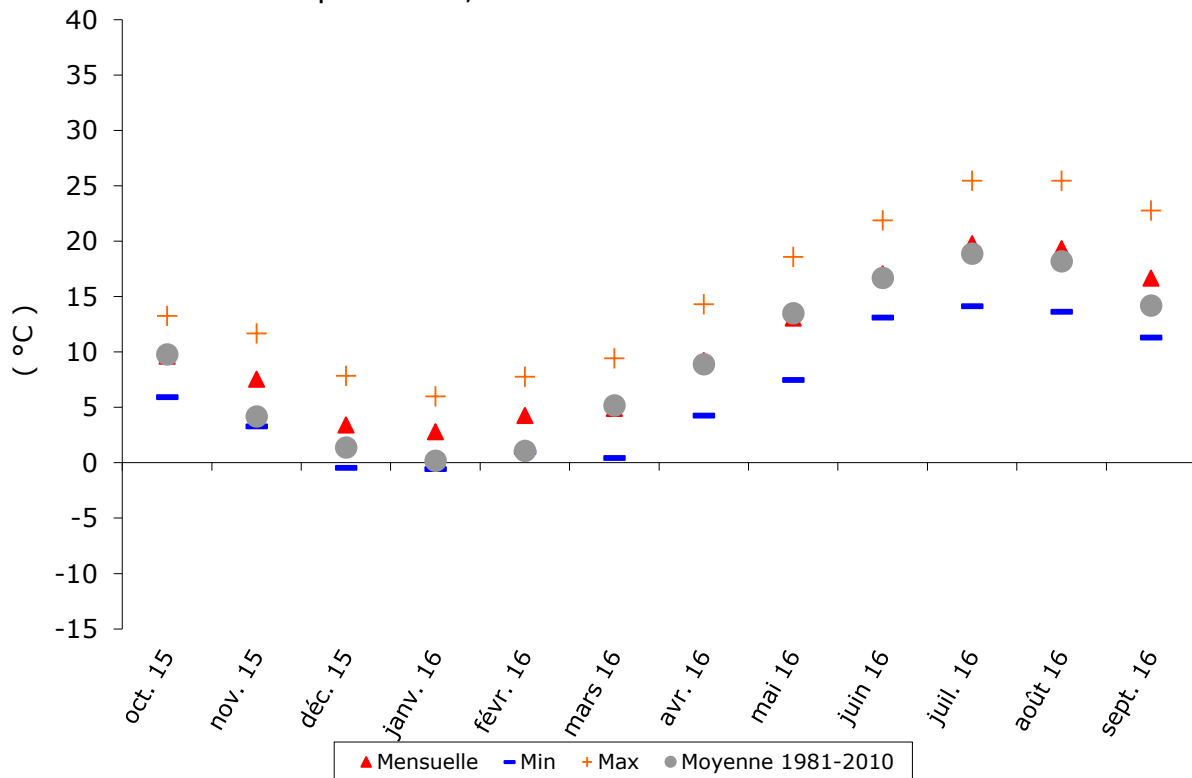
Météo selon les lieux d'essai en 2016 - Reckenholz, Alt. : 420 m

(Les moyennes de 30 ans sont celles de Zürich-Kloten)

Précipitations, saison 2015 - 2016



Températures, saison 2015 - 2016



Données expérimentales / Versuchangaben

Lieu <i>Standort</i>	Changins VD - 1260	Goumoens VD - 1376	Giez VD - 1429	Delley FR - 1567	Reckenholz ZH - 8046
Altitude <i>Höhe ü. M.</i>	420 m	609 m	600m	500 m	440 m
Date de semis <i>Saat Datum</i>	04.05.16	06.05.16	06.05.16	09.05.16	05.05.16
Date de récolte <i>Ernte Datum</i>	14.09.16	28.09.16	22.09.16	23.09.16	30.09.16
Densité de semis <i>Saatdichte</i>	55 grains/m ²	55 grains/m ²	55 grains/m ²	55 grains/m ²	55 grains/m ²
Surface parcelles <i>Parzellenfläche</i>	11,65 m ²	11,65 m ²	11,65 m ²	10,00 m ²	12.30 m ²
Surface récoltée <i>Geerntete Oberfläche</i>	10,05 m ²	10,05 m ²	10,05 m ²	8.1 m ²	selon mesures individuelles
Interlignes <i>Reihenabstand</i>	50 cm	50 cm	50 cm	50 cm	25 cm
Précédent <i>Vorfrucht</i>	Orge d'automne	Blé de printemps	Betteraves	Blé d'automne	Pommes de terre / Phacelia
Inoculation <i>Impfung</i>	Oui	Oui	Oui	Oui	Oui
Dispositif <i>Dispositif</i>	Blocs randomisés	Blocs randomisés	Blocs randomisés	Blocs randomisés	Blocs randomisés
Répétitions <i>Wiederholungen</i>	4	4	4	4	4
Désherbage pré-levée <i>Vorauflauf Herbizid</i>	Frontier X2 : 1.2 l/ha Bolero : 0.8 l/ha	Frontier X2 : 1.2 l/ha Bolero : 0.8 l/ha	Afalon : 1.3 kg/ha Dual Gold : 2 l/ha	Frontier : 1 l/ha Molipan Pro : 0.3 kg/ha	Frontier X2 : 1.2 l/ha Bolero : 0.8 l/ha
Désherbage post-levée <i>Nachlauf Herbizid</i>	-	-	-	Bolero : 0.8 l/ha Basagran SG : 0.8 kg/ha	-
Répulsif lièvre	-	cloture	cloture	-	-
Insecticides <i>Insektizid</i>	-	-	-	-	anti-limaces 7 kg/ha
Sarclage <i>Hacken</i>	oui	oui	oui	oui	non
Irrigation <i>Bewässerung</i>	oui	non	non	oui	non
Remarques <i>Bemerkungen</i>	parcelle 30	parcelle 10	-	répétition 3 et 4 semé sur 2 rangs à la place de 3	parcelle 106

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Variétés / Sorten 2016

Réseau sur les sites Changins, Goumoens, Giez, Delley et Reckenholz

Noms Namen	N° Nr.	Précocité Frühreife	Obtenteur Züchter	Statut Statut	Début des tests Beginn der testen	LR Suisse ESL Schweiz
Maple Arrow		00	CFAIHPD	std précocité 00	1979	---
Merlin		000	Saatbau Linz	std/Früh 000	2004	2007
Gallec		000	Agroscope/DSP	std/Früh 000	1997	2000
Lissabon		000/00	Saatbau Linz	std/Früh 000/00	2010	2012
Opaline		00	Agroscope/DSP	std/Früh 00	2006	2009
Tourmaline	22161	000/00	Agroscope/DSP	std/Früh 000/00	2010	2013
Aveline		000/00	Agroscope/DSP	comp	2002	2005
Obélix	22172	000/00	Agroscope/DSP	comp	2011	2014
Protéix		00	Agroscope/DSP	comp	2006	2009
Falbala	22144	00	Agroscope/DSP	comp	2011	2014
Tequila	22197	00	Agroscope/DSP	comp	2013	2016
Galice	22177	000/00	Agroscope/DSP	comp	2013	2016
Toutatis	22232	000/00	Agroscope/DSP	5 ^{ème} année LR	2012	---
Abelina		000	Saatbau Linz	3 ^{ème} année LR	2014	---
Amadea		00	Saatbau Linz	2 ^{ème} année LR	2015	---
Regina		00	Saatbau Linz	1 ^{ère} année LR	2016	---
Amandine	22138		Agroscope/DSP	3 ^{ème} année LR	2016	---
	22321	000/00	Agroscope/DSP	2 ^{ème} année homologation	2015	---
	22412	000/00	Agroscope/DSP	1 ^{ère} année homologation	2016	---
	22436		Agroscope/DSP	préliminaire		---
Tiguan		0000/000	Agroscope/DSP	2 ^{ème} année LR	2015	---

Précocité

2009 - 2016											Jours	Groupe	Jours
Nom variété	réf.	2009	2010	2011	2012	2013	2014	2015	2016	Moy	référence	Précocité	anciens
Merlin		-7.5	-5.9	-6.2	-9.8	-8.3	-7.6	-6.9	-5.0	-7.2	-7	000	-8
Gallec	-6	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6.0	-6	000	-6
Lissabon			-0.7	-2.3	-1.1	-3.7	0.0	-2.2	-0.3	-1.5	-2	000/00	-2
Opaline		0.7	-0.2	2.7	0.7	0.0	1.7	-1.6	0.1	0.5	1	00	1
Maple Arrow	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	00	0
Tourmaline			-0.7	-1.4	0.4	0.3	-1.3	0.2	-0.7	-0.5	0	00	0
Aveline		-4.3	-1.7	-3.9	-3.7	-3.7	-2.9	-5.9	-3.0	-3.6	-4	000/00	-4
Amandine		-4.8	-3.1	-5.6	-6.0	-3.3				-1.8	-4	000/00	-4
Protéix		-1.3	2.6	2.3	2.1	1.0	2.0	0.6	1.9	1.4	1	00	1
Falbala				-0.2	3.2	4.0	3.1	1.0	3.6	2.5	2	00	2
Obélix				-3.3	-4.2	-6.0	-5.9	-3.2	-3.7	-4.4	-4	000/00	-5
Tequila					4.5	2.2	1.2	3.5	4.2	3.1	3	00	3
Toutatis					-4.4	-5.8	-4.4	-4.3	-3.7	-4.5	-5	000/00	-5
Galice						-1.5	-2.1	0.9	0.2	-0.6	-1	000/00	-1
Abelina							-6.5	-6.3	-5.0	-5.9	-6	000	-6
Amadea								1.0	3.9	2.5	1	00	1
22321								-2.3	-1.0	-1.7	-2	000/00	-2
22412								-2.4	-1.5	-2.0	-2	000/00	-2
Tiguan								-10.4	-9.0	-9.7	-10	0000/000	-10
Regina									0.3	0.3	0	00	
22436									-2.1	-2.1	-2	000/00	

2009	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-10.5	-5.8	-8.1	-7.5
Gallec	-6	-9.5	-3.5	-6.5	-6.0
Aveline		-6.8	-2.5	-4.6	-4.3
Maple Arrow	0	0.0	0.0	0.0	0.0
Tolimán		2.3	0.5	1.4	1.3
Amphor		0.3	-0.3	0.0	0.0
London		2.0	6.3	4.1	3.8
Cataline		4.0	1.5	2.8	2.5
Protéix		-3.8	1.0	-1.4	-1.3
Opaline		1.0	0.5	0.8	0.7
Pollux		-4.0	2.5	-0.8	-0.7
Amandine		-8.0	-2.5	-5.3	-4.8

2010	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-8.8	-3.5	-5.8	-6.0
Gallec	-6	-8.0	-5.5	-4.8	-6.1
Aveline		-1.3	-3.3	-0.5	-1.7
Maple Arrow	0	0.0	0.0	0.0	0.0
Amphor		-1.0	0.3	2.8	0.7
London		4.3	1.0	1.0	2.1
Protéix		4.0	2.5	1.5	2.7
Opaline		0.0	-1.5	1.0	-0.2
Pollux		4.0	1.0	1.5	2.2
Amandine		-2.8	-3.8	-2.8	-3.1
Tourmaline		-2	-1	0.8	-0.7
Protibus		-7.8	-6.5	-4.5	-6.3
Lissabon		-1	1	-2	-0.7

2011	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin			-8.0	-8.0	-6.2
Gallec	-6		-7.8	-7.8	-6.0
Aveline			-5.0	-5.0	-3.9
Maple Arrow	0		0.0	0.0	0.0
Amphor			0.5	0.5	0.4
London			3.3	3.3	2.5
Protéix			3.0	3.0	2.3
Opaline			3.5	3.5	2.7
Pollux			0.5	0.5	0.4
Amandine			-7.25	-7.25	-5.6
Tourmaline			-1.75	-1.75	-1.4
Protibus			-4.5	-4.5	-3.5
Lissabon			-3	-3	-2.3
Falbala			-0.3	-0.3	-0.2
Obélix			-4.3	-4.3	-3.3

2012	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-10.8	-9.3	-10.0	-9.8
Gallec	-6	-5.3	-7.0	-6.1	-6.0
Aveline		-4.3	-3.3	-3.8	-3.7
Maple Arrow	0	0.0	0.0	0.0	0.0
Amphor		0.0	1.8	0.9	0.9
London		0.5	5.5	3.0	2.9
Protéix		0.3	4.0	2.1	2.1
Opaline		1.3	0.3	0.8	0.7
Pollux		2.3	-0.5	0.9	0.9
Amandine		-6.0	-6.3	-6.1	-6.0
Tourmaline		1.0	-0.3	0.4	0.4
Protibus		-2.3	-5.0	-3.6	-3.6
Lissabon		-0.8	-1.5	-1.1	-1.1
Falbala		3.8	2.8	3.3	3.2
Obélix		-4.0	-4.5	-4.3	-4.2
22164		4.8	6.3	5.5	5.4
Coraline		5.8	5.3	5.5	5.4
22232		-4.3	-4.8	-4.5	-4.4
Tequila		5.0	4.3	4.6	4.5
Malaga		1.8	1.0	1.4	1.3

2013	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-5.5	-7.0	-6.3	-8.3
Gallec	-6	-4.5	-4.5	-4.5	-6.0
Aveline		-2.0	-3.5	-2.8	-3.7
Lissabon		-3.8	-1.8	-2.8	-3.7
Maple Arrow	0	0.0	0.0	0.0	0.0
Opaline		-0.3	0.3	0.0	0.0
Amphor		-2.8	-0.8	-1.8	-2.3
Protéix		0.8	0.8	0.8	1.0
London		1.5	1.5	1.5	2.0
Amandine		-1.8	-3.3	-2.5	-3.3
Tourmaline		1.5	-1.0	0.3	0.3
Falbala		2.0	4.0	3.0	4.0
Obélix		-4.5	-4.5	-4.5	-6.0
22164		1.8	2.5	2.1	2.8
Coraline		0.5	0.8	0.6	0.8
22232		-4.3	-4.5	-4.4	-5.8
Tequila		2.8	0.5	1.6	2.2
Malaga		-2.8	-0.8	-1.8	-2.3
22177		-1.3	-1.0	-1.1	-1.5
22216		-3.5	-3.5	-3.5	-4.7

2014	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-12.0	-11.3	-15.0	-12.8
Gallec	-6	-10.5	-7.3	-12.5	-10.1
Aveline		-7.8	-1.0	-5.8	-4.8
Lissabon		0.0	0.0	0.0	0.0
Maple Arrow	0	0.0	0.0	0.0	0.0
Opaline		2.0	6.8	0.0	2.9
Amphor		-0.5	2.0	0.3	0.6
Protéix		0.8	5.5	4.0	3.4
Tourmaline		-5.0	3.8	-5.3	-2.2
Falbala		2.8	7.8	5.0	5.2
Obélix		-8.5	-8.5	-12.8	-9.9
22164		3.0	6.0	1.8	3.6
Coraline		1.0	6.5	4.0	3.8
22232		-8.5	-4.5	-9.0	-7.3
Tequila		-0.3	3.3	3.0	2.0
Malaga		3.0	4.5	4.3	3.9
22177		-7.0	1.8	-5.5	-3.6
22267		4.0	8.8	5.8	6.2
Abelina		-11.0	-8.3	-13.8	-11.0
SY Livius		3.3	5.3	6.8	5.1

2015	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-8.8	-9.0	-5.8	-7.8
Gallec	-6	-6.9	-8.5	-5.0	-6.8
Aveline		-5.5	-7.8	-6.8	-6.7
Lissabon		-4.6	-3.5	0.5	-2.5
Maple Arrow	0	0.0	0.0	0.0	0.0
Obélix		-5.3	-5.0	-0.8	-3.7
Tourmaline		-1.0	1.3	0.5	0.3
Opaline		-2.9	-0.3	-2.3	-1.8
Amphor		-1.8	-1.0	1.3	-0.5
Protéix		0.3	-0.5	2.3	0.7
Falbala		1.8	-1.0	2.8	1.2
Toutatis		-7.0	-4.8	-3.0	-4.9
Coraline		1.0	-1.0	2.5	0.8
Tequila		4.0	3.3	4.5	3.9
Galice		0.5	-0.5	3.0	1.0
Abelina		-7.8	-7.5	-6.3	-7.2
SY Livius		1.8	1.3	5.5	2.8
Amadea		-0.8	0.3	3.8	1.1
22321		-3.3	-3.0	-1.5	-2.6
22412		-1.5	-5.5	-1.3	-2.8
Tiguan		-12.0	-10.8	-12.5	-11.8

2016	Changins	Goumoens	Giez	MOYENNE	Précocité
Merlin		-5.0	-8.8	-2.0	-5.3
Gallec	-6	-6.0	-9.8	-3.0	-6.3
Lissabon		1.3	-2.0	-0.3	-0.3
Opaline		-1.3	2.8	-1.3	0.1
Maple Arrow	0	0.0	0.0	0.0	0.0
Tourmaline		-2.8	-0.3	0.8	-0.8
Aveline		-6.0	-0.5	-3.0	-3.2
Obélix		-4.5	-4.5	-2.5	-3.8
Protéix		1.5	4.0	0.5	2.0
Falbala		0.8	5.0	5.5	3.8
Toutatis		-3.8	-5.8	-2.0	-3.8
Tequila		2.0	4.5	6.8	4.4
Galice		1.3	-0.5	0.0	0.3
Abelina		-3.0	-9.3	-3.5	-5.3
Amadea		2.3	4.8	5.3	4.1
Regina		1.5	-2.0	1.5	0.3
Amandine		-1.5	-4.3	0.3	-1.8
22321		-2.5	-1.3	0.8	-1.0
22412		0.3	-4.8	-0.3	-1.6
22436		-0.5	-5.3	-0.8	-2.2
Tiguan		-11.5	-11.0	-5.5	-9.3

Résultats Soja 2016

Rendement à 11% H2O, dt/ha

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	38.7	39.2	30.2	42.8	50.1	40.2
Merlin	000	34.3	34.8	25.1	37.4	46.8	35.7
Gallec	000	35.6	35.6	26.7	37.2	48.1	36.7
Lissabon	000/00	34.2	38.5	26.9	30.9	42.0	34.5
Opaline	00	40.1	42.5	29.7	45.4	55.8	42.7
Tourmaline	00	39.9	37.3	27.7	41.6	50.1	39.3
Aveline	000/00	30.9	35.4	25.5	39.2	46.3	35.5
Obélix	000/00	38.7	38.7	26.2	40.7	47.2	38.3
Protéix	00	37.4	36.7	30.8	41.8	52.4	39.8
Falbala	00	37.7	34.9	27.2	37.9	48.8	37.3
Toutatis	000/00	36.9	39.0	25.8	43.1	52.2	39.4
Tequila	00	31.6	35.7	29.4	38.8	54.4	38.0
Galice	000/00	38.5	41.6	29.9	39.7	53.0	40.6
Abelina	000	32.1	38.4	23.4	38.1	46.6	35.7
Amadea	00	30.0	34.2	28.3	37.2	49.3	35.8
Regina	00	28.4	33.1	24.2	39.4	46.2	34.3
Amandine	000/00	39.5	36.0	26.0	35.5	51.1	37.6
22321	000/00	40.8	43.3	28.7	43.9	50.6	41.4
22412	000/00	39.2	37.6	31.6	40.9	50.7	40.0
22436	000/00	38.1	36.0	28.2	40.2	48.1	38.1
Tiguan	0000/000	29.3	37.5	25.5	30.1	33.6	31.2
Témoins 000		35.0	35.2	25.9	37.3	47.4	36.2
Témoins 000/00		34.2	38.5	26.9	30.9	42.0	34.5
Témoins 00		40.0	39.9	28.7	43.5	53.0	41.0
Moy. témoins		36.4	37.9	27.2	37.3	47.5	37.2

