



Danish Preferred 

Stress test
Crop 2019

Results and Decisions

Committee meeting notes 20th February 2020

Summary

The Danish Preferred Committee met on 20th February 2020, in Copenhagen to discuss the results from the stress test, which are the first step in the Danish Preferred Program. In total 6 varieties were put into testing at VLB Berlin. Of the 6 varieties, 3 was pulled by the applicant after testing at VLB, and therefor not presented to the committee on the 20th of February 2020 and are not a part of the following report.

The remaining three varieties; Firefoxx (Ackermann/Nordic Seed), Skyway (Nordic Seed) and SY Splendor (Syngenta) was presented to the committee. All three varieties were approved to continue in the program as all three performed better than the two standard varieties; KWS Irina and RGT Planet.

On the following pages the data from the stress test is presented.

Final Index

The varieties are graded in relation to how they perform compared to each other on a scale of 1-5, 1 being the best. The scores are then added up, to give an index score, the lower the better. Actual values are presented on the following pages, and raw data can be found online.

	KWS Irina_45	KWS Irina_43	KWS Irina_41	RGT Planet_45	RGT Planet_43	RGT Planet_41	Firefoxx_45	Firefoxx_43	Firefoxx_41	Skyway_45	Skyway_43	Skyway_41	SY Splendor_45	SY Splendor_43	SY Splendor_41
Extract	3	5	5	1	4	4	1	1	3	1	2	4	1	2	3
Friability	3	4	5	1	2	4	1	3	4	1	2	5	1	2	4
Beta-Glucan	2	4	5	1	2	4	1	3	4	1	3	5	1	2	4
Viscosity	2	3	4	1	1	4	1	2	4	1	3	5	1	2	4
FAN, diff. *	35	27	25	31	25	23	27	20	13	16	14	5	18	7	6
Soluble N, diff. *	33	31	40	24	23	22	9	2	4	-37	-21	-36	-29	-35	-30
Kolback, diff. *	0	0	1	2	2	1	1	1	0	-3	-1	-3	-1	-1	-1
Alpha-Amylase	4	4	5	1	1	2	5	5	5	3	2	4	2	3	5
Beta-Amylase	3	2	3	3	4	3	5	5	5	1	2	2	3	4	5
Limit Dextrinase	1	2	3	2	1	3	3	2	3	1	1	2	2	3	5
Attenuation	3	3	3	3	3	4	3	3	5	1	2	3	1	2	3
Turbidity	1	1	1	2	5	5	1	1	1	1	1	2	1	2	2
Index **	18	23	25	13	23	28	14	16	25	8	13	24	8	15	23
Index mean ***	42			38			35			26			28		

Explanation to the color indications:

the best of the standards is for each parameter and steeping degree assigned light green (except if value=5). Values lower than best standard are marked with increasingly intense green.

Red is used for values being two points higher than best standard, the higher value the more intense red.

