

**DANISH
PREFERRED
23/02-2022**



LG FLAMENCO

sejet
planteforædling

dlg

**Lene Krusell
Sejet Planteforædling I/S**

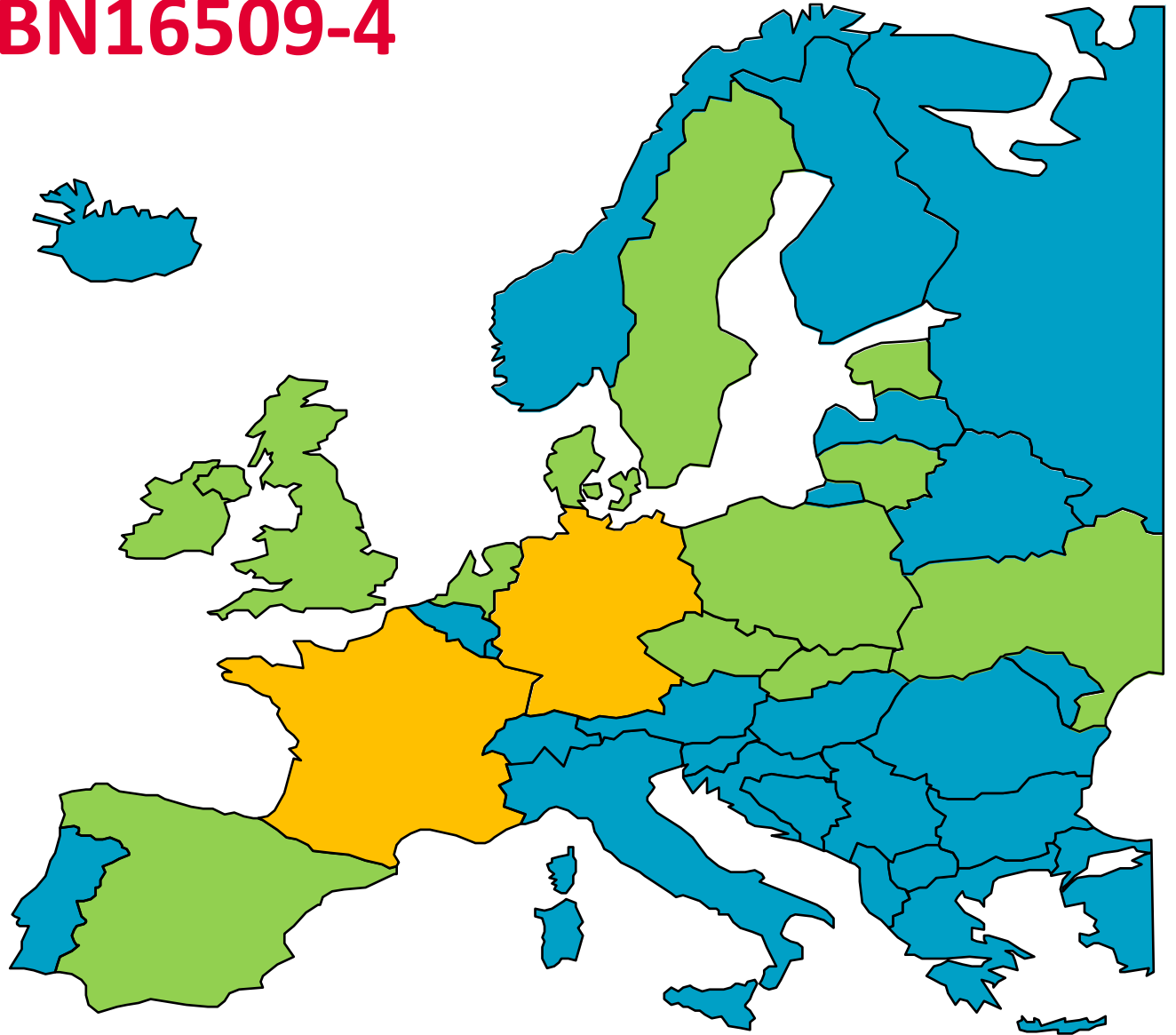


LG Flamenco - LGBN16509-4

Breeder: Limagrain Europe