Rendement en valeurs relatives à la durée de végétation, %

Variété	Jours	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	0.0	106.4	104.6	106.2	106.4	98.6	104.5
Merlin	-7.0	99.2	92.9	98.3	101.9	105.4	99.5
Gallec	-6.0	102.2	95.1	103.1	99.9	106.2	101.3
Lissabon	-2.0	95.4	103.0	97.6	78.8	85.7	92.1
Opaline	1.0	109.5	113.7	103.2	111.4	108.0	109.2
Tourmaline	0.0	109.7	99.7	97.5	103.4	98.8	101.8
Aveline	-4.0	87.5	94.7	95.2	102.6	98.2	95.6
Obélix	-4.0	109.5	103.3	98.0	106.5	100.2	103.5
Protéix	1.0	102.0	98.0	106.9	102.6	101.4	102.2
Falbala	2.0	102.3	93.2	93.2	91.7	92.8	94.6
Toutatis	-5.0	105.2	104.2	97.9	114.2	112.9	106.9
Tequila	3.0	85.0	95.4	99.2	92.8	101.7	94.8
Galice	-1.0	106.6	111.3	106.9	99.9	106.2	106.2
Abelina	-6.0	92.1	102.6	90.1	102.2	102.9	98.0
Amadea	1.0	81.8	91.4	98.3	91.2	95.4	91.6
Regina	0.0	78.1	88.6	85.4	97.9	90.9	88.2
Amandine	-4.0	111.6	96.1	97.3	92.7	108.4	101.2
22321	-2.0	113.6	115.6	104.0	111.9	103.4	109.7
22412	-2.0	109.2	100.5	114.7	104.1	103.7	106.4
22436	-2.0	106.2	96.1	102.2	102.3	98.2	101.0
Tiguan	-10.0	86.7	100.1	105.0	85.5	80.7	91.6
Témoins 000		100.7	94.0	100.7	100.9	105.8	100.4
Témoins 000/00		95.4	103.0	97.6	78.8	85.7	92.1
Témoins 00		109.6	106.7	100.3	107.4	103.4	105.5
Moy. témoins		101.9	101.2	99.5	95.7	98.3	99.3

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Rendement en valeurs relatives au groupe de précocité, %

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	96.8	98.1	105.1	98.4	94.5	98.6
Merlin	000	98.1	98.8	96.8	100.3	98.6	98.5
Gallec	000	101.9	101.2	103.2	99.7	101.4	101.5
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	100.2	106.5	103.6	104.4	105.4	104.0
Tourmaline	00	99.8	93.5	96.4	95.6	94.6	96.0
Aveline	000/00	90.4	92.0	94.7	126.8	110.3	102.8
Obélix	000/00	113.2	100.4	97.5	131.7	112.5	111.0
Protéix	00	93.4	91.9	107.2	96.1	98.9	97.5
Falbala	00	94.3	87.3	94.8	87.0	92.1	91.1
Toutatis	000/00	108.0	101.2	95.8	139.3	124.4	113.8
Tequila	00	78.9	89.4	102.3	89.1	102.7	92.5
Galice	000/00	112.6	108.0	111.1	128.4	126.2	117.3
Abelina	000	91.7	109.1	90.2	102.0	98.3	98.3
Amadea	00	74.9	85.6	98.6	85.4	93.0	87.5
Regina	00	71.0	83.0	84.5	90.5	87.1	83.2
Amandine	000/00	115.4	93.3	96.8	114.6	121.8	108.4
22321	000/00	119.2	112.3	106.6	142.0	120.6	120.1
22412	000/00	114.5	97.6	117.5	132.1	120.9	116.5
22436	000/00	111.4	93.3	104.7	129.8	114.5	110.8
Tiguan	0000/000	85.7	97.3	94.9	97.3	80.1	91.0
Témoins 000		100.0	100.0	100.0	100.0	100.0	100.0
Témoins 000/00		100.0	100.0	100.0	100.0	100.0	100.0
Témoins 00		100.0	100.0	100.0	100.0	100.0	100.0
Moy. témoins		100.0	100.0	100.0	100.0	100.0	100.0

Humidité à la récolte, % H2O

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	7.7	8.6	7.1	8.5	5.5	7.5
Merlin	000	7.2	7.6	6.5	9.0	5.2	7.1
Gallec	000	7.4	7.8	7.0	8.7	5.4	7.2
Lissabon	000/00	7.4	7.9	6.8	8.4	5.3	7.1
Opaline	00	7.6	8.8	7.0	9.5	5.7	7.7
Tourmaline	00	7.6	8.4	6.9	8.7	5.6	7.4
Aveline	000/00	7.4	8.0	6.8	9.1	5.5	7.3
Obélix	000/00	7.4	8.6	6.6	10.1	5.4	7.6
Protéix	00	7.9	8.7	7.1	9.5	5.4	7.7
Falbala	00	7.6	9.0	7.2	8.9	5.6	7.6
Toutatis	000/00	7.5	8.1	6.7	9.8	5.0	7.4
Tequila	00	7.9	9.1	7.0	11.4	5.5	8.2
Galice	000/00	7.5	8.1	6.9	8.9	5.0	7.3
Abelina	000	7.3	7.4	6.4	8.1	5.1	6.9
Amadea	00	7.6	8.3	7.4	8.2	5.3	7.3
Regina	00	7.7	8.8	7.2	9.6	5.5	7.8
Amandine	000/00	7.3	7.7	7.0	9.8	5.2	7.4
22321	000/00	7.6	8.5	7.0	9.2	5.2	7.5
22412	000/00	7.3	8.8	7.3	8.3	5.3	7.4
22436	000/00	7.4	8.4	6.9	8.4	5.3	7.3
Tiguan	0000/000	6.0	7.2	6.1	8.8	6.9	7.0
Témoins 000		7.3	7.7	6.8	8.8	5.3	7.2
Témoins 000/00		7.4	7.9	6.8	8.4	5.3	7.1
Témoins 00		7.6	8.6	6.9	9.1	5.6	7.6
Moy. témoins		7.4	8.1	6.8	8.8	5.4	7.3

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Poids de 1000 grains, g

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	224	281	186	239	275	241
Merlin	000	224	252	175	248	219	224
Gallec	000	216	235	199	235	242	225
Lissabon	000/00	196	247	206	225	235	222
Opaline	00	211	245	215	235	260	233
Tourmaline	00	227	272	204	247	243	239
Aveline	000/00	219	251	194	254	243	232
Obélix	000/00	254	267	217	267	261	253
Protéix	00	194	269	205	230	230	226
Falbala	00	204	278	219	227	248	235
Toutatis	000/00	219	263	208	240	246	235
Tequila	00	196	263	235	243	255	238
Galice	000/00	212	253	221	241	239	233
Abelina	000	196	261	219	224	266	233
Amadea	00	205	282	213	225	248	235
Regina	00	226	244	233	240	268	242
Amandine	000/00	209	231	277	227	269	243
22321	000/00	199	252	292	239	239	244
22412	000/00	205	250	272	254	250	246
22436	000/00	194	244	262	220	243	233
Tiguan	0000/000	216	239	238	232	264	238
Témoins 000		220	244	187	241	231	224
Témoins 000/00		196	247	206	225	235	222
Témoins 00		219	258	209	241	251	236
Moy. témoins		212	250	201	236	239	227

Verse à la récolte, note (1 = dressé)

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	1.8	3.8	1.0	4.0		2.6
Merlin	000	1.8	1.0	1.0	2.0		1.4
Gallec	000	1.3	2.3	1.0	2.3		1.7
Lissabon	000/00	1.0	1.3	1.0	1.5		1.2
Opaline	00	1.3	3.8	1.0	3.8		2.4
Tourmaline	00	1.5	3.5	1.0	4.3		2.6
Aveline	000/00	1.3	4.5	1.0	2.8		2.4
Obélix	000/00	1.0	1.8	1.0	1.8		1.4
Protéix	00	2.0	4.0	1.0	3.8		2.7
Falbala	00	1.3	4.0	1.0	4.5		2.7
Toutatis	000/00	1.0	2.0	1.0	1.3		1.3
Tequila	00	1.3	4.3	1.3	5.8		3.1
Galice	000/00	1.0	2.3	1.0	2.0		1.6
Abelina	000	1.0	1.8	1.0	2.0		1.4
Amadea	00	1.0	4.5	1.0	4.8		2.8
Regina	00	1.0	1.3	1.0	1.5		1.2
Amandine	000/00	1.0	2.3	1.0	2.0		1.6
22321	000/00	1.0	3.8	1.0	3.3		2.3
22412	000/00	1.8	2.0	1.0	2.3		1.8
22436	000/00	1.0	1.8	1.0	2.0		1.4
Tiguan	0000/000	1.0	2.0	1.0	1.5		1.4
Témoins 000		1.5	1.6	1.0	2.1		1.6
Témoins 000/00		1.0	1.3	1.0	1.5		1.2
Témoins 00		1.4	3.6	1.0	4.0		2.5
Moy. témoins		1.3	2.2	1.0	2.5		1.8

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Teneur en protéines, % MS

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	40.9	40.8	38.4	41.9	40.3	40.5
Merlin	000	40.9	40.0	39.0	41.5	39.9	40.3
Gallec	000	40.3	40.9	39.3	42.7	41.3	40.9
Lissabon	000/00	40.2	40.6	38.5	42.5	41.7	40.7
Opaline	00	40.6	40.9	38.9	42.0	40.2	40.5
Tourmaline	00	41.1	40.4	38.9	42.5	40.4	40.7
Aveline	000/00	42.9	42.8	42.2	44.0	42.3	42.8
Obélix	000/00	39.9	40.9	39.8	42.4	41.2	40.8
Protéix	00	43.5	43.4	40.9	44.9	42.8	43.1
Falbala	00	45.8	44.2	43.7	47.2	45.7	45.3
Toutatis	000/00	39.3	40.8	38.3	41.6	40.1	40.0
Tequila	00	38.9	38.8	37.9	41.9	39.4	39.4
Galice	000/00	38.8	39.0	38.3	41.5	40.2	39.6
Abelina	000	39.7	39.5	39.2	41.3	40.4	40.0
Amadea	00	40.4	40.1	38.9	41.6	40.8	40.4
Regina	00	42.0	41.7	40.3	42.8	42.3	41.8
Amandine	000/00	41.2	40.8	39.3	42.6	41.0	41.0
22321	000/00	40.1	39.7	38.7	42.2	39.7	40.1
22412	000/00	39.2	39.7	37.7	41.9	40.3	39.8
22436	000/00	42.5	42.2	39.9	43.6	41.5	41.9
Tiguan	0000/000	39.8	39.6	39.0	41.9	40.4	40.1
Témoins 000		40.6	40.4	39.1	42.1	40.6	40.6
Témoins 000/00		40.2	40.6	38.5	42.5	41.7	40.7
Témoins 00		40.8	40.6	38.9	42.2	40.3	40.6
Moy. témoins		40.5	40.6	38.8	42.3	40.9	40.6

Teneur en protéines en valeur relative, %

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	100.2	100.4	98.7	99.2	100.0	99.7
Merlin	000	100.8	98.9	99.7	98.6	98.4	99.3
Gallec	000	99.2	101.1	100.3	101.4	101.6	100.7
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	99.4	100.6	99.9	99.3	99.8	99.8
Tourmaline	00	100.6	99.4	100.1	100.7	100.2	100.2
Aveline	000/00	106.7	105.3	109.6	103.4	101.4	105.3
Obélix	000/00	99.3	100.6	103.4	99.8	98.7	100.4
Protéix	00	106.6	106.9	105.0	106.3	106.2	106.2
Falbala	00	112.1	108.7	112.4	111.8	113.4	111.7
Toutatis	000/00	97.7	100.4	99.5	97.9	96.2	98.4
Tequila	00	95.3	95.6	97.4	99.2	97.7	97.0
Galice	000/00	96.5	96.0	99.5	97.6	96.3	97.2
Abelina	000	97.9	97.7	100.0	98.1	99.5	98.6
Amadea	00	98.8	98.8	99.9	98.5	101.3	99.5
Regina	00	102.8	102.7	103.7	101.4	105.0	103.1
Amandine	000/00	102.5	100.5	102.2	100.2	98.2	100.7
22321	000/00	99.6	97.8	100.6	99.2	95.3	98.5
22412	000/00	97.6	97.7	97.9	98.5	96.7	97.7
22436	000/00	105.7	103.9	103.7	102.6	99.5	103.1
Tiguan	0000/000	98.9	97.5	101.4	98.5	97.0	98.6
Témoins 000		100	100	100	100	100	100
Témoins 000/00		100	100	100	100	100	100
Témoins 00		100	100	100	100	100	100
Moy. témoins		100	100	100	100	100	100

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Teneur en huile, % MS

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	19.5	19.6	20.9	19.4	20.3	19.9
Merlin	000	19.5	20.2	21.0	19.7	20.5	20.2
Gallec	000	19.4	19.8	19.7	18.6	20.2	19.5
Lissabon	000/00	19.9	19.7	20.1	18.9	20.0	19.7
Opaline	00	20.0	19.2	20.4	18.9	20.6	19.8
Tourmaline	00	19.7	19.9	20.4	19.2	21.0	20.0
Aveline	000/00	19.1	18.5	19.1	18.1	19.5	18.9
Obélix	000/00	19.8	19.7	20.1	18.8	20.8	19.8
Protéix	00	18.4	18.4	19.5	17.9	19.2	18.7
Falbala	00	17.6	18.2	18.3	16.5	18.3	17.8
Toutatis	000/00	19.8	19.5	21.0	19.1	20.6	20.0
Tequila	00	20.3	19.8	20.8	18.9	20.9	20.1
Galice	000/00	20.5	20.5	20.7	19.6	21.3	20.5
Abelina	000	20.4	20.8	21.1	19.4	20.9	20.5
Amadea	00	19.7	19.9	20.8	18.5	20.0	19.8
Regina	00	19.2	19.3	19.6	18.7	19.8	19.3
Amandine	000/00	20.0	19.5	19.8	18.9	20.6	19.8
22321	000/00	20.8	20.1	21.0	18.8	21.2	20.4
22412	000/00	20.1	20.2	21.1	19.2	20.8	20.3
22436	000/00	19.1	19.3	20.4	18.5	19.5	19.4
Tiguan	0000/000	20.0	20.3	19.8	18.9	19.6	19.7
Témoins 000		19.4	20.0	20.4	19.2	20.3	19.8
Témoins 000/00		19.9	19.7	20.1	18.9	20.0	19.7
Témoins 00		19.8	19.6	20.4	19.0	20.8	19.9
Moy. témoins		19.7	19.7	20.3	19.0	20.4	19.8

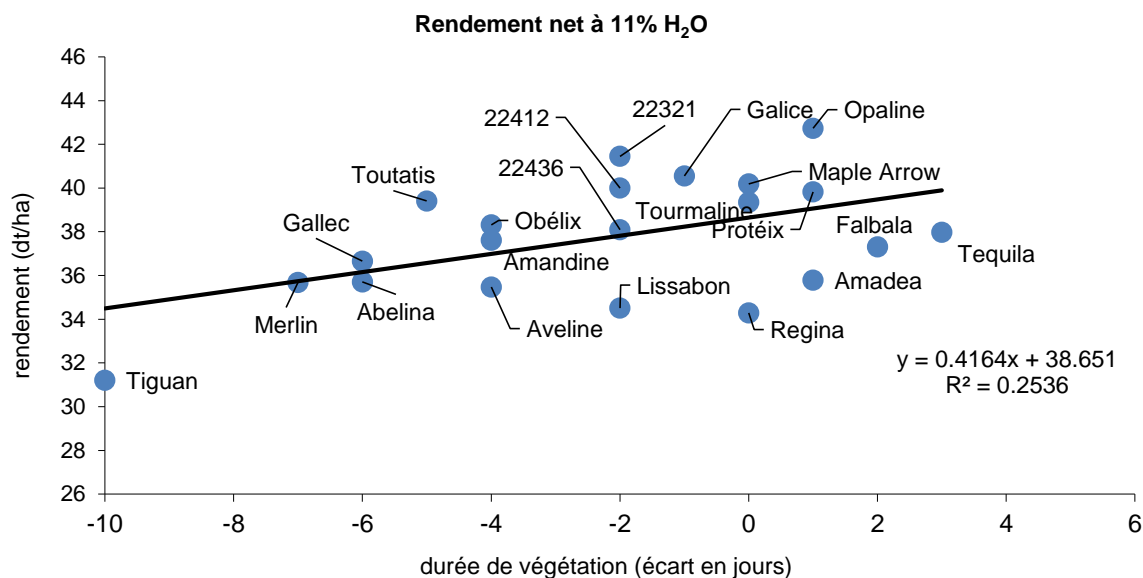
Teneur en huile en valeur relative, %

Variété	Groupe	Changins 2016	Goumoëns 2016	Giez 2016	Delley 2016	Reckenholz 2016	Moyenne 2016
Maple Arrow	00	98.3	100.3	102.4	101.6	97.7	100.1
Merlin	000	100.4	101.0	103.2	102.9	100.7	101.6
Gallec	000	99.6	99.0	96.8	97.1	99.3	98.4
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	100.6	98.3	99.9	99.4	99.1	99.5
Tourmaline	00	99.4	101.7	100.1	100.6	100.9	100.5
Aveline	000/00	96.1	94.2	94.8	96.0	97.5	95.7
Obélix	000/00	99.8	99.8	99.8	99.6	103.8	100.6
Protéix	00	92.7	94.1	95.5	93.9	92.3	93.7
Falbala	00	88.5	92.9	89.7	86.9	88.0	89.2
Toutatis	000/00	99.6	98.9	104.2	101.1	102.9	101.3
Tequila	00	102.4	101.2	102.1	99.3	100.4	101.1
Galice	000/00	103.2	104.2	103.1	103.8	106.6	104.2
Abelina	000	105.1	104.4	103.8	101.4	102.8	103.5
Amadea	00	99.1	101.8	102.0	97.4	96.4	99.3
Regina	00	96.8	98.7	96.2	98.2	95.5	97.1
Amandine	000/00	100.6	99.2	98.5	100.4	102.9	100.3
22321	000/00	104.5	102.3	104.5	99.7	106.2	103.4
22412	000/00	101.3	102.5	105.0	101.9	103.8	102.9
22436	000/00	96.3	98.0	101.3	98.2	97.7	98.3
Tiguan	0000/000	100.5	103.0	98.4	100.1	98.1	100.0
Témoins 000		100	100	100	100	100	100
Témoins 000/00		100	100	100	100	100	100
Témoins 00		100	100	100	100	100	100
Moy. témoins		100	100	100	100	100	100

Synthèse Soja 2016

Synthèse 2016	Durée végétation écart en jours	Groupe précocité	Rdt. net	Rdt relatif	Rdt relatif	Verse	PMG	Protéines	Protéines val. rel.	Huile	Huiles val. rel.
			11 % H2O dt/ha	durée végétation %	groupe précocité %	(1=dressé) note					
Maple Arrow	0	00	40.2	104	99	2.6	241	40.5	100	19.9	100
Merlin	-7	000	35.7	100	99	1.4	224	40.3	99	20.2	102
Gallec	-6	000	36.7	101	101	1.7	225	40.9	101	19.5	98
Lissabon	-2	000/00	34.5	92	100	1.2	222	40.7	100	19.7	100
Opaline	1	00	42.7	109	104	2.4	233	40.5	100	19.8	99
Tourmaline	0	00	39.3	102	96	2.6	239	40.7	100	20.0	101
Aveline	-4	000/00	35.5	96	103	2.4	232	42.8	105	18.9	96
Obélix	-4	000/00	38.3	104	111	1.4	253	40.8	100	19.8	101
Protéix	1	00	39.8	102	98	2.7	226	43.1	106	18.7	94
Falbala	2	00	37.3	95	91	2.7	235	45.3	112	17.8	89
Toutatis	-5	000/00	39.4	107	114	1.3	235	40.0	98	20.0	101
Tequila	3	00	38.0	95	92	3.1	238	39.4	97	20.1	101
Galice	-1	000/00	40.6	106	117	1.6	233	39.6	97	20.5	104
Abelina	-6	000	35.7	98	98	1.4	233	40.0	99	20.5	104
Amadea	1	00	35.8	92	88	2.8	235	40.4	99	19.8	99
Regina	0	00	34.3	88	83	1.2	242	41.8	103	19.3	97
Amandine	-4	000/00	37.6	101	108	1.6	243	41.0	101	19.8	100
22321	-2	000/00	41.4	110	120	2.3	244	40.1	98	20.4	103
22412	-2	000/00	40.0	106	117	1.8	246	39.8	98	20.3	103
22436	-2	000/00	38.1	101	111	1.4	233	41.9	103	19.4	98
Tiguan	-10	0000/000	31.2	92	91	1.4	238	40.1	99	19.7	100
Témoins 000			36.2	100.4	100.0	1.6	224.4	40.6	100.0	19.8	100.0
Témoins 000/00			34.5	92.1	100.0	1.2	221.9	40.7	100.0	19.7	100.0
Témoins 00			41.0	105.5	100.0	2.5	236.0	40.6	100.0	19.9	100.0
Moy. témoins			37.2	99.3	100.0	1.8	227.4	40.6	100.0	19.8	100.0