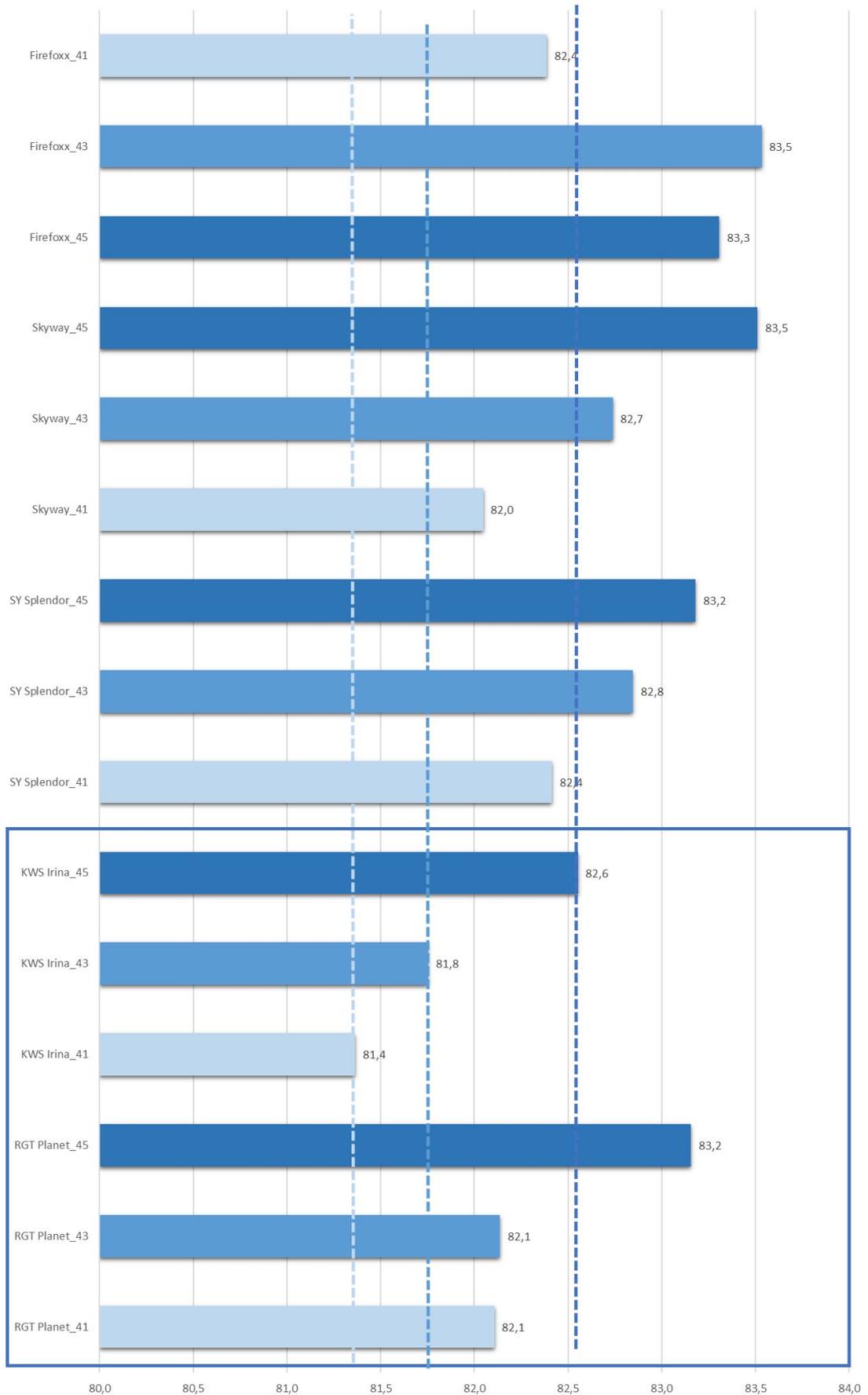
* = deviation from the calculated value (calculated from the degree of modification in terms of beta-glucan). KWS Irina_45 FAN = 125; calculated value = 90.

** = 2*Extract + Mean(Friability, Beta-glucan, Viscosity) + Mean(Alpha, Beta-amylase, Limit Dextrinase) + Attenuation + Turbidity