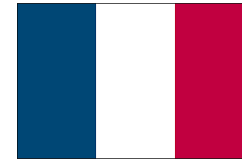
Pedigree: LGBN15007-200 X LG Belcanto

-  National list
-  Official trial

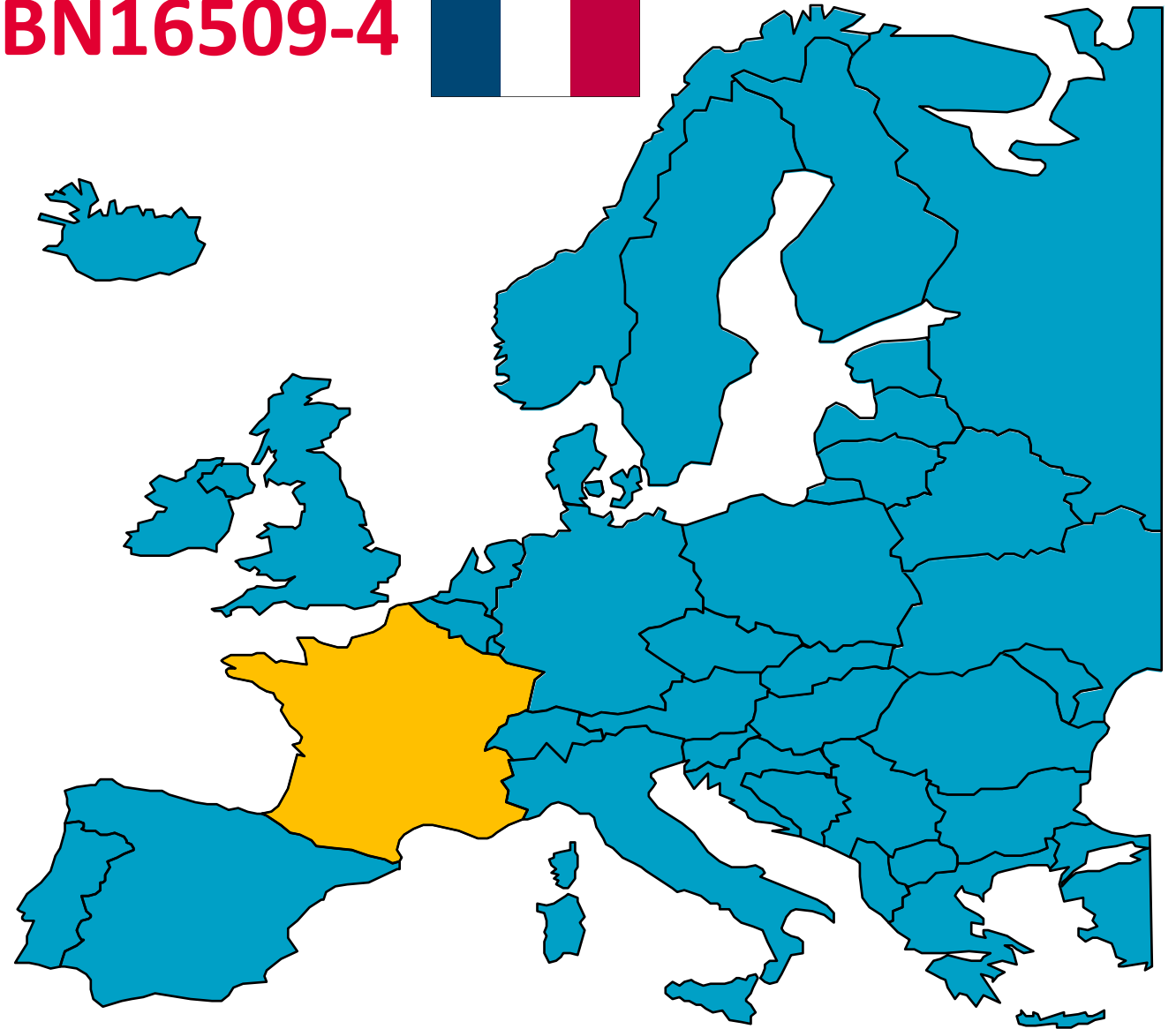




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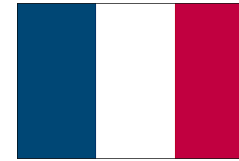