Synthèse 2016	Durée végétation écart en jours	Groupe précocité	Rdt relatif	Verse	Protéines val. rel.	Huiles val. rel.	VAT
			durée végétation %	(bonus)			
Maple Arrow	0	00	104		-	-	104
Merlin	-7	000	100	1	-	2	103
Gallec	-6	000	101		1	-	102
Lissabon	-2	000/00	92		-	-	92
Opaline	1	00	109		-	-	109
Tourmaline	0	00	102		-	1	103
Aveline	-4	000/00	96		5	-	101
Obélix	-4	000/00	104		-	1	105
Protéix	1	00	102	1	6	-	109
Falbala	2	00	95		12	-	107
Toutatis	-5	000/00	107		-	1	108
Tequila	3	00	95		-	1	96
Galice	-1	000/00	106		-	4	110
Abelina	-6	000	98	1	-	4	103
Amadea	1	00	92		-	-	92
Regina	0	00	88		3	-	91
Amandine	-4	000/00	101		1	-	102
22321	-2	000/00	110	1	-	3	114
22412	-2	000/00	106	1	-	3	110
22436	-2	000/00	101		3	-	104
Tiguan	-10	0000/000	92	1	-	-	93



Résultats Soja 5 ans

Rendement à 11% H2O, dt/ha

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.		
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Maple Arrow	00	32.6	36.5	36.2	38.7	34.9	40.4	31.1	42.6	39.2	30.3	35.5	30.3	37.2	30.2	34.6	36.4	35.2	42.8	26.9	35.0	38.3	50.1	31.2	36.9	33.2	38.0	40.2	35.9
Merlin	000	36.0	35.2	39.3	34.3	32.9	37.9	31.4	39.0	34.8	31.9	38.5	33.0	38.6	25.1	38.8	29.4	36.8	37.4	23.9	29.5	36.3	46.8	31.2	38.4	30.8	37.2	35.7	34.6
Gallec	000	33.8	36.8	37.6	35.6	32.7	40.7	27.8	44.2	35.6	31.0	35.5	31.1	37.5	26.7	39.5	34.2	34.6	37.2	26.2	32.4	36.9	48.1	31.0	38.6	31.4	38.0	36.7	35.1
Lissabon	000/00	36.9	38.0	39.7	34.2	34.2	36.9	31.5	41.4	38.5	37.3	38.5	32.8	42.7	26.9	39.8	38.3	32.8	30.9	25.4	33.7	40.1	42.0	33.5	38.4	32.8	39.7	34.5	35.8
Opaline	00	39.1	42.7	41.1	40.1	36.6	43.5	37.0	43.1	42.5	34.5	41.7	42.0	41.1	29.7	47.9	39.4	36.5	45.4	30.4	37.7	38.3	55.8	35.1	44.4	39.0	40.3	42.7	40.3
Tourmaline	00	37.0	46.1	37.4	39.9	34.7	42.0	36.2	45.3	37.3	34.3	41.1	37.9	43.5	27.7	44.2	46.8	35.5	41.6	30.8	32.9	38.2	50.1	34.2	42.4	38.5	41.7	39.3	39.2
Aveline	000/00	30.0	35.8	32.6	30.9	30.6	32.0	26.5	36.0	35.4	27.3	33.9	31.0	32.4	25.5	37.5	28.0	28.7	39.2	25.5	30.2	32.3	46.3	28.3	34.4	28.9	33.0	35.5	32.0
Obélix	000/00	36.5	43.3	41.7	38.7	34.7	40.2	32.6	45.5	38.7	35.0	36.2	35.1	42.2	26.2	44.5	37.1	33.2	40.7	20.1	33.8	37.1	47.2	31.6	40.3	34.6	40.3	38.3	37.0
Protéix	00	32.4	37.1	41.1	37.4	33.9	42.9	28.2	44.7	36.7	35.0	39.7	34.0	45.6	30.8	41.6	41.1	35.3	41.8	32.0	34.6	40.5	52.4	33.3	41.4	34.5	40.6	39.8	37.9
Falbala	00	30.2	34.1	36.3	37.7	31.5	32.3	23.8	36.3	34.9	29.2	33.9	30.0	40.7	27.2	35.1	36.4	32.4	37.9	34.8	26.9	34.8	48.8	31.4	33.8	29.3	35.6	37.3	33.5
Toutatis	000/00	36.2	44.1	43.5	36.9	35.0	43.2	32.9	44.7	39.0	34.1	36.9	37.1	38.8	25.8	38.0	40.8	36.0	43.1	25.4	38.0	37.1	52.2	32.7	39.4	37.2	40.1	39.4	37.8
Tequila	00	38.2	41.0	39.7	31.6	34.0	40.5	30.0	42.6	35.7	37.8	40.6	37.3	46.7	29.4	39.1	39.4	39.4	38.8	33.2	36.9	41.5	54.4	35.8	40.1	35.9	42.2	38.0	38.4
Témoins 000		34.9	36.0	38.4	35.0	32.8	39.3	29.6	41.6	35.2	31.4	37.0	32.0	38.0	25.9	39.2	31.8	35.7	37.3	25.1	31.0	36.6	47.4	31.1	38.5	31.1	37.6	36.2	34.9
Témoins 000/00		36.9	38.0	39.7	34.2	34.2	36.9	31.5	41.4	38.5	37.3	38.5	32.8	42.7	26.9	39.8	33.1	36.2	30.9	25.4	33.7	40.1	42.0	33.5	38.4	32.8	39.7	34.5	35.8
Témoins 00		38.0	44.4	39.2	40.0	35.7	42.7	36.6	44.2	39.9	34.4	41.4	39.9	42.3	28.7	46.1	43.1	36.0	43.5	30.6	35.3	38.2	53.0	34.7	43.4	38.7	41.0	41.0	39.8
Moy. témoins		36.6	39.5	39.1	36.4	34.2	39.7	32.6	42.4	37.9	34.4	38.9	34.9	41.0	27.2	41.7	36.0	36.0	37.3	27.0	33.3	38.3	47.5	33.1	40.1	34.2	39.4	37.2	36.8

Rendement en valeurs relatives à la durée de végétation, %

Variété	Jours	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.		
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Maple Arrow	0.0	93.3	92.7	93.4	105.5	102.7	102.3	101.1	101.0	104.2	90.1	93.1	87.1	88.9	106.2	86.1	95.1	99.6	106.6	90.3	103.4	100.3	99.0	94.1	93.8	96.6	96.5	104.3	97.1
Merlin	-7.0	103.5	91.2	100.5	97.3	99.1	97.4	101.9	92.8	94.7	100.5	106.7	100.5	104.6	99.6	98.2	90.5	108.5	97.5	107.1	91.0	101.4	100.8	102.6	100.8	96.0	99.7	98.0	99.4
Gallec	-6.0	97.3	95.1	96.4	100.4	98.2	104.3	90.3	105.1	96.6	97.0	97.6	94.1	99.7	104.2	99.7	102.9	101.2	96.2	112.4	99.5	102.2	102.4	101.2	100.6	96.7	100.7	100.0	99.8
Lissabon	-2.0	105.7	96.9	102.2	94.2	101.3	93.8	102.3	98.3	103.2	112.9	102.3	95.8	105.6	97.9	99.4	90.4	103.6	78.0	91.9	100.7	106.7	85.0	102.9	98.5	97.3	102.2	91.7	98.5
Opaline	1.0	111.7	108.0	106.1	108.7	107.3	109.7	120.5	102.2	112.9	101.7	108.2	119.7	96.7	103.0	118.9	100.7	102.7	112.3	98.7	110.7	99.2	109.1	104.9	112.3	112.9	101.7	109.2	108.2
Tourmaline	0.0	105.7	117.0	96.4	108.7	102.1	106.3	117.9	107.4	99.3	102.2	107.5	108.9	104.1	97.5	110.0	122.3	100.5	103.6	103.4	97.4	100.0	99.2	103.4	107.9	111.6	105.8	101.7	106.1
Aveline	-4.0	86.1	91.8	83.8	86.2	91.2	81.6	86.0	85.6	95.5	83.8	91.7	92.1	83.2	95.9	94.0	80.1	83.0	100.1	100.0	91.6	87.8	96.1	90.3	89.1	87.4	86.3	94.8	89.6
Obélix	-4.0	104.9	111.1	107.0	107.9	103.4	102.6	105.9	108.2	104.3	107.5	97.9	104.2	108.2	98.7	111.8	106.0	96.2	104.0	78.8	102.3	100.8	98.0	98.6	104.1	104.6	104.9	102.6	103.0
Protéix	1.0	92.6	93.8	106.1	101.3	99.2	108.2	92.0	106.0	97.3	103.2	103.2	96.9	107.3	106.7	103.1	105.1	99.4	103.4	104.0	101.7	105.0	102.5	99.8	104.8	98.9	102.3	102.2	101.6
Falbala	2.0	86.3	85.9	93.8	101.7	91.9	81.2	77.5	86.2	92.2	85.4	87.4	84.8	94.1	92.8	86.8	91.0	90.7	93.0	109.2	78.7	89.4	94.3	93.2	85.1	83.0	89.2	94.8	89.1
Toutatis	-5.0	104.0	113.6	111.6	103.5	104.6	110.6	106.7	106.3	105.5	105.8	100.6	111.1	101.3	98.8	95.5	119.4	104.8	110.7	104.2	115.9	101.8	109.7	104.6	102.2	113.3	105.6	105.7	106.3
Tequila	3.0	108.9	103.1	102.7	84.6	99.0	101.8	97.9	100.9	94.1	109.9	103.9	104.7	106.3	98.6	96.5	96.5	109.8	94.7	100.8	107.2	105.5	104.0	104.6	100.7	101.6	105.1	95.2	101.5
Témoins 000		100.4	93.1	98.4	98.8	98.6	100.9	96.1	99.0	95.7	98.8	102.2	97.3	102.2	101.9	98.9	96.7	104.8	96.8	109.8	95.2	101.8	101.6	101.9	100.7	96.3	100.2	99.0	99.6
Témoins 000/00		105.7	96.9	102.2	94.2	101.3	93.8	102.3	98.3	103.2	112.9	102.3	95.8	105.6	97.9	99.4	90.4	103.6	78.0	91.9	100.7	106.7	85.0	102.9	98.5	97.3	102.2	91.7	98.5
Témoins 00		108.7	112.5	101.2	108.7	104.7	108.0	119.2	104.8	106.1	102.0	107.9	114.3	100.4	100.2	114.5	111.5	101.6	108.0	101.1	104.0	99.6	104.1	104.1	110.1	112.3	103.8	105.4	107.1
Moy. témoins		104.9	100.8	100.6	100.6	101.6	100.9	105.9	100.7	101.7	104.5	104.1	102.5	102.7	100.0	104.3	99.5	103.4	94.2	100.9	100.0	102.7	96.9	103.0	103.1	102.0	102.1	98.7	101.8

Rendement en valeurs relatives au groupe de précocité, %

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.		
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Maple Arrow	00	85.8	82.3	92.3	96.8	97.9	94.6	84.8	96.4	98.1	88.0	85.9	75.8	87.8	105.1	75.1	84.4	97.8	98.4	87.8	99.0	100.2	94.5	89.9	85.2	86.0	92.9	98.6	90.5
Merlin	000	103.1	97.7	102.2	98.1	100.3	96.5	106.1	93.8	98.8	101.3	104.0	102.9	101.5	96.8	99.1	92.3	103.2	100.3	95.3	95.2	99.1	98.6	100.0	99.9	99.1	99.1	98.5	99.3
Gallec	000	96.9	102.3	97.8	101.9	99.7	103.5	93.9	106.2	101.2	98.7	96.0	97.1	98.5	103.2	100.9	107.7	96.8	99.7	104.7	104.8	100.9	101.4	100.0	100.1	100.9	100.9	101.5	100.7
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	102.8	96.2	104.8	100.2	102.6	101.7	101.0	97.5	106.5	100.2	100.7	105.1	97.1	103.6	104.0	91.4	101.4	104.4	99.4	106.7	100.1	105.4	101.3	102.1	101.1	98.5	104.0	101.4
Tourmaline	00	97.2	103.8	95.2	99.8	97.4	98.3	99.0	102.5	93.5	99.8	99.3	94.9	102.9	96.4	96.0	108.6	98.6	95.6</										

Résultats Soja 5 ans

Poids de 1000 grains, g

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.		
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Maple Arrow	00	236.6	229.8	228.8	224.1	223.6	216.4	231.9	218.2	280.5	229.0	199.7	242.7	203.5	185.9	226.2	328.1	205.2	239.4	217.1	221.1	205.0	274.6	226.6	214.1	255.9	212.3	240.9	230.0
Merlin	000	199.6	185.2	199.2	224.1	172.3	181.0	185.7	192.1	252.4	183.0	164.3	183.1	202.4	174.7	182.3	185.6	168.8	247.5	170.1	174.8	168.4	219.0	181.2	175.9	182.3	183.4	223.6	189.3
Gallec	000	226.2	221.5	216.7	216.1	217.1	210.4	226.8	208.2	234.8	215.6	184.9	223.2	212.1	198.5	209.8	235.6	187.7	234.8	201.7	211.1	194.8	242.4	215.2	201.7	224.2	204.9	225.3	214.2
Lissabon	000/00	223.0	222.8	204.3	196.3	214.1	185.4	200.8	201.1	247.2	211.2	182.3	219.3	206.9	206.4	198.1	215.9	185.8	224.5	196.7	214.2	185.1	234.9	211.2	188.6	212.6	200.3	221.9	206.9
Opaline	00	219.6	225.7	215.0	211.3	208.2	205.2	217.0	212.1	244.6	212.1	197.1	225.6	210.6	214.7	215.5	227.5	192.2	235.4	200.9	213.4	196.3	259.7	210.2	205.9	220.6	207.4	233.2	215.5
Tourmaline	00	218.1	219.2	220.9	227.3	215.7	209.8	225.3	214.9	272.3	220.4	192.3	219.7	214.3	203.9	206.4	226.6	196.3	247.5	192.1	208.3	191.1	243.2	211.5	202.8	220.0	207.2	238.8	216.1
Aveline	000/00	223.1	233.3	227.4	219.1	227.7	199.3	213.9	194.2	251.5	226.6	187.4	220.2	207.1	194.1	215.9	241.8	191.2	253.8	209.5	235.3	193.0	243.0	221.7	200.9	227.8	203.8	232.3	217.3
Obélix	000/00	265.8	277.1	251.1	253.5	251.7	239.8	263.4	246.7	267.1	256.3	223.0	242.6	248.2	217.0	249.5	268.1	221.1	266.8	243.6	238.3	204.1	260.6	254.4	237.4	253.1	239.5	253.0	247.5
Protéix	00	197.5	204.1	209.7	194.3	185.5	180.4	183.9	200.9	268.8	194.3	181.2	196.8	205.3	204.6	193.8	207.9	187.4	230.0	182.3	180.3	185.9	229.8	189.9	185.1	192.2	196.7	225.5	197.9
Falbala	00	209.2	212.1	212.1	203.6	220.3	195.2	199.2	197.8	278.3	229.4	183.2	204.0	208.5	219.3	201.2	221.9	187.2	268.2	200.0	183.8	189.7	248.2	214.7	193.2	202.2	199.1	235.2	208.9
Toutatis	000/00	225.1	215.8	215.3	218.9	199.7	196.4	219.7	212.5	263.4	205.7	182.9	219.5	220.7	207.6	201.5	218.9	191.3	240.0	197.5	204.8	194.4	246.2	207.0	193.6	215.7	207.0	235.2	211.7
Tequila	00	191.9	210.1	210.8	195.9	231.8	193.0	199.1	196.0	262.9	224.7	173.9	211.5	194.1	235.0	196.4	220.1	180.0	243.2	188.1	211.2	178.2	254.6	209.1	187.8	210.5	191.7	238.3	207.5
Témoins 000		212.9	203.3	207.9	220.1	194.7	195.7	206.3	200.1	243.6	199.3	174.6	203.2	207.3	186.6	196.0	210.6	178.3	241.2	185.9	192.9	181.6	230.7	198.2	188.8	203.2	194.1	224.4	201.8
Témoins 000/00		223.0	222.8	204.3	196.3	214.1	185.4	200.8	201.1	247.2	211.2	182.3	219.3	206.9	206.4	198.1	215.9	185.8	224.5	196.7	214.2	185.1	234.9	211.2	188.6	212.6	200.3	221.9	206.9
Témoins 00		218.9	222.5	218.0	219.3	211.9	207.5	221.1	213.5	258.4	216.2	194.7	222.7	212.5	209.3	210.9	227.0	194.3	241.4	196.5	210.8	193.7	251.5	210.9	204.4	220.4	207.3	236.0	215.8
Moy. témoins		218.3	216.2	210.1	211.9	206.9	196.2	209.4	204.9	249.8	208.9	183.9	215.0	208.9	200.8	201.7	217.9	186.1	235.7	193.0	206.0	186.8	239.0	206.8	193.9	212.1	200.6	227.4	208.2

Verse à la récolte, note (1 = dressé)

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.		
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Maple Arrow	00	3.3	7.3	6.5	1.8	7.5	4.8	7.0	3.3	3.8	4.0	4.0	8.3	2.8	1.0	5.3	7.0	5.5	4.0					4.9	4.7	7.4	4.7	2.6	4.9
Merlin	000	1.3	4.8	2.5	1.8	3.5	1.5	3.0	1.0	1.0	3.0	1.0	5.3	1.0	1.0	3.0	6.0	1.3	2.0					2.6	1.8	4.8	2.0	1.4	2.5
Gallec	000	1.0	5.0	3.7	1.3	5.5	2.0	4.0	2.5	2.3	4.3	1.3	4.5	1.5	1.0	3.5	4.8	2.3	2.3					3.6	2.3	4.4	2.8	1.7	3.0
Lissabon	000/00	1.5	5.3	1.7	1.0	6.0	1.0	3.3	1.0	1.3	3.0	1.3	6.0	1.0	1.0	2.8	3.8	1.0	1.5					3.5	1.7	4.3	2.1	1.2	2.6
Opaline	00	2.0	7.5	6.3	1.3	7.3	4.8	6.5	3.8	3.8	4.3	4.0	6.5	2.0	1.0	5.3	6.8	5.8	3.8					4.5	4.7	6.6	4.8	2.4	4.6
Tourmaline	00	1.5	4.5	4.3	1.5	5.3	4.5	4.5	2.5	3.5	3.5	4.3	5.8	2.0	1.0	4.3	6.8	2.5	4.3					3.4	4.3	5.7	2.9	2.6	3.8
Aveline	000/00	1.3	6.0	4.5	1.3	5.0	3.5	4.0	3.0	4.5	4.0	2.8	5.8	1.5	1.0	5.3	6.0	3.8	2.8					3.4	3.8	5.3	3.6	2.4	3.7
Obélix	000/00	1.0	4.5	2.8	1.0	4.3	1.0	3.0	1.5	1.8	3.0	1.3	3.3	1.0	1.0	2.0	4.8	1.5	1.8					2.8	1.4	3.7	2.1	1.4	2.3
Protéix	00	1.3	6.3	4.5	2.0	5.3	4.3	6.3	2.8	4.0	4.5	4.0	6.8	2.0	1.0	5.0	5.8	5.0	3.8					3.7	4.4	6.3	4.0	2.7	4.2
Falbala	00	2.3	7.8	4.3	1.3	6.0	4.3	6.8	1.8	4.0	3.8	5.3	7.3	1.3	1.0	5.0	6.0	3.0	4.5					4.0	4.8	6.7	3.4	2.7	4.3
Toutatis	000/00	1.0	5.5	2.0	1.0	3.0	1.3	2.8	1.3	2.0	2.5	1.0	5.0	1.0	1.0	2.8	5.5	1.5	1.3					2.2	1.7	4.4	2.3	1.3	2.4
Tequila	00	2.0	6.8	4.0	1.3	5.0	3.3	5.8	2.8	4.3	2.8	4.3	5.5	1.5	1.3	5.3	6.3	3.3	5.8					3.3	4.3	5.8	3.6	3.1	4.0
Témoins 000		1.1	4.9	3.1	1.5	4.5	1.8	3.5	1.8	1.6	3.6	1.1	4.9	1.3	1.0	3.3	5.4	1.8	2.1					3.1	2.0	4.6	2.4	1.6	2.7
Témoins 000/00		1.5	5.3	1.7	1.0	6.0	1.0	3.3	1.0	1.3	3.0	1.3	6.0	1.0	1.0	2.8	3.8	1.0	1.5					3.5	1.7	4.3	2.1	1.2	2.6
Témoins 00		1.8	6.0	5.3	1.4	6.3	4.6	5.5	3.1	3.6	3.9	4.1	6.1	2.0	1.0	4.8	6.8	4.1	4.0					4.0	4.5	6.1	3.8	2.5	4.2
Moy. témoins		1.5	5.4	3.3	1.3	5.6	2.5	4.1	2.0	2.2	3.5	2.2	5.7	1.4	1.0	3.6	5.3	2.3	2.5					3.5	2.7	5.0	2.8	1.8	3.2