*** = Index_45 + Mean(Index_43, Index_41)

Ekstrakt

Positiv værdi: HØJ



Analysis for skinned Grains

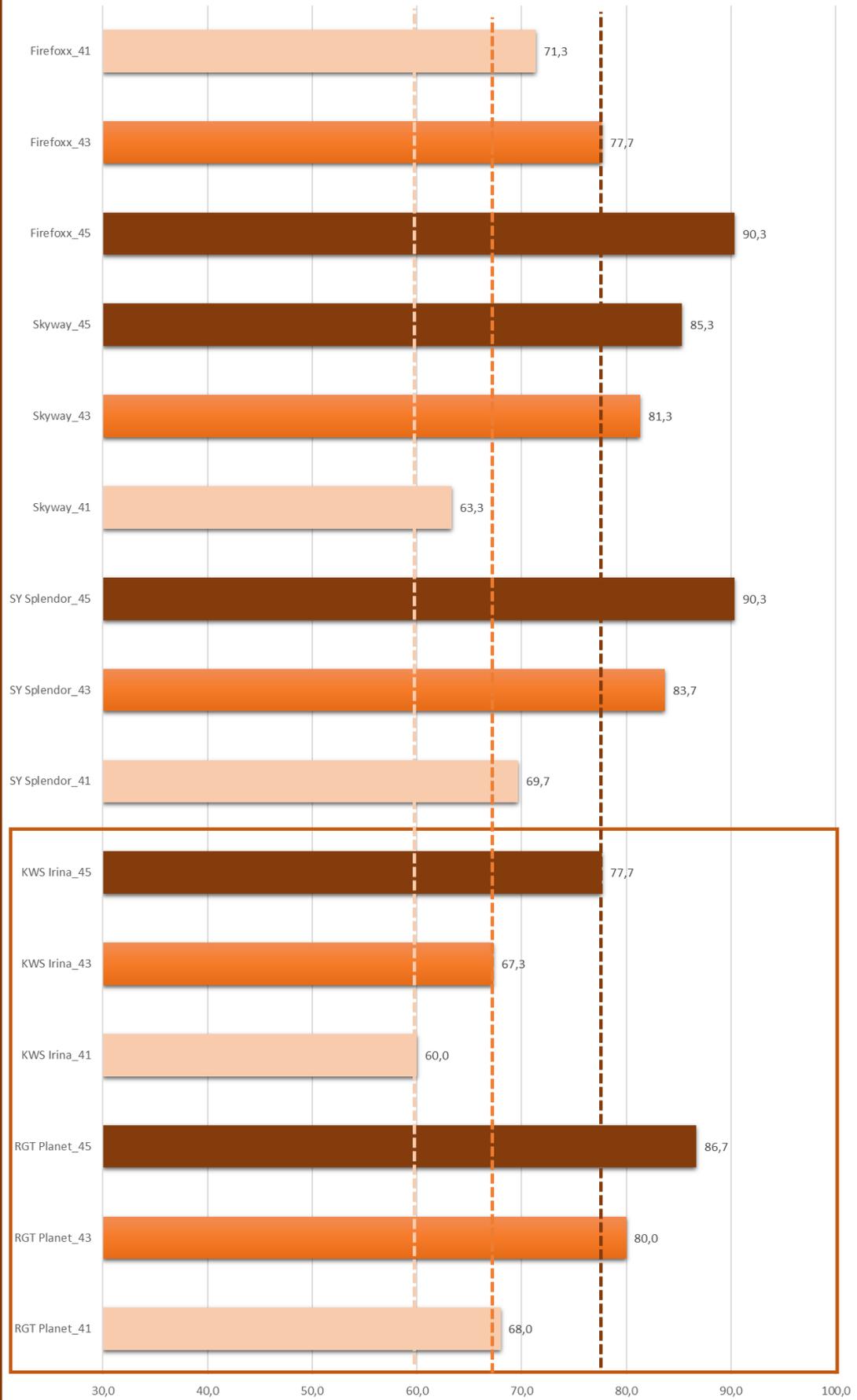
The committee decided in 2019 to include EyeFoss analysis for damage kernels, to ensure that high extract values, was not just a sign of skinned grains.

	Damaged kernels		different species	
	Skinned	Broken	Wheat	Rye
Eskilstrup	2,11	0,66	0,01	0,00
Sejet	2,26	0,30	0,01	0,01
Tystofte	2,02	0,66	0,02	0,00
KWS Irina	3,59	0,54	0,02	0,00
RGT Planet	2,00	0,67	0,01	0,02
Firefoxx	1,08	0,58	0,00	0,00
Skyway	2,96	0,36	0,02	0,01
SY Splendor	1,46	0,43	0,01	0,00

The results from the Eyefoss analysis, showed no issues with skinned grains from any of the used locations, or the varieties in testing.