- France
 - National Listed: January 2021





LG Flamenco - LGBN16509-4



LES RESULTATS DE LA RECOLTE 2021

- France
 - National Listed: January 2021
 - Highest performing variety in ARVALIS 2021

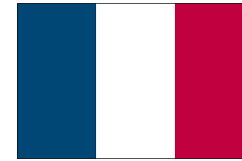
France

Préc. épiaison	Avis Malterie	VARIETES	Rendement à 15% validé		REGULARITE - Rendement à 15% validé				
			traité fongicide Q/ha	% MG.	moyenne et écart-type en q/ha				
					65	70	75	80	85
5	Val	LG Flamenco	79,8	104					
5	Obs 1	LG Belcanto	79,3	104					
5.5	Obs 1	Yoda	78,7	103					
5.5	Val	Shetty	78,4	103					
6	Val	KWS Thalix	77,4	101					
5.5	Préf	RGT Planet	77,3	101					
5	Val	Lexy	77,1	101					
5	Obs 1	Amidala	76,4	100					
6	Obs 1	Valerian	75,9	99					
4.5	Préf	Laureate	75,4	99					
5	Obs 2	LG Tosca	74,8	98					
5	Préf	KWS Fantex	74,6	98					
5	Préf	Fandaga	74,3	97					
5	Val	CB Score*	74,1	97					
5	Préf	Focus*	73,5	96					
Moy. Générale			76,5		Le trait vertical représente la moyenne générale.				
ETR			3,0		La longueur des barres illustre la régularité de la variété par rapport à l'ensemble des variétés testées, elle est égale à 2 écarts-types.				
Nombre d'essais			10						

* : données estimées dans un ou plusieurs lieux



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- France

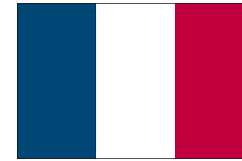
- National Listed: January 2021
- Highest performing variety in ARVALIS 2021
- Good malting performance in CTPS

French official micro-malting results CTPS 2019/20

	KWS Irina	RGT Planet	LG Flamenco
<i>Extract (% DM)</i>	83,1	83,6	83,9
<i>Total protein (% DM)</i>	10,3	9,9	9,8
<i>Kolbach Index</i>	43	45	46
<i>Diastatic Power (WK)</i>	348	335	349
<i>Viscosity (mPa)</i>	1,52	1,53	1,52
<i>Friability (%)</i>	89,4	88,0	89,6
<i>Beta-glucan (mg/l)</i>	214	184	204



LG Flamenco - LGBN16509-4



03 février 2022



- France
 - National Listed: January 2021
 - Highest performing variety in ARVALIS 2021
 - Good malting performance in CTPS
 - CBMO: Approved for malting Feb 2022
 - Commercial batches H21 available with Soufflet, Boortmalt and Malteurop for plant-scale malting and brewing tests

COMMUNIQUE DE PRESSE PRESS RELEASE

COMITE BIERE MALT ORGE C.B.M.O BARLEY, MALT, BEER COMMITTEE

HOMOLOGATION DES NOUVELLES VARIETES D'ORGES DE BRASSERIE APPROVAL OF NEW MALTING BARLEY VARIETIES

Lors du Comité Bière Malt Orge du 03 février 2022, les décisions suivantes ont été prises :
During the Barley Malt Beer Committee on February the 3rd, 2022 the following decisions were made:

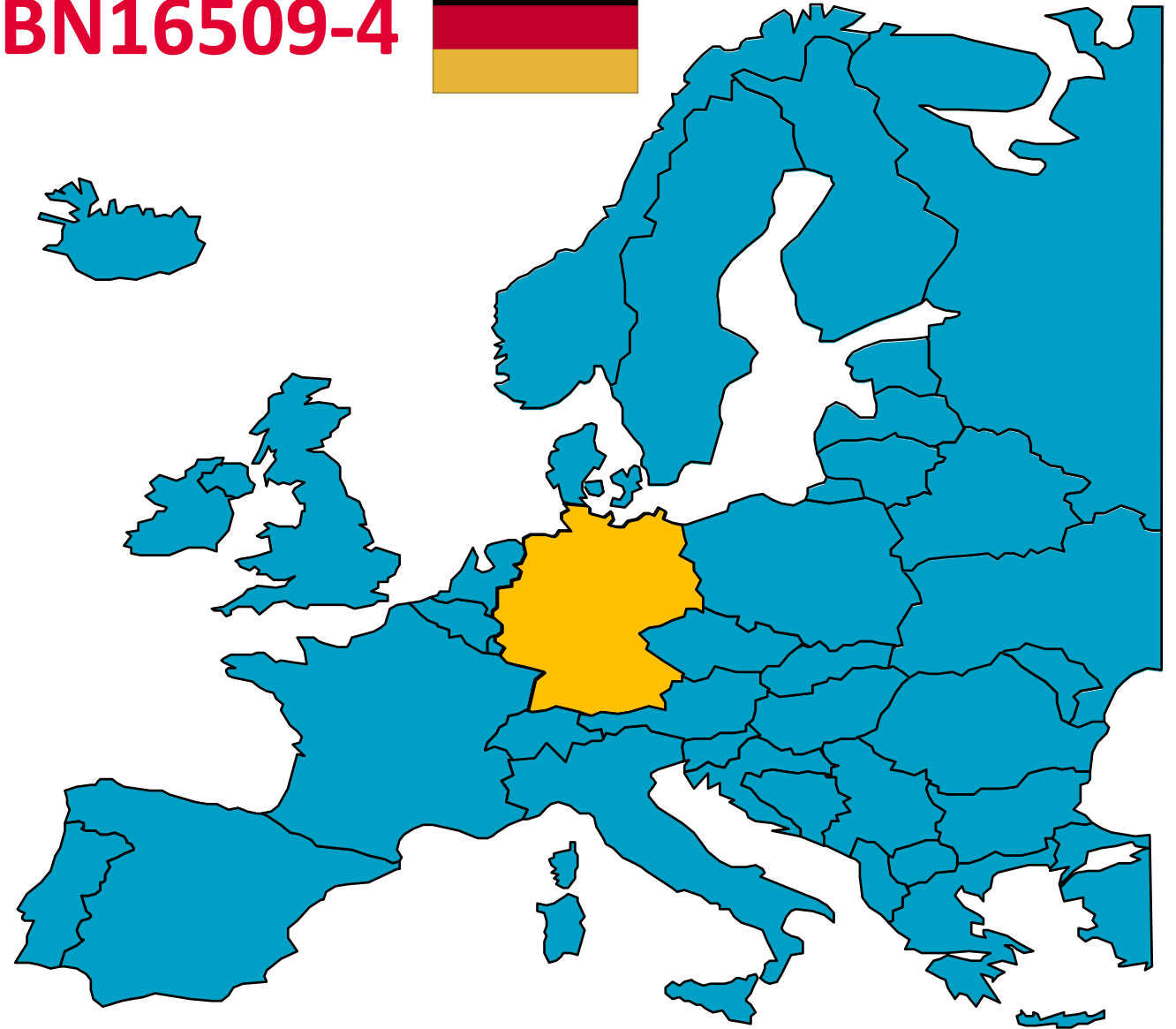
- Les variétés à 2 rangs de printemps, inscrites en janvier 2021, KWS THALIS, SHETTY, LG FLAMENCO and LEXY sont homologuées en Brasserie.
- *The 2 row Spring varieties, registered in January 2021, KWS THALIS, SHETTY, LG FLAMENCO and LEXY are approved for brewing by the CBMO.*