Teneur en protéines, % MS

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.		
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016			
Maple Arrow	00	42.3	41.2	40.2	40.9	40.4	41.1	43.7	39.3	40.8	42.7	40.3	43.1	40.0	38.4	41.0	41.7	37.6	41.9	40.3	42.8	40.2	40.3	41.4	40.8	42.8	39.7	40.5	41.0
Merlin	000	41.4	41.1	39.4	40.9	40.2	39.5	41.3	38.8	40.0	41.7	39.9	43.8	39.9	39.0	39.6	44.1	37.6	41.5	38.6	43.5	38.3	39.9	40.5	39.6	43.2	39.1	40.3	40.5
Gallec	000	41.9	42.8	40.1	40.3	41.2	41.1	45.0	40.5	40.9	43.1	41.0	44.6	41.0	39.3	41.6	44.3	38.7	42.7	40.4	44.0	40.2	41.3	41.6	41.2	44.5	40.6	40.9	41.8
Lissabon	000/00	42.0	42.7	40.1	40.2	41.6	40.7	43.6	39.2	40.6	42.8	40.7	45.1	40.1	38.5	40.5	43.4	37.4	42.5	40.8	45.0	39.4	41.7	41.8	40.6	44.2	39.8	40.7	41.4
Opaline	00	41.2	40.7	39.7	40.6	40.0	39.8	42.5	39.8	40.9	42.1	39.6	42.7	40.1	38.9	40.7	41.6	37.8	42.0	40.5	42.4	38.9	40.2	40.9	40.1	42.3	39.5	40.5	40.7
Tourmaline	00	40.5	40.2	38.9	41.1	40.4	39.7	42.1	39.1	40.4	42.2	39.9	42.4	39.8	38.9	39.8	41.9	36.8	42.5	39.8	43.9	38.9	40.4	40.7	39.8	42.6	39.0	40.7	40.5
Aveline	000/00	43.7	44.1	41.3	42.9	43.2	43.6	44.4	42.2	42.8	45.1	42.8	45.6	43.0	42.2	43.1	45.2	40.0	44.0	42.2	46.0	41.0	42.3	43.6	43.2	45.3	42.0	42.8	43.4
Obélix	000/00	41.0	43.0	39.7	39.9	41.1	41.2	44.0	40.2	40.9	42.5	41.1	43.1	40.6	39.8	41.1	44.8	38.1	42.4	40.6	44.9	39.5	41.2	41.3	41.1	44.2	40.3	40.8	41.5
Protéix	00	44.8	43.9	43.3	43.5	43.2	42.9	45.3	43.0	43.4	45.2	42.9	45.2	43.9	40.9	43.5	44.5	40.7	44.9	43.0	45.4	41.3	42.8	44.0	43.1	45.1			

Résultats Soja 5 ans

Teneur en protéines en valeur relative, %

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.					
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016						
Maple Arrow	00	103.5		101.8	102.2	100.2	100.5	103.4	103.3	99.7	100.4	101.4	101.4	101.2	100.2	98.7		101.8	99.9	100.9	99.2			99.3	103.2	100.0	101.8	102.2	100.9	101.2	99.7	101.1
Merlin	000	99.4		97.9	99.1	100.8	98.7	97.9	95.8	97.8	98.9	98.4	98.6	99.2	98.7	99.7		97.5	99.8	98.6	98.6			99.4	97.6	98.4	98.8	98.0	98.5	98.1	99.3	98.5
Gallec	000	100.6		102.1	100.9	99.2	101.3	102.1	104.2	102.2	101.1	101.6	101.4	100.8	101.3	100.3		102.5	100.2	101.4	101.4			100.6	102.4	101.6	101.2	102.0	101.5	101.9	100.7	101.5
Lissabon	000/00	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	100.8		100.6	101.1	99.4	99.5	100.2	100.5	100.9	100.6	100.0	99.7	100.3	100.4	99.9		101.2	99.6	101.3	99.3			98.2	100.0	99.8	100.1	100.4	99.7	100.6	99.8	100.1
Tourmaline	00	99.2		99.4	98.9	100.6	100.5	99.8	99.5	99.1	99.4	100.0	100.3	99.7	99.6	100.1		98.8	100.4	98.7	100.7			101.8	100.0	100.2	99.9	99.6	100.3	99.4	100.2	99.9
Aveline	000/00	104.1		103.1	103.1	106.7	103.8	107.2	101.9	107.7	105.3	105.4	105.2	101.1	107.1	109.6		106.3	104.1	107.0	103.4			102.2	104.0	101.4	104.4	106.2	102.3	105.8	105.3	104.8
Obélix	000/00	97.5		100.7	99.0	99.3	98.6	101.2	101.0	102.7	100.6	99.4	101.0	95.7	101.2	103.4		101.3	103.2	101.9	99.8			98.2	100.1	98.7	98.5	101.2	99.9	101.3	100.4	100.3
Protéix	00	109.5		108.4	110.2	106.6	107.4	107.8	107.2	108.9	106.9	107.1	107.8	106.1	109.9	105.0		108.1	106.6	109.1	106.3			105.3	106.2	106.2	108.0	107.9	106.3	108.5	106.2	107.4
Falbala	00	114.1		117.5	115.7	112.1	114.8	115.6	116.1	111.9	108.7	116.7	113.6	116.5	114.7	112.4		113.6	114.0	116.3	111.8			120.7	115.0	113.4	115.2	114.3	116.8	115.1	111.7	114.6
Toutatis	000/00	95.6		93.8	96.3	97.7	95.5	96.8	98.5	98.7	100.4	96.3	96.7	94.9	97.5	99.5		96.6	98.8	97.8	97.9			96.1	96.5	96.2	95.8	96.7	97.1	96.9	98.4	97.0
Tequila	00	96.4		99.6	98.9	95.3	102.0	101.7	101.8	98.8	95.6	99.3	97.6	104.0	99.9	97.4		99.7	100.4	99.3	99.2			104.2	99.2	97.7	99.3	99.6	102.6	99.4	97.0	99.6
Témoins 000		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Témoins 000/00		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Témoins 00		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Moy. témoins		100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Teneur en huile, % MS

Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.						
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016							
Maple Arrow	00	18.8		19.2	20.0	19.5	19.1	18.9	16.8	19.5	19.6	18.8	18.5	17.1	19.7	20.9		18.2	18.3	20.4	19.4			20.1	18.8	19.5	20.3	19.2	18.5	17.8	19.7	19.9	19.0
Merlin	000	19.7		18.8	20.0	19.5	19.6	19.6	17.9	20.0	20.2	19.8	19.0	17.3	20.5	21.0		19.3	18.0	20.8	19.7			21.4	18.5	20.0	20.5	20.1	19.3	17.9	20.0	20.2	19.5
Gallec	000	19.1		18.3	19.2	19.4	19.1	19.0	16.7	18.9	19.8	18.6	18.2	16.5	19.2	19.7		18.2	17.0	20.2	18.6			20.0	18.3	19.8	20.2	19.2	18.5	17.1	19.3	19.5	18.7
Lissabon	000/00	19.0		18.3	19.7	19.9	18.7	18.8	16.6	19.4	19.7	18.5	18.3	16.5	19.4	20.1		18.4	17.2	20.4	18.9			20.1	17.9	19.5	20.0	19.1	18.5	17.1	19.4	19.7	18.7
Opaline	00	19.0		18.8	20.1	20.0	19.4	19.2	16.9	19.2	19.2	18.8	18.5	17.0	19.8	20.4		18.3	17.7	20.3	18.9			20.0	19.2	20.1	20.6	19.3	18.6	17.7	19.7	19.8	19.0
Tourmaline	00	19.6		19.3	20.0	19.7	19.5	19.4	17.2	19.7	19.9	19.0	18.6	17.5	20.2	20.4		18.6	18.1	20.9	19.2			20.6	18.5	20.4	21.0	19.7	18.9	17.8	20.1	20.0	19.3
Aveline	000/00	18.4		17.7	19.2	19.1	18.8	17.9	16.2	18.6	18.5	17.8	17.6	16.0	18.5	19.1		17.4	16.7	19.4	18.1			19.5	17.5	19.2	19.5	18.6	17.6	16.6	18.7	18.9	18.1
Obélix	000/00	19.5		18.2	20.4	19.8	18.9	19.1	16.9	19.2	19.7	19.2	18.4	17.4	19.9	20.1		18.5	17.3	20.3	18.8			20.6	18.2	20.1	20.8	19.6	18.7	17.4	19.5	19.8	19.0
Protéix	00	17.8		17.5	18.3	18.4	18.5	17.9	15.7	18.0	18.4	17.3	17.4	16.0	18.4	19.5		17.1	16.6	19.2	17.9			20.7	17.7	19.4	19.2	18.1	17.5	16.5	18.5	18.7	17.8
Falbala	00	16.3		16.0	17.8	17.6	17.2	16.9	14.8	17.3	18.2	15.8	16.5	14.7	17.6	18.3		16.2	15.5	18.4	16.5			17.7	15.1	18.1	18.3	16.8	16.5	15.0	17.5	17.8	16.7
Toutatis	000/00	19.8		18.6	20.2	19.8	19.6	19.7	16.7	19.8	19.5	19.2	18.8	17.2	20.0	21.0		19.0	17.7	20.7	19.1			20.9	18.7	20.3	20.6	19.9	19.2	17.6	19.9	20.0	19.3
Tequila	00	19.0		18.8	19.8	20.3	19.2	18.7	17.0	19.1	19.8	18.6	18.9	16.6	19.5	20.8		18.4	17.5	20.4	18.9			19.9	17.9	19.9	20.9	19.2	18.7	17.3	19.5	20.1	19.0
Témoins 000		19.4		18.5	19.6	19.4	19.3	19.3	17.3	19.4	20.0	19.2	18.6	16.9	19.9	20.4		18.8	17.5	20.5	19.2			20.7	18.4	19.9	20.3	19.7	18.9	17.5	19.6	19.8	19.1
Témoins 000/00		19.0		18.3	19.7	19.9	18.7	18.8	16.6	19.4	19.7	18.5	18.3	16.5	19.4	20.1		18.4	17.2	20.4	18.9			20.1	17.9	19.5	20.0	19.1	18.5	17.1	19.4	19.7	18.7
Témoins 00		19.3		19.1	20.1	19.8	19.5	19.3	17.0	19.5	19.6	18.9	18.6	17.2	20.0	20.4		18.4	17.9	20.6	19.0			20.3	18.8	20.2	20.8	19.5	18.7	17.8	19.9	19.9	19.2
Moy. témoins		19.2		18.6	19.8	19.7	19.2	19.1	17.0	19.4	19.7	18.9	18.5	16.9	19.8	20.3		18.5	17.6	20.5	19.0			20.4	18.4	19.9	20.4	19.4	18.7	17.4	19.6	19.8	19.0

Teneur en huile en valeur relative, %

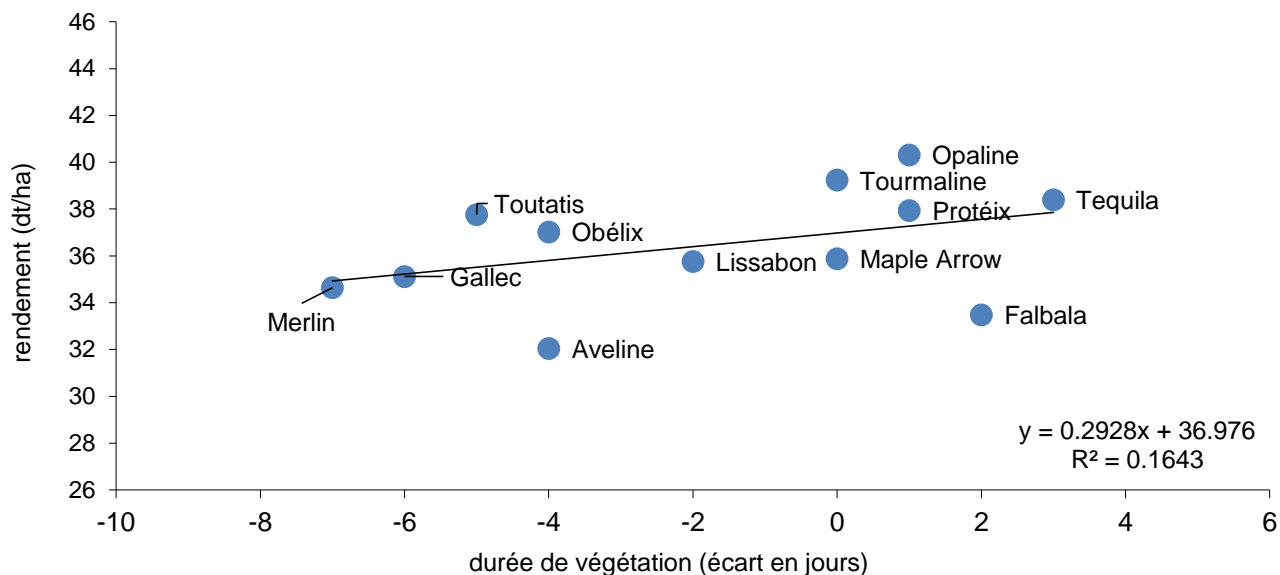
Variété	Groupe	Changins					Goumoëns					Giez					Delley					Reckenholz					Moy.						
		2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016							
Maple Arrow	00	97.8		100.6	99.4	98.3	98.0	98.0	98.7	100.2	100.3	99.7	99.7	99.1	98.3	102.4		98.4	102.4	99.1	101.6			100.0	96.5	97.7	98.5	98.7	100.0	98.9	100.1	99.2	
Merlin	000	101.5		101.3	102.0	100.4	101.5	101.7	103.3	102.9	101.0	103.1	102.2	102.4	103.1	103.2		102.9	102.8	101.6	102.9			100.4	100.5	100.7	102.0	102.3	102.2	101.9	101.6	102.0	
Gallec	000	98.5		98.7	98.0	99.6	98.5	98.3	96.7	97.1	99.0	96.9	97.8	97.6	96.9	96.8		97.1	97.2	98.4	97.1			99.6	99.5	99.3	98.0	97.7	97.8	98.1	98.4	98.0	
Lissabon	000/00	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Opaline	00	98.5		98.7	100.2	100.6	99.8	99.5	99.3	98.8	98.3	99.4	99.7	98.4	98.9	99.9		99.1	98.9	98.7	99.4			102.0	99.2	99.1	99.2	99.4	99.6	99.6	99.8	99.5	99.3
Tourmaline	00	101.5		101																													

Synthèse Soja 5 ans

Synthèse 5 ans	Durée végétation écart en jours	Groupe précocité	Rdt. net	Rdt relatif durée	Rdt relatif groupe	Verse	PMG	Protéines	Protéines val. rel.	Huile	Huiles val. rel.
			11 % H2O dt/ha	végétation %	précocité %	(1=dressé) note	g	% MS	%	% MS	%
Maple Arrow	0	00	35.9	97	91	5	230	41.0	101	19.0	99
Merlin	-7	000	34.6	99	99	3	189	40.5	99	19.5	102
Gallec	-6	000	35.1	100	101	3	214	41.8	101	18.7	98
Lissabon	-2	000/00	35.8	99	100	3	207	41.4	100	18.7	100
Opaline	1	00	40.3	108	101	5	216	40.7	100	19.0	99
Tourmaline	0	00	39.2	106	99	4	216	40.5	100	19.3	101
Aveline	-4	000/00	32.0	90	90	4	217	43.4	105	18.1	97
Obélix	-4	000/00	37.0	103	103	2	247	41.5	100	19.0	101
Protéix	1	00	37.9	102	96	4	198	43.6	107	17.8	93
Falbala	2	00	33.5	89	85	4	209	46.5	115	16.7	87
Toutatis	-5	000/00	37.8	106	106	2	212	40.1	97	19.3	103
Tequila	3	00	38.4	101	97	4	207	40.4	100	19.0	99
Témoins 000			35.3			4	210	40.8		19.3	
Témoins 000/00			35.1			3	214	41.8		18.7	
Témoins 00			39.8			4	216	40.6		19.2	

Synthèse 5 ans	Durée végétation écart en jours	Groupe précocité	Rdt relatif durée	Verse	Protéines val. rel.	Huiles val. rel.	VAT
			végétation %	(bonus)	%	%	
Maple Arrow	0	00	97		1	-	98
Merlin	-7	000	99	2	-	2	103
Gallec	-6	000	100	1	1	-	102
Lissabon	-2	000/00	99	1	-	-	100
Opaline	1	00	108		-	-	108
Tourmaline	0	00	106	1	-	1	108
Aveline	-4	000/00	90		5	-	95
Obélix	-4	000/00	103	1	-	1	105
Protéix	1	00	102		7	-	109
Falbala	2	00	89		15	-	104
Toutatis	-5	000/00	106	1	-	3	110
Tequila	3	00	101	1	-	-	102

Rendement net à 11% H₂O



Résultats Soja 4 ans

Rendement à 11% H2O, dt/ha

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.			
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
Maple Arrow	00	36.5	36.2	38.7	40.4	31.1	42.6	39.2	35.5	30.3	37.2	30.2	34.6	36.4	35.2	42.8	35.0	38.3	50.1		36.9	33.9	37.9	40.2	37.2
Merlin	000	35.2	39.3	34.3	37.9	31.4	39.0	34.8	38.5	33.0	38.6	25.1	38.8	29.4	36.8	37.4	29.5	36.3	46.8		38.4	31.7	38.0	35.7	35.9
Gallec	000	36.8	37.6	35.6	40.7	27.8	44.2	35.6	35.5	31.1	37.5	26.7	39.5	34.2	34.6	37.2	32.4	36.9	48.1		38.6	32.5	38.1	36.7	36.5
Lissabon	000/00	38.0	39.7	34.2	36.9	31.5	41.4	38.5	38.5	32.8	42.7	26.9	39.8	33.1	36.2	30.9	33.7	40.1	42.0		38.4	33.8	40.0	34.5	36.7
Opaline	00	42.7	41.1	40.1	43.5	37.0	43.1	42.5	41.7	42.0	41.1	29.7	47.9	39.4	36.5	45.4	37.7	38.3	55.8		44.4	39.8	40.0	42.7	41.7
Tourmaline	00	46.1	37.4	39.9	42.0	36.2	45.3	37.3	41.1	37.9	43.5	27.7	44.2	46.8	35.5	41.6	32.9	38.2	50.1		42.4	40.0	40.0	39.3	40.4
Aveline	000/00	35.8	32.6	30.9	32.0	26.5	36.0	35.4	33.9	31.0	32.4	25.5	37.5	28.0	28.7	39.2	30.2	32.3	46.3		34.4	30.3	32.4	35.5	33.2
Obélix	000/00	43.3	41.7	38.7	40.2	32.6	45.5	38.4	36.2	35.1	42.2	26.2	44.5	37.1	33.2	40.7	33.8	37.1	47.2		40.3	36.4	39.9	38.3	38.7
Protéix	00	37.1	41.1	37.4	42.9	28.2	44.7	36.7	39.7	34.0	45.6	30.8	41.6	41.1	35.3	41.8	34.6	40.5	52.4		41.4	35.0	41.4	39.8	39.4
Falbala	00	34.1	36.3	37.7	32.3	23.8	36.3	34.9	33.9	30.0	40.7	27.2	35.1	36.4	32.4	37.9	26.9	34.8	48.8		33.8	30.2	36.1	37.3	34.3
Toutatis	000/00	44.1	43.5	36.9	43.2	32.9	44.7	39.0	40.6	37.1	38.8	25.8	38.0	40.8	36.0	43.1	38.0	37.1	52.2		39.4	38.6	40.0	39.4	39.3
Tequila	00	41.0	39.7	31.6	40.5	30.0	42.6	35.7	46.9	37.3	46.7	29.4	39.1	39.4	39.4	38.8	36.9	41.5	54.4		40.1	36.9	42.0	38.0	39.2
Galice	000/00	47.1	43.5	38.5	44.5	32.4	45.3	41.6	42.2	39.2	46.0	29.9	43.4	40.1	38.6	39.7	37.5	44.0	53.0		43.4	39.3	43.5	40.6	41.7
Témoins 000		36.0	38.4	35.0	39.3	29.6	41.6	35.2	37.0	32.0	38.0	25.9	39.2	31.8	35.7	37.3	31.0	36.6	47.4		38.5	32.1	38.1	36.2	36.2
Témoins 000/00		38.0	39.7	34.2	36.9	31.5	41.4	38.5	38.5	32.8	42.7	26.9	39.8	33.1	36.2	30.9	33.7	40.1	42.0		38.4	33.8	40.0	34.5	36.7
Témoins 00		44.4	39.2	40.0	42.7	36.6	44.2	39.9	41.4	39.9	42.3	28.7	46.1	43.1	36.0	43.5	35.3	38.2	53.0		43.4	39.9	40.0	41.0	41.1
Moy. témoins		39.5	39.1	36.4	39.7	32.6	42.4	37.9	38.9	34.9	41.0	27.2	41.7	36.0	36.0	37.3	33.3	38.3	47.5		40.1	35.3	39.4	37.2	38.0