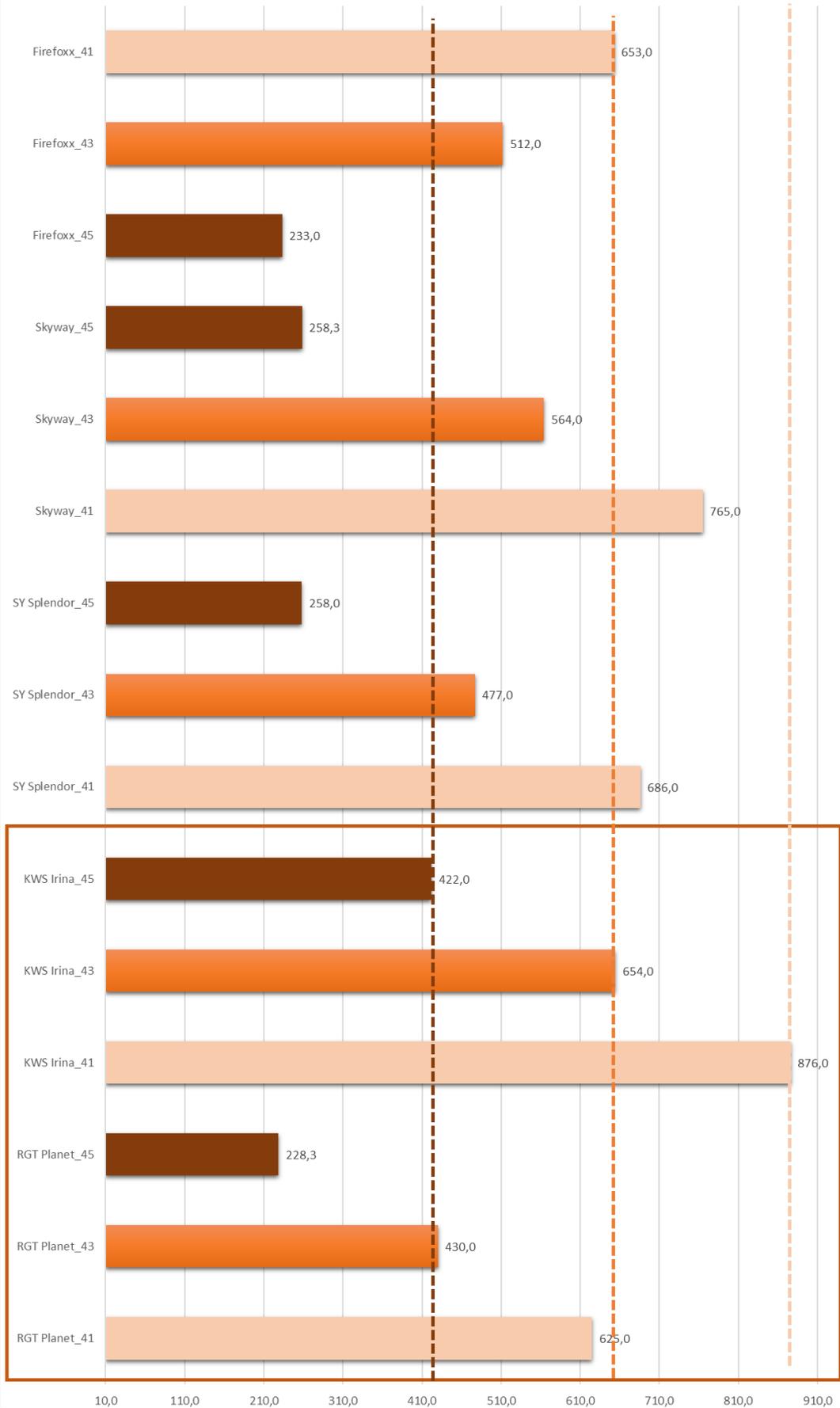
Friabilimeter

Positiv værdi: HØJ