LG Flamenco - LGBN16509-4



- Germany
 - National Listed: Dec. 2021





LG Flamenco - LGBN16509-4



- **Germany**
 - National Listed: Dec. 2021
 - Good performance in WP1-WP3

Official trials Germany 2019-2021									
	Rel yield		Sorting		Disease resistance				
	Untreated	Treated	2,5 mm	2,8 mm	Mildew	Rust	Net blotch	Rhync	Ramu
QUENCH	96	98	92	65	1,2	3,9	2,7	2,9	5,5
AVALON	98	97	96	80	3,7	2,5	2,9	3,1	4,4
RGT PLANET	105	105	93	71	1,1	3,5	2,6	3,0	4,7
ACCORDINE	102	101	93	70	1,4	2,9	2,8	2,9	4,9
LEANDRA	101	99	94	72	1,0	2,3	2,3	2,3	5,3
LG FLAMENCO	108	109	93	70	1,5	3,6	2,6	2,7	4,8



LG Flamenco - LGBN16509-4



- Germany

- National Listed: Dec. 2021
- Good performance in WP1-WP3
- Well balanced malting profile

Official trials Germany 2019-2021						
	QUENCH	AVALON	RGT PLANET	ACCORDINE	LEANDRA	LG FLAMENCO
Screening 2,5	92	96	93	93	94	93
Screening 2,8	65	80	71	70	72	70
Extract (% DM)	82,3	82,3	82,6	83,1	81,6	83,4
Final Attenuation (%)	85,3	85,2	85,9	86,0	86,1	86,4
Alpha-amylase (DU)	47	70	56	50	69	56
Beta-amylase	934	1153	938	1075	976	971
Sol N (mg/100g)	595	662	614	649	680	641
Kolbach Index	39	41	42	41	44	44
FAN (ng/100g malt)	114	127	118	131	133	127
Friability (%)	88	95	90	95	95	96
Viscosity (mPas)	1,55	1,47	1,51	1,46	1,45	1,44
Beta-glucan (mg/l)	308	113	267	139	153	240



LG Flamenco - LGBN16509-4



Germany

- National Listed: Dec. 2021
- Good performance in WP1-WP3
- Well balanced malting profile
- Berliner programm:
only variety accepted for Gross-technik 2022

Zusammenfassung LG Flamenco

Agronomische Eigenschaften:

Mittlere Reife, gute Halmstabilität, mittlere Resistenzeigenschaften, überdurchschnittlicher Kornertrag

Gerstenqualität:

Mittlere Sortierung, mittlerer Proteingehalt
Kornanomalien: keine

Malzqualität: Sehr hohe Extraktausbeute

Zytolyse: mittlerer Friabilimeterwert, hohe beta-Glucanwerte, mittlere Viskosität
Proteolyse: mittlerer löslicher Stickstoff, hoher freier Aminostickstoff
Amylyse: mittlere alpha-Amylase-Aktivität, mittlere beta-Amylase-Aktivität

Ausgewogenheit der Lösungseigenschaften:
Ausgewogen bei intensiver Mälzung

MÄLZUNGSVARIANTEN Berliner Programm:
5 Tage – 18/14 °C – A 45 % / B 43 % / C 41 % / D 39 %

Würzequalität bei angepasster Mälzung:

Sehr hohe Ausbeute, schnelle Läuterzeit, sehr hohe Stickstoffversorgung, niedrige Viskosität, hoher Vergärungsgrad