Rendement en valeurs relatives à la durée de végétation, %

Variété	Jours	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.			
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
Maple Arrow	0.0	91.1	92.4	105.0	101.2	100.6	100.4	103.2	92.2	86.1	88.0	105.6	85.5	94.5	98.8	106.6	102.3	98.9	98.5		92.9	94.9	95.7	103.8	96.8
Merlin	-7.0	90.3	99.9	97.0	96.8	101.7	92.5	94.2	106.1	99.8	104.0	99.2	97.8	90.1	108.0	97.5	90.5	100.6	100.5		100.2	94.5	101.0	97.7	98.4
Gallec	-6.0	94.1	95.8	100.1	103.6	90.0	104.7	96.0	97.0	93.4	99.0	103.8	99.3	102.4	100.7	96.2	98.9	101.3	102.0		100.0	95.8	100.3	99.6	98.9
Lissabon	-2.0	95.4	101.3	93.8	92.9	101.9	97.8	102.4	101.4	94.9	104.7	97.4	98.8	89.9	102.9	78.0	99.9	105.5	84.6		97.7	96.4	102.4	91.2	96.9
Opaline	1.0	106.1	105.0	108.1	108.4	119.9	101.5	111.7	107.1	118.3	95.7	102.4	118.0	100.1	101.8	112.4	109.6	97.8	108.5		111.2	110.8	100.3	108.6	107.7
Tourmaline	0.0	115.0	95.4	108.2	105.1	117.4	106.7	96.9	106.5	107.7	103.0	96.9	109.2	121.6	99.7	103.7	96.4	98.6	98.7		107.0	111.6	100.7	101.2	105.1
Aveline	-4.0	90.6	83.2	85.9	81.0	85.7	85.1	94.8	91.0	91.3	82.5	95.5	93.5	79.7	82.5	100.2	90.9	86.8	95.7		88.5	87.6	84.0	94.4	88.6
Obélix	-4.0	109.7	106.2	107.5	101.7	105.6	107.6	103.5	97.1	103.3	107.3	98.3	111.2	105.5	95.6	104.0	101.6	99.7	97.6		103.4	105.1	103.3	102.2	103.5
Protéix	1.0	92.1	104.9	100.8	107.0	91.5	105.3	96.3	102.1	95.8	106.2	106.0	102.3	104.4	98.5	103.5	100.7	103.5	101.9		103.8	96.9	103.7	101.7	101.5
Falbala	2.0	84.3	92.7	101.1	80.2	77.0	85.5	91.2	86.4	83.7	93.1	92.2	86.1	90.4	89.8	93.1	77.8	88.0	93.8		84.3	82.6	89.8	94.3	87.8
Toutatis	-5.0	112.3	110.8	103.2	109.8	106.4	105.8	104.8	99.9	110.2	100.6	98.4	95.0	118.9	104.2	110.7	115.1	100.8	109.3		101.6	112.6	104.4	105.3	106.0
Tequila	3.0	101.1	101.4	84.1	100.5	97.3	100.1	93.1	102.7	103.3	105.1	98.0	95.7	95.9	108.7	94.7	105.9	103.8	103.4		99.6	100.7	103.8	94.6	99.7
Galice	-1.0	117.9	110.9	105.1	111.7	105.0	107.0	110.2	110.5	112.3	110.8	106.4	107.6	106.4	108.9	99.5	110.6	114.6	105.5		109.9	110.4	110.4	105.3	109.0
Témoins 000		92.2	97.9	98.5	100.2	95.8	98.6	95.1	101.5	96.6	101.5	91.5	98.5	96.3	104.3	96.9	94.7	100.9	101.3		100.1	95.1	100.6	98.7	98.6
Témoins 000/00		95.4	101.3	93.8	92.9	101.9	97.8	102.4	101.4	94.9	104.7	97.4	98.8	89.9	102.9	78.0	99.9	105.5	84.6		97.7	96.4	102.4	91.2	96.9
Témoins 00		110.5	100.2	108.2	106.8	118.6	104.1	105.1	106.8	113.0	99.4	99.6	113.6	110.9	100.7	108.0	103.0	98.2	103.6		109.1	111.2	100.5	104.9	106.4
Moy. témoins		99.4	99.8	100.2	100.0	105.5	100.1	100.9	103.3	101.5	101.9	99.5	103.6	99.0	102.6	94.3	99.2	101.5	96.5		102.3	100.9	101.2	98.3	100.7

Rendement en valeurs relatives au groupe de précocité, %

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.			
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016
Maple Arrow	00	82.3	92.3	96.8	94.6	84.8	96.4	98.1	85.9	75.8	87.8	105.1	75.1	84.4	97.8	98.4	99.0	100.2	94.5		85.2	85.3	94.9	98.6	91.0
Merlin	000	97.7	102.2	98.1	96.5	106.1	93.8	98.8	104.0	102.9	101.5	96.8	99.1	92.3	103.2	100.3	95.2	99.1	98.6		99.9	98.9	99.9	98.5	99.3
Gallec	000	102.3	97.8	101.9	103.5	93.9	106.2	101.2	96.0	97.1	98.5	103.2	100.9	107.7	96.8	99.7	104.8	100.9	101.4		100.1	101.1	100.1	101.5	100.7
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0
Opaline	00	96.2	104.8	100.2	101.7	101.0	97.5	106.5	100.7	105.1	97.1	103.6	104.0	91.4	101.4	104.4	106.7	100.1	105.4		102.1	100.1	100.2	104.0	101.6
Tourmaline	00	103.8	95.2	99.8	98.3	99.0	102.5	93.5	99.3	94.9	102.9	96.4	96.0	108.6	98.6	95.6	93.3	99.9	94.6		97.9	99.9	99.8	96.0	98.4
Aveline	000/00	94.2	82.2	90.4	86.6	84.1	86.9	92.0	88.1	94.6	76.0	94.7	94.1	84.5	79.2	126.8	89.8	80.7	110.3		89.6	89.4	81.0	102.8	90.7
Obélix	000/00	114.0	104.9	113.2	108.8	103.6	109.9	100.4	94.1	106.9	99.8	97.5	112.0	112.0	91.8	131.7	100.4	92.7	112.5		105.0	107.4	99.6	111.0	105.8
Protéix	00	83.5	104.7	93.4	100.3	77.1	101.2	91.9	96.1	85.1	107.8	107.2	90.2	95.3	98.0	96.1	98.1	105.9	98.9		95.5	87.8	103.5	97.5	96.1
Falbala	00	76.7	92.5	94.3	75.5	64.9	82.3	87.3	82.0	75.1	96.1	94.8	76.1	81.3	90.0	87.0	76.3	91.0	92.1		77.8	75.5	90.4	91.1	83.7
Toutatis	000/00	116.2	109.6	108.0	117.1	104.4	107.9	101.2	95.9	113.1	90.9	95.8	95.4	123.1	99.4	139.3	112.9	92.7	124.4		102.8	114.0	100.1	113.8	107.7
Tequila	00	92.4	101.1	78.9	94.8	82.0	96.4	89.4	98.2	93.4	110.4	102.3	84.8	91.3	109.5	8									

Résultats Soja 4 ans

Poids de 1000 grains, g

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.		
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016			
Maple Arrow	00	229.8	228.8	224.1	216.4	231.9	218.2	280.5	199.7	242.7	203.5	185.9	226.2	328.1	205.2	239.4	221.1	205.0	274.6	214.1	250.7	212.1	240.9	229.5
Merlin	000	185.2	199.2	224.1	181.0	185.7	192.1	252.4	164.3	183.1	202.4	174.7	182.3	185.6	168.8	247.5	174.8	168.4	219.0	175.9	182.9	186.2	223.6	192.1
Gallec	000	221.5	216.7	216.1	210.4	226.8	208.2	234.8	184.9	223.2	212.1	198.5	209.8	235.6	187.7	234.8	211.1	194.8	242.4	201.7	223.6	203.9	225.3	213.6
Lissabon	000/00	222.8	204.3	196.3	185.4	200.8	201.1	247.2	182.3	219.3	206.9	206.4	198.1	215.9	185.8	224.5	214.2	185.1	234.9	188.6	214.6	196.6	221.9	205.4
Opaline	00	225.7	215.0	211.3	205.2	217.0	212.1	244.6	197.1	225.6	210.6	214.7	215.5	227.5	192.2	235.4	213.4	196.3	259.7	205.9	221.8	205.2	233.2	216.5
Tourmaline	00	219.2	220.9	227.3	209.8	225.3	214.9	272.3	192.3	219.7	214.3	203.9	206.4	226.6	196.3	247.5	208.3	191.1	243.2	202.8	219.8	207.5	238.8	217.2
Aveline	000/00	233.3	227.4	219.1	199.3	213.9	194.2	251.5	187.4	220.2	207.1	194.1	215.9	241.8	191.2	253.8	235.3	193.0	243.0	200.9	228.9	202.6	232.3	216.2
Obélix	000/00	277.1	251.1	253.5	239.8	263.4	246.7	267.1	223.0	242.6	248.2	217.0	249.5	268.1	221.1	266.8	238.3	204.1	260.6	237.4	257.9	234.3	253.0	245.6
Protéix	00	204.1	209.7	194.3	180.4	183.9	200.9	268.8	181.2	196.8	205.3	204.6	193.8	207.9	187.4	230.0	180.3	185.9	229.8	185.1	194.6	197.8	225.5	200.8
Falbala	00	212.1	212.1	203.6	195.2	199.2	197.8	278.3	183.2	204.0	208.5	219.3	201.2	221.9	187.2	226.8	183.8	189.7	248.2	193.2	204.2	199.1	235.2	207.9
Toutatis	000/00	215.8	215.3	218.9	196.4	219.7	212.5	263.4	182.9	219.5	220.7	207.6	201.5	218.9	191.3	240.0	204.8	194.4	246.2	193.6	215.7	206.9	235.2	212.9
Tequila	00	210.1	210.8	195.9	193.0	199.1	196.0	262.9	173.9	211.5	194.1	235.0	196.4	220.1	180.0	243.2	211.2	178.2	254.6	187.8	210.4	191.8	238.3	207.1
Galice	000/00	243.5	217.3	212.3	208.4	228.0	228.1	252.9	197.9	225.5	222.8	221.0	213.8	229.9	199.4	241.1	224.9	212.6	239.4	206.7	230.4	216.0	233.3	221.6
Témoins 000		203.3	207.9	220.1	195.7	206.3	200.1	243.6	174.6	203.2	207.3	186.6	196.0	210.6	178.3	241.2	192.9	181.6	230.7	188.8	203.2	195.0	224.4	202.9
Témoins 000/00		222.8	204.3	196.3	185.4	200.8	201.1	247.2	182.3	219.3	206.9	206.4	198.1	215.9	185.8	224.5	214.2	185.1	234.9	188.6	214.6	196.6	221.9	205.4
Témoins 00		222.5	218.0	219.3	207.5	221.1	213.5	258.4	194.7	222.7	212.5	209.3	210.9	227.0	194.3	241.4	210.8	193.7	251.5	204.4	220.8	206.4	236.0	216.9
Moy. témoins		216.2	210.1	211.9	196.2	209.4	204.9	249.8	183.9	215.0	208.9	200.8	201.7	217.9	186.1	235.7	206.0	186.8	239.0	193.9	212.9	199.3	227.4	208.4

Verse à la récolte, note (1 = dressé)

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.	
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016		
Maple Arrow	00	7.3	6.5	1.8	4.8	7.0	3.3	3.8	4.0	8.3	2.8	1.0	5.3	7.0	5.5	4.0			4.7	7.4	4.5	2.6	4.8
Merlin	000	4.8	2.5	1.8	1.5	3.0	1.0	1.0	1.0	5.3	1.0	1.0	3.0	6.0	1.3	2.0			1.8	4.8	1.4	1.4	2.4
Gallec	000	5.0	3.7	1.3	2.0	4.0	2.5	2.3	1.3	4.5	1.5	1.0	3.5	4.8	2.3	2.3			2.3	4.6	2.5	1.7	2.7
Lissabon	000/00	5.3	1.7	1.0	1.0	3.3	1.0	1.3	1.3	6.0	1.0	1.0	2.8	3.8	1.0	1.5			1.7	4.6	1.2	1.2	2.1
Opaline	00	7.5	6.3	1.3	4.8	6.5	3.8	3.8	4.0	6.5	2.0	1.0	5.3	6.8	5.8	3.8			4.7	6.8	4.5	2.4	4.6
Tourmaline	00	4.5	4.3	1.5	4.5	4.5	2.5	3.5	4.3	5.8	2.0	1.0	4.3	6.8	2.5	4.3			4.3	5.4	2.8	2.6	3.8
Aveline	000/00	6.0	4.5	1.3	3.5	4.0	3.0	4.5	2.8	5.8	1.5	1.0	5.3	6.0	3.8	2.8			3.8	5.4	3.2	2.4	3.7
Obélix	000/00	4.5	2.8	1.0	1.0	3.0	1.5	1.8	1.3	3.3	1.0	1.0	2.0	4.8	1.5	1.8			1.4	3.9	1.7	1.4	2.1
Protéix	00	6.3	4.5	2.0	4.3	6.3	2.8	4.0	4.0	6.8	2.0	1.0	5.0	5.8	5.0	3.8			4.4	6.3	3.6	2.7	4.2
Falbala	00	7.8	4.3	1.3	4.3	6.8	1.8	4.0	5.3	7.3	1.3	1.0	5.0	6.0	3.0	4.5			4.8	6.9	2.6	2.7	4.3
Toutatis	000/00	5.5	2.0	1.0	1.3	2.8	1.3	2.0	1.0	5.0	1.0	1.0	2.8	5.5	1.5	1.3			1.7	4.7	1.4	1.3	2.3
Tequila	00	6.8	4.0	1.3	3.3	5.8	2.8	4.3	4.3	5.5	1.5	1.3	5.3	6.3	3.3	5.8			4.3	6.1	2.9	3.1	4.1
Galice	000/00	5.8	4.0	1.0	4.0	3.3	1.8	2.3	3.5	5.3	1.5	1.0	4.5	6.3	2.0	2.0			4.0	5.1	2.3	1.6	3.3
Témoins 000		4.9	3.1	1.5	1.8	3.5	1.8	1.6	1.1	4.9	1.3	1.0	3.3	5.4	1.8	2.1			2.0	4.7	2.0	1.6	2.6
Témoins 000/00		5.3	1.7	1.0	1.0	3.3	1.0	1.3	1.3	6.0	1.0	1.0	2.8	3.8	1.0	1.5			1.7	4.6	1.2	1.2	2.1
Témoins 00		6.0	5.3	1.4	4.6	5.5	3.1	3.6	4.1	6.1	2.0	1.0	4.8	6.8	4.1	4.0			4.5	6.1	3.6	2.5	4.2
Moy. témoins		5.4	3.3	1.3	2.5	4.1	2.0	2.2	2.2	5.7	1.4	1.0	3.6	5.3	2.3	2.5			2.7	5.1	2.3	1.8	3.0

Teneur en protéines, % MS

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.	
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016		
Maple Arrow	00	41.2	40.2	40.9	41.1	43.7	39.3	40.8	40.3	43.1	40.0	38.4	41.0	41.7	37.6	41.9			40.8	42.5	39.5	40.5	40.8
Merlin	000	41.1	39.4	40.9	39.5	41.3	38.8	40.0	39.9	43.8	39.9	39.0	39.6	44.1	37.6	41.5			39.6	42.8	38.8	40.3	40.4
Gallec	000	42.8	40.1	40.3	41.1	45.0	40.5	40.9	41.0	44.6	41.0	39.3	41.6	44.3	38.7	42.7			41.2	44.1	40.1	40.9	41.6
Lissabon	000/00	42.7	40.1	40.2	40.7	43.6	39.2	40.6	40.7	45.1	40.1	38.5	40.5	43.4	37.4	42.5			40.6	43.9	39.2	40.7	41.1
Opaline	00	40.7	39.7	40.6	39.8	42.5	39.8	40.9	39.6	42.7	40.1	38.9	40.7	41.6	37.8	42.0			40.1	42.0	39.3	40.5	40.5
Tourmaline	00	40.2	38.9	41.1	39.7	42.1	39.1	40.4	39.9	42.4	39.8	38.9	39.8	41.9	36.8	42.5			39.8	42.1	38.7	40.7	40.3
Aveline	000/00	44.1	41.3	42.9	43.6	44.4	42.2	42.8	42.8	45.6	43.0	42.2	43.1	45.2	40.0	44.0			46.0	41.0	42.3	43.2	43.1
Obélix	000/00	43.0	39.7	39.9	41.2	44.0	40.2	40.9	41.1	43.1	40.6	39.8	41.1	44.8	38.1	42.4			44.9	39.5	41.2	41.4	41.4
Protéix	00	43.9	43.3	43.5	42.9	45.3	43.0	43.4	42.9	45.2	43.9	40.9	43.5	44.5	40.7	44.9			45.4	41.3	42.8	43.1	43.4
Falbala	00	47.5	45.5	45.8	46.0	49.1	44.2	44.2	45.2	49.6	45.8	43.7	45.7	47.6	43.3	47.2			52.1	44.8	45.7	45.3	46.2
Toutatis	000/00	40.1	38.6	39.3	39.4	42.9	38.6	40.8	39.3	42.7	39.1	38.3	39.2	42.9	36.5	41.6			43.2	38.0	40.1	40.0	40.0
Tequila	00	40.3	38.9	38.9	40.4	43.0	39.0	38.8	38.8	44.3	39.9	37.9	40.1	41.9									

Résultats Soja 4 ans

Teneur en protéines en valeur relative, %

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.				
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016					
Maple Arrow	00	101.8	102.2	100.2	103.4	103.3	99.7	100.4	101.4	101.2	100.2	98.7	101.8	99.9	100.9	99.2	99.3	103.2	100.0	102.2	101.1	101.2	101.1	99.7	101.0	
Merlin	000	97.9	99.1	100.8	97.9	95.8	97.8	98.9	98.6	99.2	98.7	99.7	97.5	99.8	98.6	98.6	99.4	97.6	98.4	99.3	98.5	98.0	98.4	98.4	99.3	98.5
Gallec	000	102.1	100.9	99.2	102.1	104.2	102.2	101.1	101.4	100.8	101.3	100.3	102.5	100.2	101.4	101.4	100.6	102.4	101.6	101.5	102.0	101.6	101.6	100.7	101.5	
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Opaline	00	100.6	101.1	99.4	100.2	100.5	100.9	100.6	99.7	100.3	100.4	99.9	101.2	99.6	101.3	99.3	98.2	100.0	99.8	100.4	99.9	100.7	99.8	99.8	100.2	
Tourmaline	00	99.4	98.9	100.6	99.8	99.5	99.1	99.4	100.3	99.7	99.6	100.1	98.8	100.4	98.7	100.7	101.8	100.0	100.2	99.6	100.1	99.3	100.2	99.8		
Aveline	000/00	103.1	103.1	106.7	107.2	101.9	107.7	105.3	105.2	101.1	107.1	109.6	106.3	104.1	107.0	103.4	102.2	104.0	101.4	104.9	106.2	102.5	105.8	105.3	104.9	
Obélix	000/00	100.7	99.0	99.3	101.2	101.0	102.7	100.6	101.0	95.7	101.2	103.4	101.3	103.2	101.9	99.8	99.8	100.1	98.7	100.2	100.1	101.0	100.4	100.6		
Protéix	00	108.4	110.2	106.6	107.8	107.2	108.9	106.9	107.8	106.1	109.9	105.0	108.1	106.6	109.1	106.3	105.3	106.2	106.2	107.4	107.9	106.7	108.8	106.2	107.4	
Falbalá	00	117.5	115.7	112.1	115.6	116.1	111.9	108.7	113.6	116.5	114.7	112.4	113.6	114.0	116.3	111.8	120.7	115.0	113.4	114.4	117.0	114.7	111.7	114.4		
Toutatis	000/00	93.8	96.3	97.7	96.8	98.5	98.7	100.4	96.7	94.9	97.5	99.5	96.6	98.8	97.8	97.9	96.1	96.5	96.2	97.2	96.7	96.4	97.4	98.4	97.2	
Tequila	00	99.6	98.9	95.3	101.7	101.8	98.8	95.6	97.6	104.0	99.9	97.4	99.7	100.4	99.3	99.2	104.2	99.2	97.7	99.5	102.0	99.2	97.0	99.5		
Galice	000/00	97.6	98.1	96.5	98.8	97.9	100.3	96.0	97.8	97.1	100.2	99.5	98.4	98.8	98.9	97.6	100.0	99.9	96.3	98.3	98.3	99.5	97.2	98.3		
Témoins 000		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Témoins 000/00		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Témoins 00		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Moy. témoins		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	