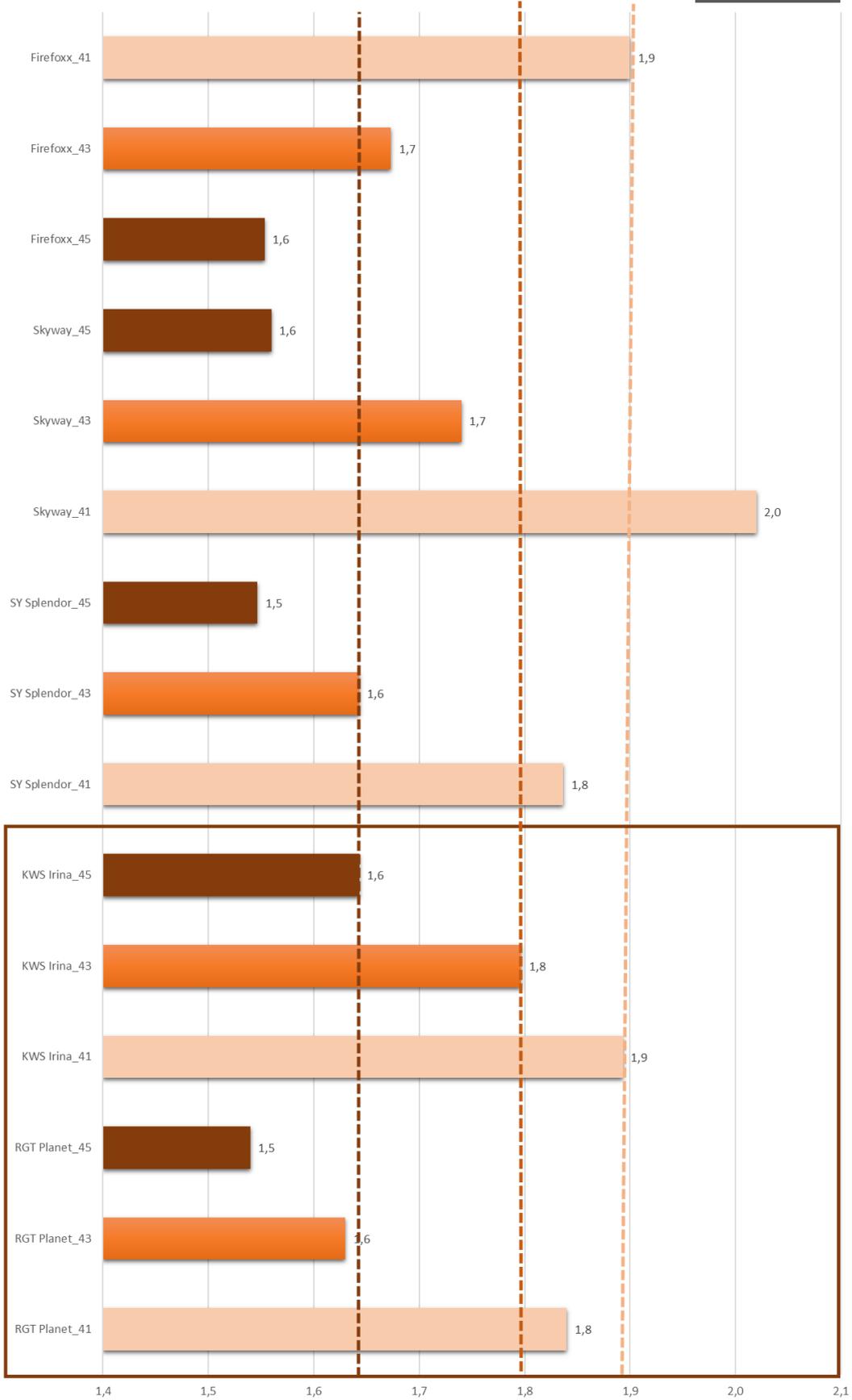
Betaglucan

Positiv værdi: LAV