Bierqualität: Gute Verkostungsergebnisse

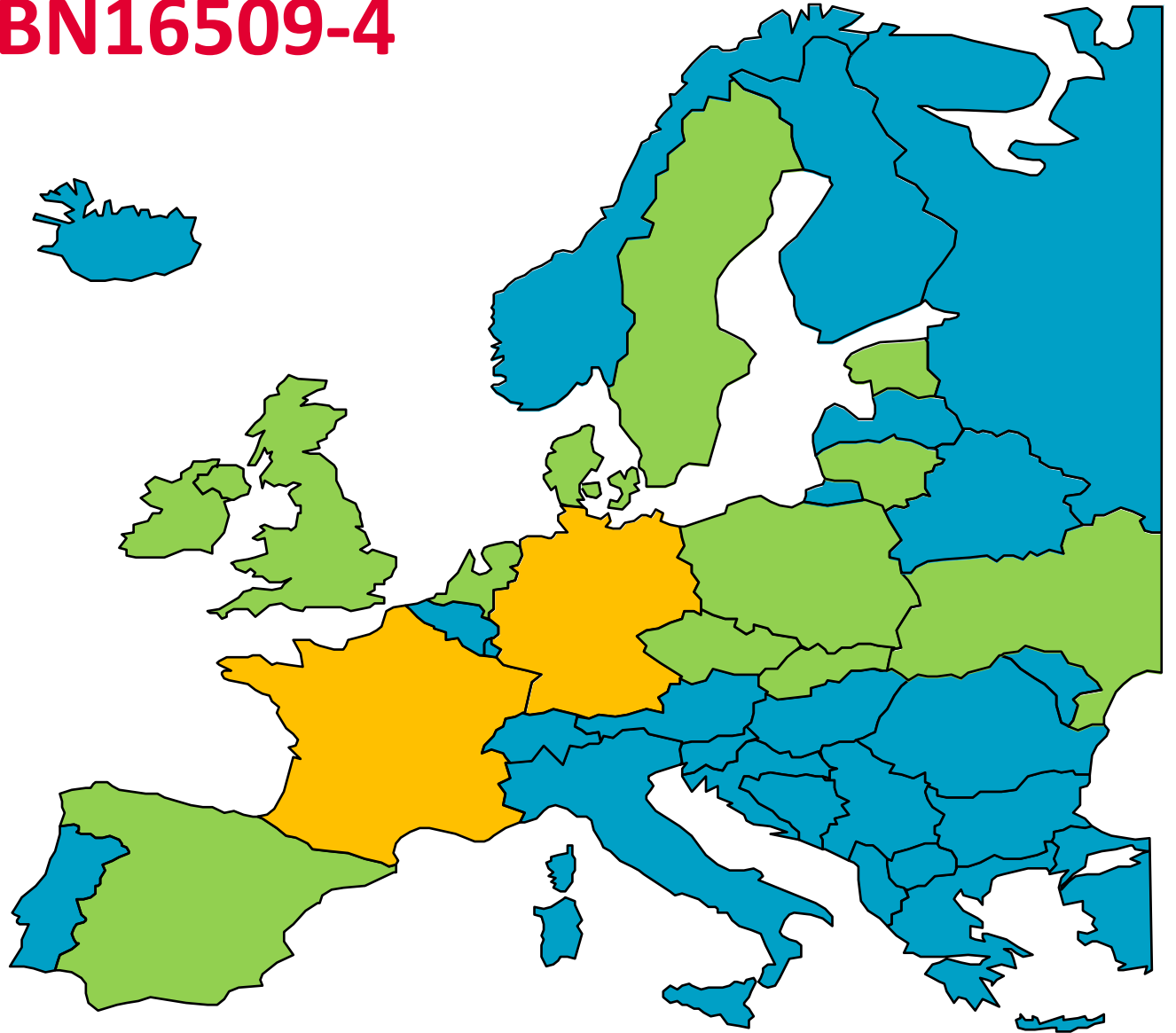
Bewertung:
Empfehlung
für die
Praxisversuche

Sortengremium, 08.02.2022



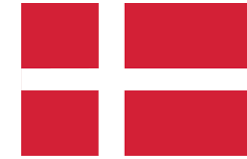
LG Flamenco - LGBN16509-4

- **Denmark**
 - Farmers' Union trials 2 H21
 - Danish Preferred stress test
- **Czech Republic**
 - 3rd year official trials completed H21
- **United Kingdom, Slovak Republic**
 - 2nd year official trials completed H21
- **Poland, Ukraine, Netherlands, Lithuania, Estonia, Sweden**
 - 1st year official trials completed H21 (Sweden : FUT)
- **Spain**
 - Entering *Malteros de España* field trials 21/22





LG Flamenco - LGBN16509-4



Agronomy - Results from the Danish National Trials and Official Trials, 2020-2021