Teneur en huile, % MS

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.		
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016			
Maple Arrow	00	19.2	20.0	19.5	18.9	16.8	19.5	19.6	18.5	17.1	19.7	20.9	18.2	18.3	20.4	19.4	18.8	19.5	20.3	18.5	18.1	19.8	19.9	19.1
Merlin	000	18.8	20.0	19.5	19.6	17.9	20.0	20.2	19.0	17.3	20.5	21.0	19.3	18.0	20.8	19.7	18.5	20.0	20.5	19.3	18.1	20.3	20.2	19.5
Gallec	000	18.3	19.2	19.4	19.0	16.7	18.9	19.8	18.2	16.5	19.2	19.7	18.2	17.0	20.2	18.6	18.3	19.8	20.2	18.7	18.3	19.5	19.5	18.7
Lissabon	000/00	18.3	19.7	19.9	18.8	16.6	19.4	19.7	18.3	16.5	19.4	20.1	18.4	17.2	20.4	18.9	17.9	19.5	20.0	18.5	17.3	19.7	19.7	18.8
Opaline	00	18.8	20.1	20.0	19.2	16.9	19.2	19.2	18.5	17.0	19.8	20.4	18.3	17.7	20.3	18.9	19.2	20.1	20.6	18.6	17.9	19.9	19.8	19.1
Tourmaline	00	19.3	20.0	19.7	19.4	17.2	19.7	19.9	18.6	17.5	20.2	20.4	18.6	18.1	20.9	19.2	18.5	20.4	21.0	18.9	18.1	20.3	20.0	19.3
Aveline	000/00	17.7	19.2	19.1	17.9	16.2	18.6	18.5	17.6	16.0	18.5	19.1	17.4	16.7	19.4	18.1	17.5	19.2	19.5	17.6	16.8	19.0	18.9	18.1
Obélix	000/00	18.2	20.4	19.8	19.1	16.9	19.2	19.7	18.4	17.4	19.9	20.1	18.5	17.3	20.3	18.8	18.2	20.1	20.8	18.7	17.6	20.0	19.8	19.0
Protéix	00	17.5	18.3	18.4	17.9	15.7	18.0	18.4	17.4	16.0	18.4	19.5	17.1	16.6	19.2	17.9	17.7	19.4	19.2	17.5	16.7	18.7	18.7	17.9
Falbalá	00	16.0	17.8	17.6	16.9	14.8	17.3	18.2	16.2	15.5	17.6	18.3	16.2	15.5	18.4	16.5	15.1	18.1	18.3	16.5	15.2	17.8	17.8	16.8
Toutatis	000/00	18.6	20.2	19.8	19.7	16.7	19.8	19.5	18.8	17.2	20.0	21.0	19.0	17.7	20.7	19.1	18.7	20.3	20.6	19.2	17.8	20.2	20.0	19.3
Tequila	00	18.8	19.8	20.3	18.7	17.0	19.1	19.8	18.9	16.6	19.5	20.8	18.4	17.5	20.4	18.9	17.9	19.9	20.9	18.7	17.6	19.7	20.1	19.0
Galice	000/00	18.6	20.3	20.5	19.3	17.1	19.7	20.5	19.1	17.2	19.8	20.7	19.0	17.8	20.9	19.6	18.3	20.4	21.3	19.1	17.8	20.2	20.5	19.4
Témoins 000		18.5	19.6	19.4	19.3	17.3	19.4	20.0	18.6	16.9	19.9	20.4	18.8	17.5	20.5	19.2	18.4	19.9	20.3	18.9	17.7	19.9	19.8	19.1
Témoins 000/00		18.3	19.7	19.9	18.8	16.6	19.4	19.7	18.3	16.5	19.4	20.1	18.4	17.2	20.4	18.9	17.9	19.5	20.0	18.5	17.3	19.7	19.7	18.8
Témoins 00		19.1	20.1	19.8	19.3	17.0	19.5	19.6	18.6	17.2	20.0	20.4	18.4	17.9	20.6	19.0	18.8	20.2	20.8	18.7	18.0	20.1	19.9	19.2
Moy. témoins		18.6	19.8	19.7	19.1	17.0	19.4	19.7	18.5	16.9	19.8	20.3	18.5	17.6	20.5	19.0	18.4	19.9	20.4	18.7	17.7	19.9	19.8	19.0

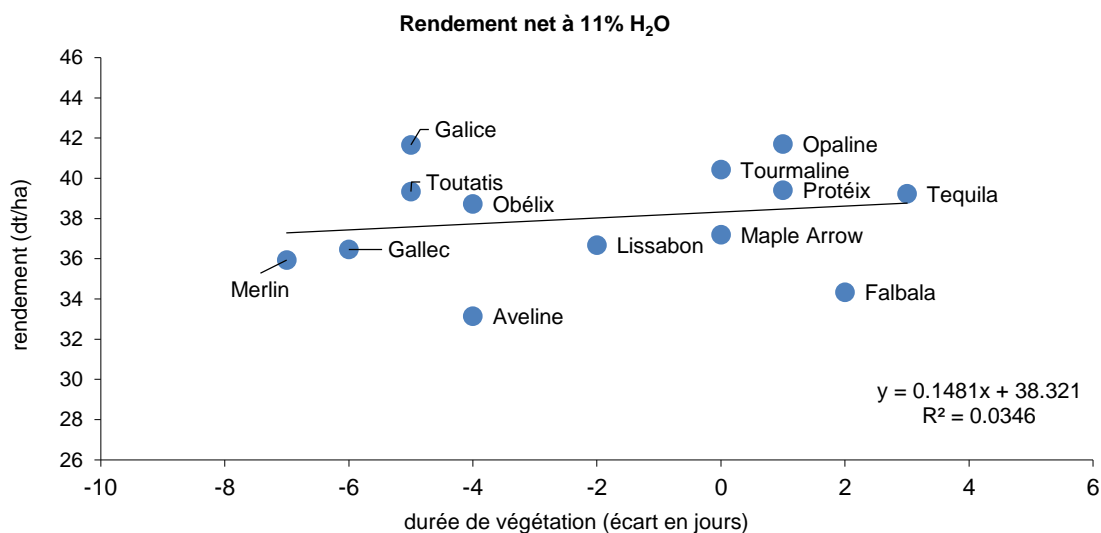
Teneur en huile en valeur relative, %

Variété	Groupe	Changins				Goumoëns				Giez				Delley				Reckenholz				Moy.		
		2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016	2013	2014	2015	2016			
Maple Arrow	00	100.6	99.4	98.3	98.0	98.7	100.2	100.3	99.7	99.1	98.3	102.4	98.4	102.4	99.1	101.6	100.0	96.5	97.7	98.7	100.1	98.7	100.1	99.4
Merlin	000	101.3	102.0	100.4	101.7	103.3	102.9	101.0	102.2	102.4	103.1	103.2	102.9	102.8	101.6	102.9	100.4	100.5	100.7	102.3	102.0	102.0	101.6	102.0
Gallec	000	98.7	98.0	99.6	98.3	96.7	97.1	99.0	97.8	97.6	96.9	96.8	97.1	97.2	98.4	97.1	99.6	99.5	99.3	98.0	98.0	98.0	98.4	98.0
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	98.7	100.2	100.6	99.5	99.3	98.8	98.3	99.7	98.4	98.9	99.9	99.1	98.9	98.7	99.4	102.0	99.2	99.1	99.4	99.5	99.2	99.5	99.4
Tourmaline	00	101.3	99.8	99.4	100.5	100.7	101.2	101.7	100.3	101.6	101.1	100.1	100.9	101.1	101.3	100.6	98.0	100.8	100.9	100.6	100.5	100.8	100.5	100.6
Aveline	000/00	96.9	97.3	96.1	95.2	97.5	95.6	94.2	96.5	97.3	95.2	94.8	94.6	97.0	95.3	96.0	97.7	98.2	97.5	95.4	97.3	96.3	95.7	96.2
Obélix	000/00	99.6	103.3	99.8	101.2	101.5	98.9	99.8	100.9	105.7	102.3	99.8	100.8	100.1	99.6	99.6	101.7	102.7	103.8	101.0	101.7	101.4	100.6	101.2
Protéix	00	91.7	91.2	92.7	93.1	92.1	92.2	94.1	94.0	92.5	91.8	95.5	92.8	92.5	93.0	93.9	94.2	96.1	92.3	93.3	92.6	92.9	93.7	93.1
Falbalá	00	83.7	88.5	88.5	87.7	87.0	88.9	92.9	89.0	85.1	87.8	89.7	87.8	86.4	89.4	86.9	80.2	89.4	88.0	88.2	84.5	88.8	89.2	87.7
Toutatis	000/00	101.8	102.4	99.6	104.5	100.7	101.8	98.9	102.9	104.2	102.9	104.2	103.7	102.9	101.5	101.1	104.2	104.0	102.9	103.7	102.8	102.5	101.3	102.6
Tequila	00	98.3	98.5	102.4	97.2	99.5	97.8	101.2	101.9	96.4	97.3	102.1	99.6	97.9	99.1	99.3	94.9	98						

Synthèse Soja 4 ans

Synthèse 4 ans	Durée végétation écart en jours	Groupe précocité	Rdt. net	Rdt relatif durée végétation	Rdt relatif groupe précocité	Verse (1=dressé)	PMG	Protéines	Protéines val. rel.	Huile	Huiles val. rel.
			11 % H ₂ O dt/ha	%	%	note	g	% MS	%	% MS	%
Maple Arrow	0	00	37.2	97	91	5	229	40.8	101	19.1	99
Merlin	-7	000	35.9	98	99	2	192	40.4	99	19.5	102
Gallec	-6	000	36.5	99	101	3	214	41.6	101	18.7	98
Lissabon	-2	000/00	36.7	97	100	2	205	41.1	100	18.8	100
Opaline	1	00	41.7	108	102	5	217	40.5	100	19.1	99
Tourmaline	0	00	40.4	105	98	4	217	40.3	100	19.3	101
Aveline	-4	000/00	33.2	89	91	4	216	43.1	105	18.1	96
Obélix	-4	000/00	38.7	103	106	2	246	41.4	101	19.0	101
Protéix	1	00	39.4	102	96	4	201	43.4	107	17.9	93
Falbala	2	00	34.3	88	84	4	208	46.2	114	16.8	88
Toutatis	-5	000/00	39.3	106	108	2	213	40.0	97	19.3	103
Tequila	3	00	39.2	100	96	4	207	40.2	99	19.0	99
Galice	-5	000/00	41.7	109	114	3	222	40.4	98	19.4	103
Témoins 000			36.6			4	211	40.6		19.3	
Témoins 000/00			36.5			3	214	41.6		18.7	
Témoins 00			41.1			4	217	40.4		19.2	

Synthèse 4 ans	Durée végétation écart en jours	Groupe précocité	Rdt relatif durée végétation	Verse	Protéines val. rel.	Huiles val. rel.	VAT
			%	(bonus)	%	%	
Maple Arrow	0	00	97		1	-	98
Merlin	-7	000	98	2	-	2	102
Gallec	-6	000	99	1	1	-	101
Lissabon	-2	000/00	97	1	-	-	98
Opaline	1	00	108		-	-	108
Tourmaline	0	00	105	1	-	1	107
Aveline	-4	000/00	89		5	-	94
Obélix	-4	000/00	103	1	1	1	106
Protéix	1	00	102		7	-	109
Falbala	2	00	88		14	-	102
Toutatis	-5	000/00	106	1	-	3	110
Tequila	3	00	100	1	-	-	101
Galice	-5	000/00	109		-	3	112



Résultats Soja 3 ans

Poids de 1000 grains, g

Variété	Groupe	Changins			Goumoëns			Giez			Delley			Reckenholz						Moy.
		2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	
Maple Arrow	00	229.8	228.8	224.1	231.9	218.2	280.5	242.7	203.5	185.9	328.1	205.2	239.4	221.1	205.0	274.6	250.7	212.1	240.9	234.6
Merlin	000	185.2	199.2	224.1	185.7	192.1	252.4	183.1	202.4	174.7	185.6	168.8	247.5	174.8	168.4	219.0	182.9	186.2	223.6	197.5
Gallec	000	221.5	216.7	216.1	226.8	208.2	234.8	223.2	212.1	198.5	235.6	187.7	234.8	211.1	194.8	242.4	223.6	203.9	225.3	217.6
Lissabon	000/00	222.8	204.3	196.3	200.8	201.1	247.2	219.3	206.9	206.4	215.9	185.8	224.5	214.2	185.1	234.9	214.6	196.6	221.9	211.0
Opaline	00	225.7	215.0	211.3	217.0	212.1	244.6	225.6	210.6	214.7	227.5	192.2	235.4	213.4	196.3	259.7	221.8	205.2	233.2	220.1
Tourmaline	00	219.2	220.9	227.3	225.3	214.9	272.3	219.7	214.3	203.9	226.6	196.3	247.5	208.3	191.1	243.2	219.8	207.5	238.8	222.1
Aveline	000/00	233.3	227.4	219.1	213.9	194.2	251.5	220.2	207.1	194.1	241.8	191.2	253.8	235.3	193.0	243.0	228.9	202.6	232.3	221.3
Obélix	000/00	277.1	251.1	253.5	263.4	246.7	267.1	242.6	248.2	217.0	268.1	221.1	266.8	238.3	204.1	260.6	257.9	234.3	253.0	248.4
Protéix	00	204.1	209.7	194.3	183.9	200.9	268.8	196.8	205.3	204.6	207.9	187.4	230.0	180.3	185.9	229.8	194.6	197.8	225.5	206.0
Falbala	00	212.1	212.1	203.6	199.2	197.8	278.3	204.0	208.5	219.3	221.9	187.2	226.8	183.8	189.7	248.2	204.2	199.1	235.2	212.8
Toutatis	000/00	215.8	215.3	218.9	219.7	212.5	263.4	219.5	220.7	207.6	218.9	191.3	240.0	204.8	194.4	246.2	215.7	206.9	235.2	219.3
Tequila	00	210.1	210.8	195.9	199.1	196.0	262.9	211.5	194.1	235.0	220.1	180.0	243.2	211.2	178.2	254.6	210.4	191.8	238.3	213.5
Galice	000/00	243.5	217.3	212.3	228.0	228.1	252.9	225.5	222.8	221.0	222.9	199.4	241.1	224.9	212.6	239.4	230.4	216.0	233.3	226.6
Abelina	000	214.7	207.2	195.6	207.0	196.1	261.0	208.7	209.7	219.2	220.4	174.7	223.8	188.1	167.9	265.9	207.8	191.1	233.1	210.7
Témoins 000		203.3	207.9	220.1	206.3	200.1	243.6	203.2	207.3	186.6	210.6	178.3	241.2	192.9	181.6	230.7	203.2	195.0	224.4	207.6
Témoins 000/00		222.8	204.3	196.3	200.8	201.1	247.2	219.3	206.9	206.4	215.9	185.8	224.5	214.2	185.1	234.9	214.6	196.6	221.9	211.0
Témoins 00		222.5	218.0	219.3	221.1	213.5	258.4	222.7	212.5	209.3	227.0	194.3	241.4	210.8	193.7	251.5	220.8	206.4	236.0	221.1
Moy. témoins		216.2	210.1	211.9	209.4	204.9	249.8	215.0	208.9	200.8	217.9	186.1	235.7	206.0	186.8	239.0	212.9	199.3	227.4	213.2

Verse à la récolte, note (1 = dressé)

Variété	Groupe	Changins			Goumoëns			Giez			Delley			Reckenholz						Moy.
		2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	
Maple Arrow	00	7.3	6.5	1.8	7.0	3.3	3.8	8.3	2.8	1.0	7.0	5.5	4.0				7.4	4.5	2.6	4.8
Merlin	000	4.8	2.5	1.8	3.0	1.0	1.0	5.3	1.0	1.0	6.0	1.3	2.0				4.8	1.4	1.4	2.5
Gallec	000	5.0	3.7	1.3	4.0	2.5	2.3	4.5	1.5	1.0	4.8	2.3	2.3				4.6	2.5	1.7	2.9
Lissabon	000/00	5.3	1.7	1.0	3.3	1.0	1.3	6.0	1.0	1.0	3.8	1.0	1.5				4.6	1.2	1.2	2.3
Opaline	00	7.5	6.3	1.3	6.5	3.8	3.8	6.5	2.0	1.0	6.8	5.8	3.8				6.8	4.5	2.4	4.6
Tourmaline	00	4.5	4.3	1.5	4.5	2.5	3.5	5.8	2.0	1.0	6.8	2.5	4.3				5.4	2.8	2.6	3.6
Aveline	000/00	6.0	4.5	1.3	4.0	3.0	4.5	5.8	1.5	1.0	6.0	3.8	2.8				5.4	3.2	2.4	3.7
Obélix	000/00	4.5	2.8	1.0	3.0	1.5	1.8	3.3	1.0	1.0	4.8	1.5	1.8				3.9	1.7	1.4	2.3
Protéix	00	6.3	4.5	2.0	6.3	2.8	4.0	6.8	2.0	1.0	5.8	5.0	3.8				6.3	3.6	2.7	4.2
Falbala	00	7.8	4.3	1.3	6.8	1.8	4.0	7.3	1.3	1.0	6.0	3.0	4.5				6.9	2.6	2.7	4.1
Toutatis	000/00	5.5	2.0	1.0	2.8	1.3	2.0	5.0	1.0	1.0	5.5	1.5	1.3				4.7	1.4	1.3	2.5
Tequila	00	6.8	4.0	1.3	5.8	2.8	4.3	5.5	1.5	1.3	6.3	3.3	5.8				6.1	2.9	3.1	4.0
Galice	000/00	5.8	4.0	1.0	3.3	1.8	2.3	5.3	1.5	1.0	6.3	2.0	2.0				5.1	2.3	1.6	3.0
Abelina	000	5.8	5.3	1.0	6.0	1.5	1.8	7.0	1.5	1.0	7.5	2.5	2.0				6.6	2.7	1.4	3.6
Témoins 000		4.9	3.1	1.5	3.5	1.8	1.6	4.9	1.3	1.0	5.4	1.8	2.1				4.7	2.0	1.6	2.7
Témoins 000/00		5.3	1.7	1.0	3.3	1.0	1.3	6.0	1.0	1.0	3.8	1.0	1.5				4.6	1.2	1.2	2.3
Témoins 00		6.0	5.3	1.4	5.5	3.1	3.6	6.1	2.0	1.0	6.8	4.1	4.0				6.1	3.6	2.5	4.1
Moy. témoins		5.4	3.3	1.3	4.1	2.0	2.2	5.7	1.4	1.0	5.3	2.3	2.5				5.1	2.3	1.8	3.6

Teneur en protéines, % MS

Variété	Groupe	Changins			Goumoëns			Giez			Delley			Reckenholz						Moy.
		2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	
Maple Arrow	00	41.2	40.2	40.9	43.7	39.3	40.8	43.1	40.0	38.4	41.7	37.6	41.9	42.8	40.2	40.3	42.5	39.5	40.5	40.8
Merlin	000	41.1	39.4	40.9	41.3	38.8	40.0	43.8	39.9	39.0	44.1	37.6	41.5	43.5	38.3	39.9	42.8	38.8	40.3	40.6
Gallec	000	42.8	40.1	40.3	45.0	40.5	40.9	44.6	41.0	39.3	44.3	38.7	42.7	44.0	40.2	41.3	44.1	40.1	40.9	41.7
Lissabon	000/00	42.7	40.1	40.2	43.6	39.2	40.6	45.1	40.1	38.5	43.4	37.4	42.5	45.0	39.4	41.7	43.9	39.2	40.7	41.3
Opaline	00	40.7	39.7	40.6	42.5	39.8	40.9	42.7	40.1	38.9	41.6	37.8	42.0	42.4	38.9	40.2	42.0	39.3	40.5	40.6
Tourmaline	00	40.2	38.9	41.1	42.1	39.1	40.4	42.4	39.8	38.9	41.9	36.8	42.5	43.9	38.9	40.4	42.1	38.7	40.7	40.5
Aveline	000/00	44.1	41.3	42.9	44.4	42.2	42.8	45.6	43.0	42.2	45.2	40.0	44.0	46.0	41.0	42.3	45.0	41.5	42.8	43.1
Obélix	000/00	43.0	39.7	39.9	44.0	40.2	40.9	43.1	40.6	39.8	44.8	38.1	42.4	44.9	39.5	41.2	44.0	39.6	40.8	41.5
Protéix	00	43.9	43.3	43.5	45.3	43.0	43.4	45.2	43.9	40.9	44.5	40.7	44.9	45.4	41.3	42.8	44.9	42.4	43.1	43.5
Falbala	00	47.5	45.5	45.8	49.1	44.2	44.2	49.6	45.8	43.7	47.6	43.3	47.2	52.1	44.8	45.7	49.2	44.7	45.3	46.4
Toutatis	000/00	40.1	38.6	39.3	42.9	38.6	40.8	42.7	39.1	38.3	42.9	36.5	41.6	43.2	38.0	40.1	42.4	38.2	40.0	40.2
Tequila	00	40.3	38.9	38.9	43.0	39.0	38.8	44.3	39.9	37.9	41.9	37.0	41.9	44.9	38.6	39.4	42.9	38.7	39.4	40.3
Galice	000/00	41.7	39.3	38.8	42.6	39.3	39.0	43.8	40.2	38.3	42.9	37.0	41.5	45.0	39.4	40.2	43.2	39.0	39.6	40.6
Abelina	000	41.9	40.3	39.7	43.9	39.1	39.5	43.7	41.1	39.2	43.9	37.9	41.3	43.7	38.1	40.4	43.4	39.3	40.0	40.9
Témoins 000		42.0	39.8	40.6	43.2	39.6	40.4	44.2	40.4	39.1	44.2	38.1	42.1	43.7	39.2	40.6	43.5	39.4	40.6	41.2
Témoins 000/00		42.7	40.1	40.2	43.6	39.2	40.6	45.1	40.1	38.5	43.4	37.4	42.5	45.0	39.4	41.7	43.9	39.2	40.7	41.3
Témoins 00		40.5	39.3	40.8	42.3	39.5	40.6	42.6	39.9	38.9	41.8	37.3	42.2	43.1	38.9	40.3	42.0	39.0	40.6	40.5
Moy. témoins		41.7	39.7	40.5	43.0	39.4	40.6	43.9	40.2	38.8	43.1	37.6	42.3	43.9	39.2	40.9	43.1	39.2	40.6	41.8