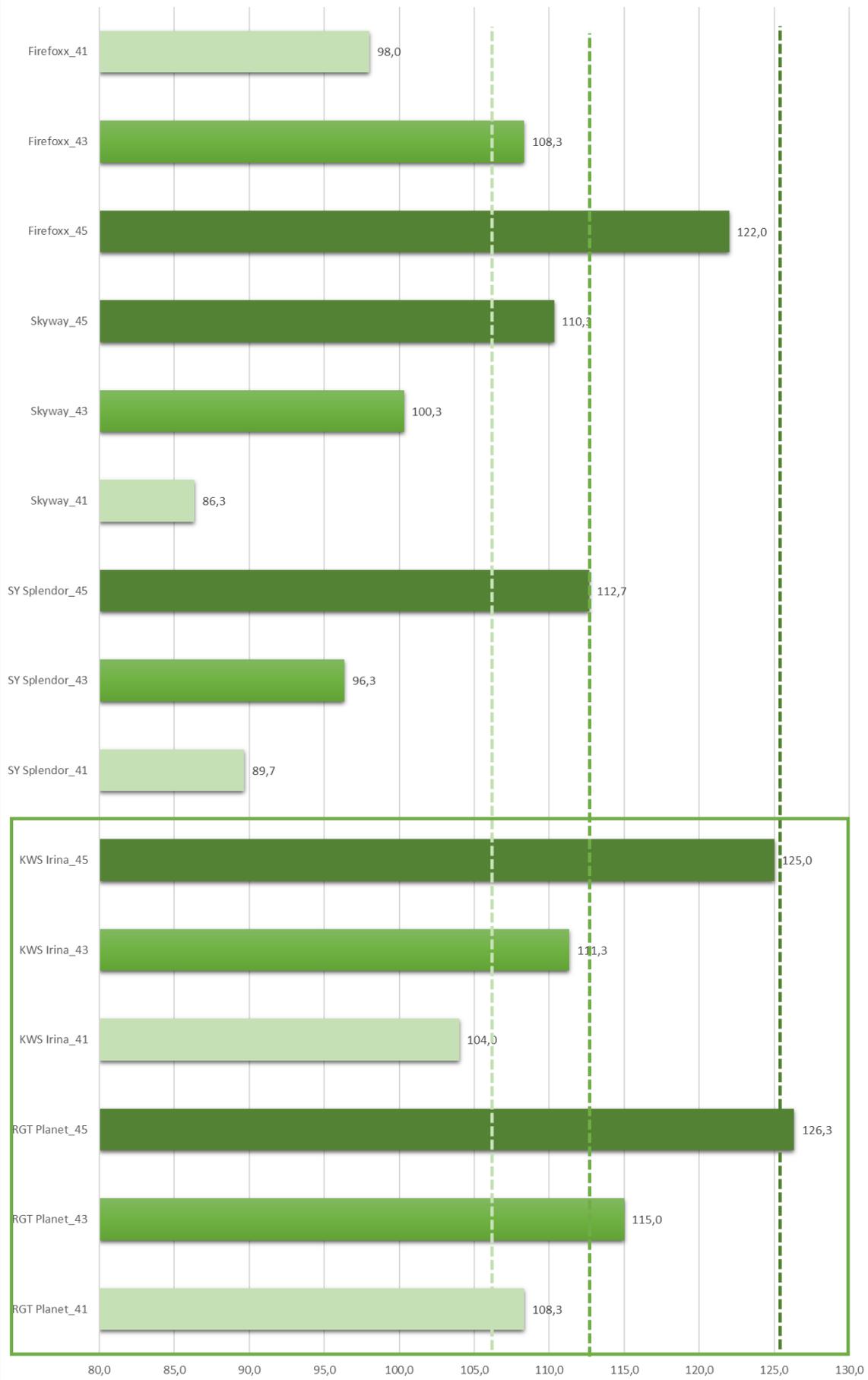
Viskositet

Positiv værdi: LAV