Variety	Relative yield in the Danish National Trials			Respons on fungicide (hkg/ha)	Kernel quality				Disease resistance					Earliness and straw characters					Nematodes				
	Mean 2020+2021	Yield			Raw protein (%)	Grading > 2,5 mm (%)	Grading > 2,8 mm (%)	Hectolitre weight (kg/hl)	Mildew (%)	Barley rust (%)	Rhynchosporium (%)	Net blotch (%)	Ramularia (%)	Maturity (date)	Straw length (cm)	Lodging, FUT (kar. 0 - 10)	Lodging, OBS (kar. 0 - 10)	Ear breaking (kar. 0 - 10)			Straw breaking (kar. 0 - 10)	I	II
		2021	2020																				
Blanding	100	100	100	7,8	10,4	96	80	68,5	0	11	10	4	19	26-jul	68	0,9	0,5	1	2,0	-	-		
Laureate	104	104	103	8,8	10,3	98	90	67,6	0	4	4	0	14	28-jul	70	1,0	0,0	2,5	3,5	S	S		
RGT Planet	100	98	102	9,8	10,3	97	87	68,5	0	10	5	22	20	27-jul	73	1,0	0,0	2,0	3,7	R	R		
LG FLAMENCO	103	103	103	13,0	10,4	97	87	67,7	0	13	7	16	14	29-jul	68	0,6	0,0	1,2	2,9	R	R		

High yielding

Good kernel quality

Medium resistance profil

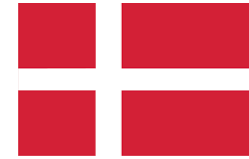
Very good straw stability

Nematode resistance

TystofteFonden



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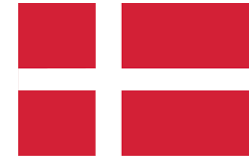
MICRO-MALTING TYSTOFTE 2020-2021

	RGT Planet		Laureate		LG Flamenco	
	2021	2020	2021	2020	2021	2020
<i>Viscosity, mPa*s</i>	1,46	1,53	1,46		1,44	1,50
<i>β-glucan, mg/l</i>	81	202	120		100	153
<i>Extract% tørstof</i>	82,3	83,7	83,5		83,4	83,7
<i>Protein Content</i>	8,9	9,2	8,6		9	8,9
<i>Soluble nitrogen</i>	648	731	657		683	713
<i>Kolbach Index, %</i>	46	49	47		48	51
<i>Friability, %</i>	97	91,7	97		97	95
<i>Limit of attenuation, %</i>	86,8	84,9	87,1		86,3	85,6
<i>FAN, mg/100g tørstof</i>	126	131	137		133	138
<i>β-amylase, BU/g tørstof</i>	874	939	812		840	1001
<i>α-amylase, DU/g tørstof</i>	50		47		43	

TystofteFonden



LG Flamenco - LGBN16509-4



Danish Preferred 

SUMMARY

- ❖ High yielding across Europe
- ❖ Good kernel quality – good screening
- ❖ High extract levels
- ❖ Good modification degree
- ❖ Well balanced proteolysis
- ❖ High enzymatic levels
- ❖ Very high Attenuation
- ❖ Low wort turbidity

Index Result

	Laureate_45	Laureate_43	Laureate_41	RGT Planet_45	RGT Planet_43	RGT Planet_41	LG Flamenco_45	LG Flamenco_43	LG Flamenco_41
Extract	1	1	3	3	4	4	1	3	3
Friability	3	3	5	1	2	4	1	2	4
Beta-Glucan	2	3	5	1	2	3	1	2	3
Viscosity	2	3	4	1	2	4	1	2	3
FAN	2	4	5	1	3	4	1	2	4
Soluble N	1	3	4	1	2	3	1	2	3
Kolback	1	2	4	1	2	3	1	2	3
FAN dev.*	6%	-1%	4%	7%	-4%	1%	12%	9%	6%
Soluble N dev.*	1%	3%	4%	1%	2%	3%	1%	2%	3%
Kolback dev.*	1%	2%	4%	1%	2%	3%	1%	2%	3%
Proteolyse compared to modification	5 % higher			2 % higher			1 % higher		
Alpha-Amylase	3	4	4	2	3	4	2	3	3
Beta-Amylase	4	4	4	2	2	3	1	1	1
Limit Dextrinase	3	3	3	2	2	3	2	2	2
Attenuation	2	3	3	2	3	5	1	1	2
Turbidity	1	1	1	3	2	3	1	1	1
Index **	10	12	18	12	16	21	6	11	14
Index mean ***	25			31			19		



LG FLAMENCO



Thanks for your attention