Résultats Soja 3 ans

Teneur en protéines en valeur relative, %

Variété	Groupe	Changins			Goumoëns			Giez			Delley			Reckenholz			2014	2015	2016	Moy.
		2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016				
Maple Arrow	00	101.8	102.2	100.2	103.3	99.7	100.4	101.2	100.2	98.7	99.9	100.9	99.2	99.3	103.2	100.0	101.1	101.2	99.7	100.7
Merlin	000	97.9	99.1	100.8	95.8	97.8	98.9	99.2	98.7	99.7	99.8	98.6	98.6	99.4	97.6	98.4	98.4	98.4	99.3	98.7
Gallec	000	102.1	100.9	99.2	104.2	102.2	101.1	100.8	101.3	100.3	100.2	101.4	101.4	100.6	102.4	101.6	101.6	101.6	100.7	101.3
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	100.6	101.1	99.4	100.5	100.9	100.6	100.3	100.4	99.9	99.6	101.3	99.3	98.2	100.0	99.8	99.9	100.7	99.8	100.1
Tourmaline	00	99.4	98.9	100.6	99.5	99.1	99.4	99.7	99.6	100.1	100.4	98.7	100.7	101.8	100.0	100.2	100.1	99.3	100.2	99.9
Aveline	000/00	103.1	103.1	106.7	101.9	107.7	105.3	101.1	107.1	109.6	104.1	107.0	103.4	102.2	104.0	101.4	102.5	105.8	105.3	104.5
Obélix	000/00	100.7	99.0	99.3	101.0	102.7	100.6	95.7	101.2	103.4	103.2	101.9	99.8	99.8	100.1	98.7	100.1	101.0	100.4	100.5
Protéix	00	108.4	110.2	106.6	107.2	108.9	106.9	106.1	109.9	105.0	106.6	109.1	106.3	105.3	106.2	106.2	106.7	108.8	106.2	107.3
Falbala	00	117.5	115.7	112.1	116.1	111.9	108.7	116.5	114.7	112.4	114.0	116.3	111.8	120.7	115.0	113.4	117.0	114.7	111.7	114.5
Toutatis	000/00	93.8	96.3	97.7	98.5	98.7	100.4	94.9	97.5	99.5	98.8	97.8	97.9	96.1	96.5	96.2	96.4	97.4	98.4	97.4
Tequila	00	99.6	98.9	95.3	101.8	98.8	95.6	104.0	99.9	97.4	100.4	99.3	99.2	104.2	99.2	97.7	102.0	99.2	97.0	99.4
Galice	000/00	97.6	98.1	96.5	97.9	100.3	96.0	97.1	100.2	99.5	98.8	98.9	97.6	100.0	99.9	96.3	98.3	99.5	97.2	98.3
Abelina	000	99.7	101.3	97.9	101.7	98.7	97.7	98.9	101.5	100.0	99.3	99.4	98.1	99.9	97.2	99.5	99.9	99.6	98.6	99.4
Témoins 000		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Témoins 000/00		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Témoins 00		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Moy. témoins		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	102.2

Teneur en huile, % MS

Variété	Groupe	Changins			Goumoëns			Giez			Delley			Reckenholz			2014	2015	2016	Moy.
		2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016				
Maple Arrow	00	19.2	20.0	19.5	16.8	19.5	19.6	17.1	19.7	20.9	18.3	20.4	19.4	18.8	19.5	20.3	18.1	19.8	19.9	19.3
Merlin	000	18.8	20.0	19.5	17.9	20.0	20.2	17.3	20.5	21.0	18.0	20.8	19.7	18.5	20.0	20.5	18.1	20.3	20.2	19.5
Gallec	000	18.3	19.2	19.4	16.7	18.9	19.8	16.5	19.2	19.7	17.0	20.2	18.6	18.3	19.8	20.2	17.4	19.5	19.5	18.8
Lissabon	000/00	18.3	19.7	19.9	16.6	19.4	19.7	16.5	19.4	20.1	17.2	20.4	18.9	17.9	19.5	20.0	17.3	19.7	19.7	18.9
Opaline	00	18.8	20.1	20.0	16.9	19.2	19.2	17.0	19.8	20.4	17.7	20.3	18.9	19.2	20.1	20.6	17.9	19.9	19.8	19.2
Tourmaline	00	19.3	20.0	19.7	17.2	19.7	19.9	17.5	20.2	20.4	18.1	20.9	19.2	18.5	20.4	21.0	18.1	20.3	20.0	19.5
Aveline	000/00	17.7	19.2	19.1	16.2	18.6	18.5	16.0	18.5	19.1	16.7	19.4	18.1	17.5	19.2	19.5	16.8	19.0	18.9	18.2
Obélix	000/00	18.2	20.4	19.8	16.9	19.2	19.7	17.4	19.9	20.1	17.3	20.3	18.8	18.2	20.1	20.8	17.6	20.0	19.8	19.1
Protéix	00	17.5	18.3	18.4	15.7	18.0	18.4	16.0	18.4	19.5	16.6	19.2	17.9	17.7	19.4	19.2	16.7	18.7	18.7	18.0
Falbala	00	16.0	17.8	17.6	14.8	17.3	18.2	14.7	17.6	18.3	15.5	18.4	16.5	15.1	18.1	18.3	15.2	17.8	17.8	16.9
Toutatis	000/00	18.6	20.2	19.8	16.7	19.8	19.5	17.2	20.0	21.0	17.7	20.7	19.1	18.7	20.3	20.6	17.8	20.2	20.0	19.3
Tequila	00	18.8	19.8	20.3	17.0	19.1	19.8	16.6	19.5	20.8	17.5	20.4	18.9	17.9	19.9	20.9	17.6	19.7	20.1	19.1
Galice	000/00	18.6	20.3	20.5	17.1	19.7	20.5	17.2	19.8	20.7	17.8	20.9	19.6	18.3	20.4	21.3	17.8	20.2	20.5	19.5
Abelina	000	18.6	20.0	20.4	17.4	19.7	20.8	17.3	19.6	21.1	17.9	20.7	19.4	19.2	20.5	20.9	18.1	20.1	20.5	19.6
Témoins 000		18.5	19.6	19.4	17.3	19.4	20.0	16.9	19.9	20.4	17.5	20.5	19.2	18.4	19.9	20.3	17.7	19.9	19.8	19.1
Témoins 000/00		18.3	19.7	19.9	16.6	19.4	19.7	16.5	19.4	20.1	17.2	20.4	18.9	17.9	19.5	20.0	17.3	19.7	19.7	18.9
Témoins 00		19.1	20.1	19.8	17.0	19.5	19.6	17.2	20.0	20.4	17.9	20.6	19.0	18.8	20.2	20.8	18.0	20.1	19.9	19.3
Moy. témoins		18.6	19.8	19.7	17.0	19.4	19.7	16.9	19.8	20.3	17.6	20.5	19.0	18.4	19.9	20.4	17.7	19.9	19.8	18.8

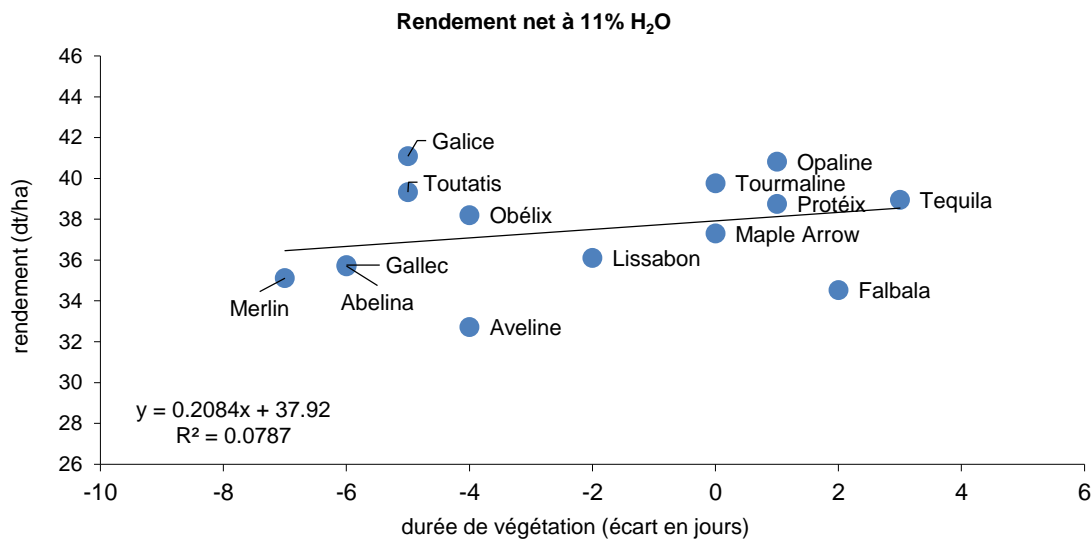
Teneur en huile en valeur relative, %

Variété	Groupe	Changins			Goumoëns			Giez			Delley			Reckenholz			2014	2015	2016	Moy.
		2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016				
Maple Arrow	00	100.6	99.4	98.3	98.7	100.2	100.3	99.1	98.3	102.4	102.4	99.1	101.6	100.0	96.5	97.7	100.1	98.7	100.1	99.6
Merlin	000	101.3	102.0	100.4	103.3	102.9	101.0	102.4	103.1	103.2	102.8	101.6	102.9	100.4	100.5	100.7	102.0	102.0	101.6	101.9
Gallec	000	98.7	98.0	99.6	96.7	97.1	99.0	97.6	96.9	96.8	97.2	98.4	97.1	99.6	99.5	99.3	98.0	98.0	98.4	98.1
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	98.7	100.2	100.6	99.3	98.8	98.3	98.4	98.9	99.9	98.9	98.7	99.4	102.0	99.2	99.1	99.5	99.2	99.5	99.4
Tourmaline	00	101.3	99.8	99.4	100.7	101.2	101.7	101.6	101.1	100.1	101.1	101.3	100.6	98.0	100.8	100.9	100.5	100.8	100.5	100.6
Aveline	000/00	96.9	97.3	96.1	97.5	95.6	94.2	97.3	95.2	94.8	97.0	95.3	96.0	97.7	98.2	97.5	97.3	96.3	95.7	96.4
Obélix	000/00	99.6	103.3	99.8	101.5	98.9	99.8	105.7	102.3	99.8	100.1	99.6	99.6	101.7	102.7	103.8	101.7	101.4	100.6	101.2
Protéix	00	91.7	91.2	92.7	92.1	92.2	94.1	92.5	91.8	95.5	92.5	93.0	93.9	94.2	96.1	92.3	92.6	92.9	93.7	93.1
Falbala	00	83.7	88.5	88.5	87.0	88.9	92.9	85.1	87.8	89.7	86.4	89.4	86.9	80.2	89.4	88.0	84.5	88.8	89.2	87.5
Toutatis	000/00	101.8	102.4	99.6	100.7	101.8	98.9	104.2	102.9	104.2	102.9	101.5	101.1	104.2	104.0	102.9	102.8	102.5	101.3	102.2
Tequila	00	98.3	98.5	102.4	99.5	97.8	101.2	96.4	97.3	102.1	97.9	99.1	99.3	94.9	98.3	100.4	97.4	98.2	101.1	98.9
Galice	000/00	101.7	103.1	103.2	102.7	101.3	104.2	104.2	102.0	103.1	103.5	102.3	103.8	102.2	104.5	106.6	102.9	102.6	104.2	103.2
Abelina	000	100.4	102.0	105.1	100.7	101.1	104.4	102.1	98.4	103.8	102.2	101.2	101.4	104.3	103.2	102.8	102.0	101.2	103.5	102.2
Témoins 000		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Témoins 000/00		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Témoins 00		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Moy. témoins		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.5

Synthèse Soja 3 ans

Synthèse 3 ans	Durée végétation écart en jours	Groupe précocité	Rdt. net 11 % H2O dt/ha	Rdt relatif durée végétation %	Rdt relatif groupe précocité %	Verse (1=dressé) note	PMG g	Protéines % MS	Protéines val. rel. %	Huile % MS	Huiles val. rel. %
Maple Arrow	0	00	37.3	98	93	5	235	40.8	101	19.3	100
Merlin	-7	000	35.1	98	99	3	198	40.6	99	19.5	102
Gallec	-6	000	35.8	99	101	3	218	41.7	101	18.8	98
Lissabon	-2	000/00	36.1	97	100	2	211	41.3	100	18.9	100
Opaline	1	00	40.8	107	101	5	220	40.6	100	19.2	99
Tourmaline	0	00	39.8	105	99	4	222	40.5	100	19.5	101
Aveline	-4	000/00	32.7	89	91	4	221	43.1	105	18.2	96
Obélix	-4	000/00	38.2	104	106	2	248	41.5	100	19.1	101
Protéix	1	00	38.8	101	96	4	206	43.5	107	18.0	93
Falbala	2	00	34.5	89	86	4	213	46.4	114	16.9	88
Toutatis	-5	000/00	39.3	108	109	2	219	40.2	97	19.3	102
Tequila	3	00	39.0	100	97	4	214	40.3	99	19.1	99
Galice	-5	000/00	41.1	109	114	3	227	40.6	98	19.5	103
Abelina	-6	000	35.7	99	101	4	211	40.9	99	19.6	102
Témoins 000			35.4			3	208	41.2		19.1	
Témoins 000/00			36.1			2	211	41.3		18.9	
Témoins 00			40.3			4	221	40.5		19.3	

Synthèse 3 ans	Durée végétation écart en jours	Groupe précocité	Rdt relatif durée végétation %	Verse (bonus)	Protéines val. rel. %	Huiles val. rel. %	VAT
Maple Arrow	0	00	98		1	-	99
Merlin	-7	000	98		-	-	100
Gallec	-6	000	99		1	-	100
Lissabon	-2	000/00	97		-	-	97
Opaline	1	00	107		-	-	107
Tourmaline	0	00	105		-	1	106
Aveline	-4	000/00	89		5	-	94
Obélix	-4	000/00	104		-	1	105
Protéix	1	00	101		7	-	108
Falbala	2	00	89		14	-	103
Toutatis	-5	000/00	108		-	2	110
Tequila	3	00	100		-	-	100
Galice	-5	000/00	109		-	3	112
Abelina	-6	000	99		-	2	101



Résultats Soja 2 ans

Rendement à 11% H2O, dt/ha

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	36.2	38.7	42.6	39.2	37.2	30.2	35.2	42.8	38.3	50.1	37.9	40.2	39.0
Merlin	000	39.3	34.3	39.0	34.8	38.6	25.1	36.8	37.4	36.3	46.8	38.0	35.7	36.8
Gallec	000	37.6	35.6	44.2	35.6	37.5	26.7	34.6	37.2	36.9	48.1	38.1	36.7	37.4
Lissabon	000/00	39.7	34.2	41.4	38.5	42.7	26.9	36.2	30.9	40.1	42.0	40.0	34.5	37.3
Opaline	00	41.1	40.1	43.1	42.5	41.1	29.7	36.5	45.4	38.3	55.8	40.0	42.7	41.4
Tourmaline	00	37.4	39.9	45.3	37.3	43.5	27.7	35.5	41.6	38.2	50.1	40.0	39.3	39.7
Aveline	000/00	32.6	30.9	36.0	35.4	32.4	25.5	28.7	39.2	32.3	46.3	32.4	35.5	33.9
Obélix	000/00	41.7	38.7	45.5	38.7	42.2	26.2	33.2	40.7	37.1	47.2	39.9	38.3	39.1
Protéix	00	41.1	37.4	44.7	36.7	45.6	30.8	35.3	41.8	40.5	52.4	41.4	39.8	40.6
Falbala	00	36.3	37.7	36.3	34.9	40.7	27.2	32.4	37.9	34.8	48.8	36.1	37.3	36.7
Toutatis	000/00	43.5	36.9	44.7	39.0	38.8	25.8	36.0	43.1	37.1	52.2	40.0	39.4	39.7
Tequila	00	39.7	31.6	42.6	35.7	46.7	29.4	39.4	38.8	41.5	54.4	42.0	38.0	40.0
Galice	000/00	43.5	38.5	45.3	41.6	46.0	29.9	38.6	39.7	44.0	53.0	43.5	40.6	42.0
Abelina	000	37.4	32.1	36.0	38.4	38.2	23.4	34.1	38.1	37.4	46.6	36.6	35.7	36.2
Amadea	00	37.3	30.0	41.0	34.2	45.7	28.3	39.2	37.2	40.3	49.3	40.7	35.8	38.2
22321	000/00	43.6	40.8	42.7	43.3	40.7	28.7	33.3	43.9	38.2	50.6	39.7	41.4	40.6
22412	000/00	41.1	39.2	40.4	37.6	43.0	31.6	38.1	40.9	37.5	50.7	40.0	40.0	40.0
Tiguan	0000/000	32.9	29.3	22.3	37.5	26.9	25.5	25.2	30.1	28.1	33.6	27.1	31.2	29.1
Témoins 000		38.4	35.0	41.6	35.2	38.0	25.9	35.7	37.3	36.6	47.4	38.1	36.2	37.1
Témoins 000/00		39.7	34.2	41.4	38.5	42.7	26.9	36.2	30.9	40.1	42.0	40.0	34.5	37.3
Témoins 00		39.2	40.0	44.2	39.9	42.3	28.7	36.0	43.5	38.2	53.0	40.0	41.0	40.5
Moy. témoins		39.1	36.4	42.4	37.9	41.0	27.2	36.0	37.3	38.3	47.5	39.4	37.2	38.3

Rendement en valeurs relatives à la durée de végétation, %

Variété	Jours	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	0.0	92	105	100	104	87	105	97	105	99	98	95	103	99
Merlin	-7.0	103	100	104	92	106	97	112	101	102	105	106	99	102
Gallec	-6.0	98	103	116	94	101	102	104	99	103	105	104	101	102
Lissabon	-2.0	102	95	101	102	104	96	103	78	106	85	103	91	97
Opaline	1.0	104	108	99	113	94	102	100	110	97	107	99	108	103
Tourmaline	0.0	95	108	106	99	102	96	98	103	98	98	100	101	100
Aveline	-4.0	84	87	91	94	83	94	84	102	88	97	86	95	90
Obélix	-4.0	108	110	115	102	108	97	97	106	101	99	106	103	104
Protéix	1.0	104	100	103	97	104	105	96	102	103	101	102	101	102
Falbala	2.0	91	100	82	92	91	92	87	91	87	92	88	93	91
Toutatis	-5.0	113	106	115	103	102	97	107	113	102	112	108	106	107
Tequila	3.0	99	83	95	94	102	98	105	92	103	101	101	94	97
Galice	-5	113	110	117	110	120	112	114	104	121	114	117	110	113
Abelina	-6.0	97	93	94	101	103	89	102	101	104	102	100	97	99
Amadea	-1.0	95	82	98	90	109	100	110	93	105	98	103	93	98
22321	-2.0	111	113	104	114	99	103	95	111	101	103	102	109	105
22412	-2.0	105	108	98	99	105	113	108	103	99	103	103	105	104
Tiguan	-10.0	87	89	64	99	80	103	80	85	83	80	79	91	85
Témoins 000		100	102	110	93	103	99	108	100	103	105	105	100	102
Témoins 000/00		102	95	101	102	104	96	103	78	106	85	103	91	97
Témoins 00		99	108	103	106	98	99	99	106	98	102	99	104	102
Moy. témoins		100	101	104	100	102	98	103	95	102	98	102	98	100

Résultats Soja 2 ans

Rendement en valeurs relatives au groupe de précocité, %

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	92	97	96	98	88	105	98	98	100		95	100	97
Merlin	000	102	98	94	99	101	97	103	100	99		100	99	99
Gallec	000	98	102	106	101	99	103	97	100	101		100	101	101
Lissabon	000/00	100	100	100	100	100	100	100	100	100		100	100	100
Opaline	00	105	100	98	107	97	104	101	104	100		100	104	102
Tourmaline	00	95	100	102	93	103	96	99	96	100		100	96	98
Aveline	000/00	82	90	87	92	76	95	79	127	81		81	101	91
Obélix	000/00	105	113	110	100	99	97	92	132	93		100	111	105
Protéix	00	105	93	101	92	108	107	98	96	106		104	97	100
Falbala	00	93	94	82	87	96	95	90	87	91		90	91	91
Toutatis	000/00	110	108	108	101	91	96	99	139	93		100	111	106
Tequila	00	101	79	96	89	110	102	110	89	108		105	90	98
Galice	000/00	109	113	110	108	108	111	107	128	110		109	115	112
Abelina	000	97	92	87	109	101	90	95	102	102		96	98	97
Amadea	00	95	75	93	86	108	99	109	85	105		102	86	94
22321	000/00	110	119	103	112	95	107	92	142	95		99	120	110
22412	000/00	104	115	98	98	101	118	105	132	94		100	115	108
Tiguan	0000/000	83	86	54	97	63	95	70	97	70		68	94	81
Témoins 000		100	100	100	100	100	100	100	100	100		100	100	100
Témoins 000/00		100	100	100	100	100	100	100	100	100		100	100	100
Témoins 00		100	100	100	100	100	100	100	100	100		100	100	100
Moy. témoins		100	100	100	100	100	100	100	100	100		100	100	100

Poids de 1000 grains, g

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	229	224	218	281	204	186	205	239	205	275	212	241	227
Merlin	000	199	224	192	252	202	175	169	248	168	219	186	224	205
Gallec	000	217	216	208	235	212	199	188	235	195	242	204	225	215
Lissabon	000/00	204	196	201	247	207	206	186	225	185	235	197	222	209
Opaline	00	215	211	212	245	211	215	192	235	196	260	205	233	219
Tourmaline	00	221	227	215	272	214	204	196	247	191	243	208	239	223
Aveline	000/00	227	219	194	251	207	194	191	254	193	243	203	232	217
Obélix	000/00	251	254	247	267	248	217	221	267	204	261	234	253	244
Protéix	00	210	194	201	269	205	205	187	230	186	230	198	226	212
Falbala	00	212	204	198	278	209	219	187	227	190	248	199	235	217
Toutatis	000/00	215	219	212	263	221	208	191	240	194	246	207	235	221
Tequila	00	211	196	196	263	194	235	180	243	178	255	192	238	215
Galice	000/00	217	212	228	253	223	221	199	241	213	239	216	233	225
Abelina	000	207	196	196	261	210	219	175	224	168	266	191	233	212
Amadea	00	211	205	204	282	210	213	191	225	194	248	202	235	218
22321	000/00	208	199	204	252	206	292	174	239	181	239	195	244	219
22412	000/00	210	205	202	250	211	272	182	254	182	250	198	246	222
Tiguan	0000/000	222	216	178	239	196	238	172	232	190	264	191	238	215
Témoins 000		208	220	200	244	207	187	178	241	182	231	195	224	210
Témoins 000/00		204	196	201	247	207	206	186	225	185	235	197	222	209
Témoins 00		218	219	213	258	212	209	194	241	194	251	206	236	221
Moy. témoins		210	212	205	250	209	201	186	236	187	239	199	227	213

Résultats Soja 2 ans

Verse à la récolte, note (1 = dressé)

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	7	2	3	4	3	1	6	4			5	3	4
Merlin	000	3	2	1	1	1	1	1	2			1	1	1
Gallec	000	4	1	3	2	2	1	2	2			2	2	2
Lissabon	000/00	2	1	1	1	1	1	1	2			1	1	1
Opaline	00	6	1	4	4	2	1	6	4			4	2	3
Tourmaline	00	4	2	3	4	2	1	3	4			3	3	3
Aveline	000/00	5	1	3	5	2	1	4	3			3	2	3
Obélix	000/00	3	1	2	2	1	1	2	2			2	1	2
Protéix	00	5	2	3	4	2	1	5	4			4	3	3
Falbala	00	4	1	2	4	1	1	3	5			3	3	3
Toutatis	000/00	2	1	1	2	1	1	2	1			1	1	1
Tequila	00	4	1	3	4	2	1	3	6			3	3	3
Galice	000/00	4	1	2	2	2	1	2	2			2	2	2
Abelina	000	5	1	2	2	2	1	3	2			3	1	2
Amadea	00	5	1	2	5	2	1	3	5			3	3	3
22321	000/00	4	1	2	4	1	1	3	3			2	2	2
22412	000/00	3	2	2	2	1	1	3	2			2	2	2
Tiguan	0000/000	5	1		2	1	1		2			3	1	2
Témoins 000		3	2	2	2	1	1	2	2			2	2	2
Témoins 000/00		2	1	1	1	1	1	1	2			1	1	1
Témoins 00		5	1	3	4	2	1	4	4			4	3	3
Moy. témoins		3	1	2	2	1	1	2	3			2	2	2

Teneur en protéines, % MS

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	40.2	40.9	39.3	40.8	40.0	38.4	37.6	41.9	40.2	40.3	39.5	40.5	40.0
Merlin	000	39.4	40.9	38.8	40.0	39.9	39.0	37.6	41.5	38.3	39.9	38.8	40.3	39.5
Gallec	000	40.1	40.3	40.5	40.9	41.0	39.3	38.7	42.7	40.2	41.3	40.1	40.9	40.5
Lissabon	000/00	40.1	40.2	39.2	40.6	40.1	38.5	37.4	42.5	39.4	41.7	39.2	40.7	40.0
Opaline	00	39.7	40.6	39.8	40.9	40.1	38.9	37.8	42.0	38.9	40.2	39.3	40.5	39.9
Tourmaline	00	38.9	41.1	39.1	40.4	39.8	38.9	36.8	42.5	38.9	40.4	38.7	40.7	39.7
Aveline	000/00	41.3	42.9	42.2	42.8	43.0	42.2	40.0	44.0	41.0	42.3	41.5	42.8	42.2
Obélix	000/00	39.7	39.9	40.2	40.9	40.6	39.8	38.1	42.4	39.5	41.2	39.6	40.8	40.2
Protéix	00	43.3	43.5	43.0	43.4	43.9	40.9	40.7	44.9	41.3	42.8	42.4	43.1	42.8
Falbala	00	45.5	45.8	44.2	44.2	45.8	43.7	43.3	47.2	44.8	45.7	44.7	45.3	45.0
Toutatis	000/00	38.6	39.3	38.6	40.8	39.1	38.3	36.5	41.6	38.0	40.1	38.2	40.0	39.1
Tequila	00	38.9	38.9	39.0	38.8	39.9	37.9	37.0	41.9	38.6	39.4	38.7	39.4	39.0
Galice	000/00	39.3	38.8	39.3	39.0	40.2	38.3	37.0	41.5	39.4	40.2	39.0	39.6	39.3
Abelina	000	40.3	39.7	39.1	39.5	41.1	39.2	37.9	41.3	38.1	40.4	39.3	40.0	39.7
Amadea	00	39.4	40.4	38.7	40.1	40.3	38.9	37.5	41.6	39.0	40.8	39.0	40.4	39.7
22321	000/00	39.4	40.1	39.2	39.7	40.1	38.7	36.8	42.2	39.2	39.7	38.9	40.1	39.5
22412	000/00	38.9	39.2	39.3	39.7	40.0	37.7	37.7	41.9	38.7	40.3	38.9	39.8	39.3
Tiguan	0000/000	39.9	39.8	37.6	39.6	39.7	39.0	37.8	41.9	38.3	40.4	38.6	40.1	39.4
Témoins 000		39.8	40.6	39.6	40.4	40.4	39.1	38.1	42.1	39.2	40.6	39.4	40.6	40.0
Témoins 000/00		40.1	40.2	39.2	40.6	40.1	38.5	37.4	42.5	39.4	41.7	39.2	40.7	40.0
Témoins 00		39.3	40.8	39.5	40.6	39.9	38.9	37.3	42.2	38.9	40.3	39.0	40.6	39.8
Moy. témoins		39.7	40.5	39.4	40.6	40.2	38.8	37.6	42.3	39.2	40.9	39.2	40.6	39.9

Résultats Soja 2 ans

Teneur en protéines en valeur relative, %

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	102.2	100.2	99.7	100.4	100.2	98.7	100.9	99.2	103.2	100.0	101.2	99.7	100.5
Merlin	000	99.1	100.8	97.8	98.9	98.7	99.7	98.6	98.6	97.6	98.4	98.4	99.3	98.8
Gallec	000	100.9	99.2	102.2	101.1	101.3	100.3	101.4	101.4	102.4	101.6	101.6	100.7	101.2
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	101.1	99.4	100.9	100.6	100.4	99.9	101.3	99.3	100.0	99.8	100.7	99.8	100.3
Tourmaline	00	98.9	100.6	99.1	99.4	99.6	100.1	98.7	100.7	100.0	100.2	99.3	100.2	99.7
Aveline	000/00	103.1	106.7	107.7	105.3	107.1	109.6	107.0	103.4	104.0	101.4	105.8	105.3	105.5
Obélix	000/00	99.0	99.3	102.7	100.6	101.2	103.4	101.9	99.8	100.1	98.7	101.0	100.4	100.7
Protéix	00	110.2	106.6	108.9	106.9	109.9	105.0	109.1	106.3	106.2	106.2	108.8	106.2	107.5
Falbala	00	115.7	112.1	111.9	108.7	114.7	112.4	116.3	111.8	115.0	113.4	114.7	111.7	113.2
Toutatis	000/00	96.3	97.7	98.7	100.4	97.5	99.5	97.8	97.9	96.5	96.2	97.4	98.4	97.9
Tequila	00	98.9	95.3	98.8	95.6	99.9	97.4	99.3	99.2	99.2	97.7	99.2	97.0	98.1
Galice	000/00	98.1	96.5	100.3	96.0	100.2	99.5	98.9	97.6	99.9	96.3	99.5	97.2	98.3
Abelina	000	101.3	97.9	98.7	97.7	101.5	100.0	99.4	98.1	97.2	99.5	99.6	98.6	99.1
Amadea	00	100.1	98.8	98.2	98.8	100.9	99.9	100.7	98.5	100.3	101.3	100.0	99.5	99.7
22321	000/00	98.3	99.6	100.0	97.8	100.0	100.6	98.5	99.2	99.6	95.3	99.3	98.5	98.9
22412	000/00	97.1	97.6	100.4	97.7	99.8	97.9	100.8	98.5	98.3	96.7	99.3	97.7	98.5
Tiguan	0000/000	99.5	98.9	95.9	97.5	98.8	101.4	101.0	98.5	97.1	97.0	98.5	98.6	98.6
Témoins 000		100	100	100	100	100	100	100	100	100	100	100	100	100
Témoins 000/00		100	100	100	100	100	100	100	100	100	100	100	100	100
Témoins 00		100	100	100	100	100	100	100	100	100	100	100	100	100
Moy. témoins		100	100	100	100	100	100	100	100	100	100	100	100	100

Teneur en huile, % MS

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	20.0	19.5	19.5	19.6	19.7	20.9	20.4	19.4	19.5	20.3	19.8	19.9	19.9
Merlin	000	20.0	19.5	20.0	20.2	20.5	21.0	20.8	19.7	20.0	20.5	20.3	20.2	20.2
Gallec	000	19.2	19.4	18.9	19.8	19.2	19.7	20.2	18.6	19.8	20.2	19.5	19.5	19.5
Lissabon	000/00	19.7	19.9	19.4	19.7	19.4	20.1	20.4	18.9	19.5	20.0	19.7	19.7	19.7
Opaline	00	20.1	20.0	19.2	19.2	19.8	20.4	20.3	18.9	20.1	20.6	19.9	19.8	19.9
Tourmaline	00	20.0	19.7	19.7	19.9	20.2	20.4	20.9	19.2	20.4	21.0	20.3	20.0	20.1
Aveline	000/00	19.2	19.1	18.6	18.5	18.5	19.1	19.4	18.1	19.2	19.5	19.0	18.9	18.9
Obélix	000/00	20.4	19.8	19.2	19.7	19.9	20.1	20.3	18.8	20.1	20.8	20.0	19.8	19.9
Protéix	00	18.3	18.4	18.0	18.4	18.4	19.5	19.2	17.9	19.4	19.2	18.7	18.7	18.7
Falbala	00	17.8	17.6	17.3	18.2	17.6	18.3	18.4	16.5	18.1	18.3	17.8	17.8	17.8
Toutatis	000/00	20.2	19.8	19.8	19.5	20.0	21.0	20.7	19.1	20.3	20.6	20.2	20.0	20.1
Tequila	00	19.8	20.3	19.1	19.8	19.5	20.8	20.4	18.9	19.9	20.9	19.7	20.1	19.9
Galice	000/00	20.3	20.5	19.7	20.5	19.8	20.7	20.9	19.6	20.4	21.3	20.2	20.5	20.4
Abelina	000	20.0	20.4	19.7	20.8	19.6	21.1	20.7	19.4	20.5	20.9	20.1	20.5	20.3
Amadea	00	19.8	19.7	19.4	19.9	19.6	20.8	20.2	18.5	19.5	20.0	19.7	19.8	19.7
22321	000/00	20.5	20.8	19.9	20.1	20.0	21.0	20.6	18.8	20.2	21.2	20.3	20.4	20.3
22412	000/00	20.2	20.1	19.7	20.2	19.7	21.1	20.4	19.2	19.5	20.8	19.9	20.3	20.1
Tiguan	0000/000	19.8	20.0	20.8	20.3	19.7	19.8	20.7	18.9	20.4	19.6	20.3	19.7	20.0
Témoins 000		19.6	19.4	19.4	20.0	19.9	20.4	20.5	19.2	19.9	20.3	19.9	19.8	19.9
Témoins 000/00		19.7	19.9	19.4	19.7	19.4	20.1	20.4	18.9	19.5	20.0	19.7	19.7	19.7
Témoins 00		20.1	19.8	19.5	19.6	20.0	20.4	20.6	19.0	20.2	20.8	20.1	19.9	20.0
Moy. témoins		19.8	19.7	19.4	19.7	19.8	20.3	20.5	19.0	19.9	20.4	19.9	19.8	19.9

Résultats Soja 2 ans

Teneur en huile en valeur relative, %

Variété	Groupe	Changins		Goumoëns		Giez		Delley		Reckenholz		2015	2016	Moy.
		2015	2016	2015	2016	2015	2016	2015	2016	2015	2016			
Maple Arrow	00	99.4	98.3	100.2	100.3	98.3	102.4	99.1	101.6	96.5	97.7	98.7	100.1	99.4
Merlin	000	102.0	100.4	102.9	101.0	103.1	103.2	101.6	102.9	100.5	100.7	102.0	101.6	101.8
Gallec	000	98.0	99.6	97.1	99.0	96.9	96.8	98.4	97.1	99.5	99.3	98.0	98.4	98.2
Lissabon	000/00	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Opaline	00	100.2	100.6	98.8	98.3	98.9	99.9	98.7	99.4	99.2	99.1	99.2	99.5	99.3
Tourmaline	00	99.8	99.4	101.2	101.7	101.1	100.1	101.3	100.6	100.8	100.9	100.8	100.5	100.7
Aveline	000/00	97.3	96.1	95.6	94.2	95.2	94.8	95.3	96.0	98.2	97.5	96.3	95.7	96.0
Obélix	000/00	103.3	99.8	98.9	99.8	102.3	99.8	99.6	99.6	102.7	103.8	101.4	100.6	101.0
Protéix	00	91.2	92.7	92.2	94.1	91.8	95.5	93.0	93.9	96.1	92.3	92.9	93.7	93.3
Falbala	00	88.5	88.5	88.9	92.9	87.8	89.7	89.4	86.9	89.4	88.0	88.8	89.2	89.0
Toutatis	000/00	102.4	99.6	101.8	98.9	102.9	104.2	101.5	101.1	104.0	102.9	102.5	101.3	101.9
Tequila	00	98.5	102.4	97.8	101.2	97.3	102.1	99.1	99.3	98.3	100.4	98.2	101.1	99.6
Galice	000/00	103.1	103.2	101.3	104.2	102.0	103.1	102.3	103.8	104.5	106.6	102.6	104.2	103.4
Abelina	000	102.0	105.1	101.1	104.4	98.4	103.8	101.2	101.4	103.2	102.8	101.2	103.5	102.3
Amadea	00	98.7	99.1	99.6	101.8	97.7	102.0	97.7	97.4	96.3	96.4	98.0	99.3	98.7
22321	000/00	104.0	104.5	102.7	102.3	102.7	104.5	101.2	99.7	103.6	106.2	102.8	103.4	103.1
22412	000/00	102.6	101.3	101.6	102.5	101.5	105.0	100.1	101.9	99.6	103.8	101.1	102.9	102.0
Tiguan	0000/000	100.4	100.5	107.3	103.0	101.1	98.4	101.5	100.1	104.4	98.1	102.9	100.0	101.5
Témoins 000		100	100	100	100	100	100	100	100	100	100	100	100	100
Témoins 000/00		100	100	100	100	100	100	100	100	100	100	100	100	100
Témoins 00		100	100	100	100	100	100	100	100	100	100	100	100	100
Moy. témoins		100	100	100	100	100	100	100	100	100	100	100	100	100

Synthèse Soja 2

Synthèse 2 ans	Durée végétation écart en jours	Groupe précocité	Rdt. net	Rdt relatif	Rdt relatif	Verse	PMG	Protéines	Protéines	Huile	Huiles
			11 % H2O dt/ha	durée végétation %	groupe précocité %	(1=dressé) note	g	% MS	val. rel. %	% MS	val. rel. %
Maple Arrow	0	00	39.0	99	97	4	227	40.0	100	19.9	99
Merlin	-7	000	36.8	102	99	1	205	39.5	99	20.2	102
Gallec	-6	000	37.4	102	101	2	215	40.5	101	19.5	98
Lissabon	-2	000/00	37.3	97	100	1	209	40.0	100	19.7	100
Opaline	1	00	41.4	103	102	3	219	39.9	100	19.9	99
Tourmaline	0	00	39.7	100	98	3	223	39.7	100	20.1	101
Aveline	-4	000/00	33.9	90	91	3	217	42.2	106	18.9	96
Obélix	-4	000/00	39.1	104	105	2	244	40.2	101	19.9	101
Protéix	1	00	40.6	102	100	3	212	42.8	108	18.7	93
Falbala	2	00	36.7	91	91	3	217	45.0	113	17.8	89
Toutatis	-5	000/00	39.7	107	106	1	221	39.1	98	20.1	102
Tequila	3	00	40.0	97	98	3	215	39.0	98	19.9	100
Galice	-5	000/00	42.0	113	112	2	225	39.3	98	20.4	103
Abelina	-6	000	36.2	99	97	2	212	39.7	99	20.3	102
Amadea	1	00	38.2	98	94	3	218	39.7	100	19.7	99
22321	-2	000/00	40.6	105	110	2	219	39.5	99	20.3	103
22412	-2	000/00	40.0	104	108	2	222	39.3	98	20.1	102
Tiguan	-10	0000/000	29.1	85	81	2	215	39.4	99	20.0	101
Témoins 000			37.1			2	210	40.0		19.9	
Témoins 000/00			37.3			1	209	40.0		19.7	
Témoins 00			40.5			3	221	39.8		20.0	

Synthèse 2 ans	Durée végétation écart en jours	Groupe précocité	Rdt relatif	Verse	Protéines	Huiles	VAT
			durée végétation %	(bonus)	val. rel. %	val. rel. %	
Maple Arrow	0	00	99		-	-	99
Merlin	-7	000	102	1	-	2	105
Gallec	-6	000	102		1	-	103
Lissabon	-2	000/00	97		-	-	97
Opaline	1	00	103		-	-	103
Tourmaline	0	00	100		-	1	101
Aveline	-4	000/00	90		6	-	96
Obélix	-4	000/00	104		1	1	106
Protéix	1	00	102		8	-	110
Falbala	2	00	91		13	-	104
Toutatis	-5	000/00	107		-	2	109
Tequila	3	00	97		-	-	97
Galice	-5	000/00	113		-	3	116
Abelina	-6	000	99		-	2	101
Amadea	-1	00	98		-	-	98
22321	-2	000/00	105		-	3	108
22412	-2	000/00	104		-	2	106
Tiguan	-10	0000/000	85		-	1	86