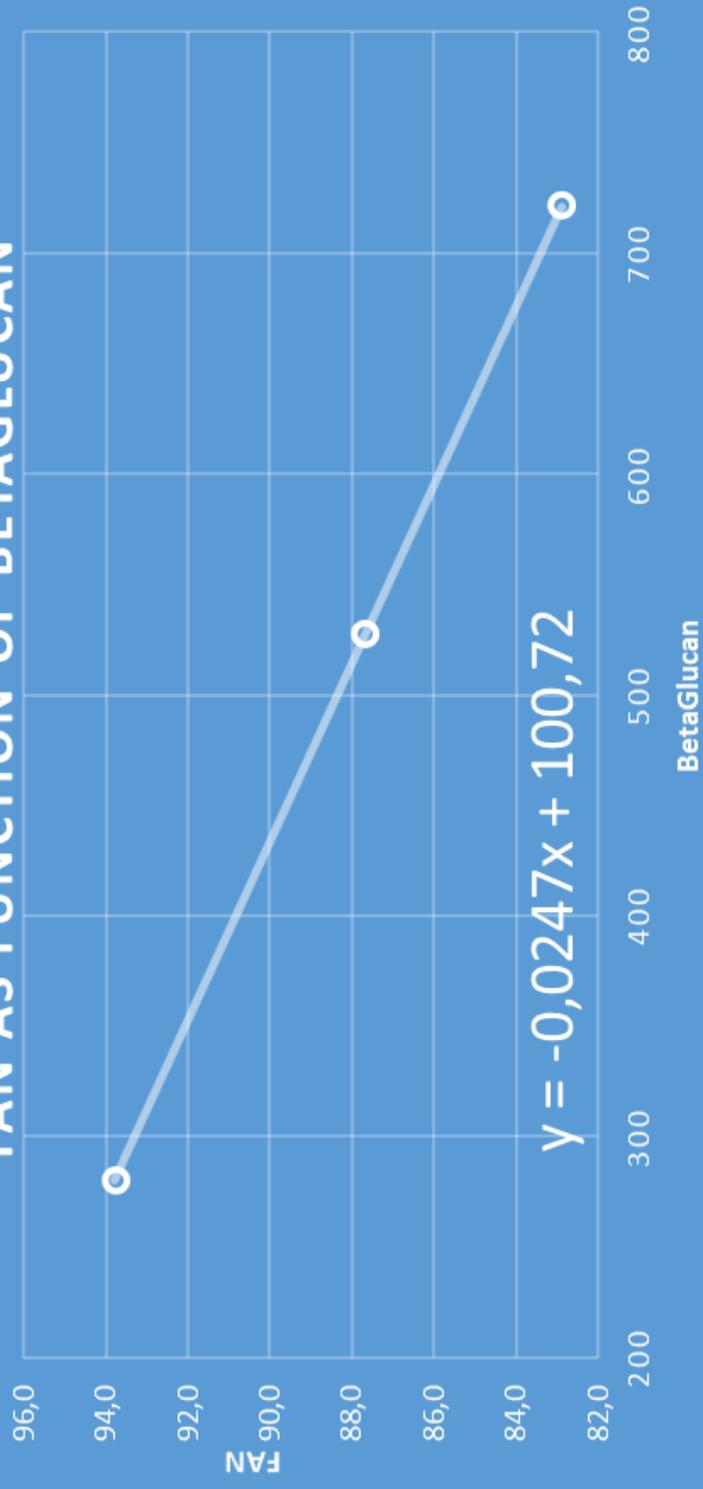


FAN

Positiv værdi: balanceret

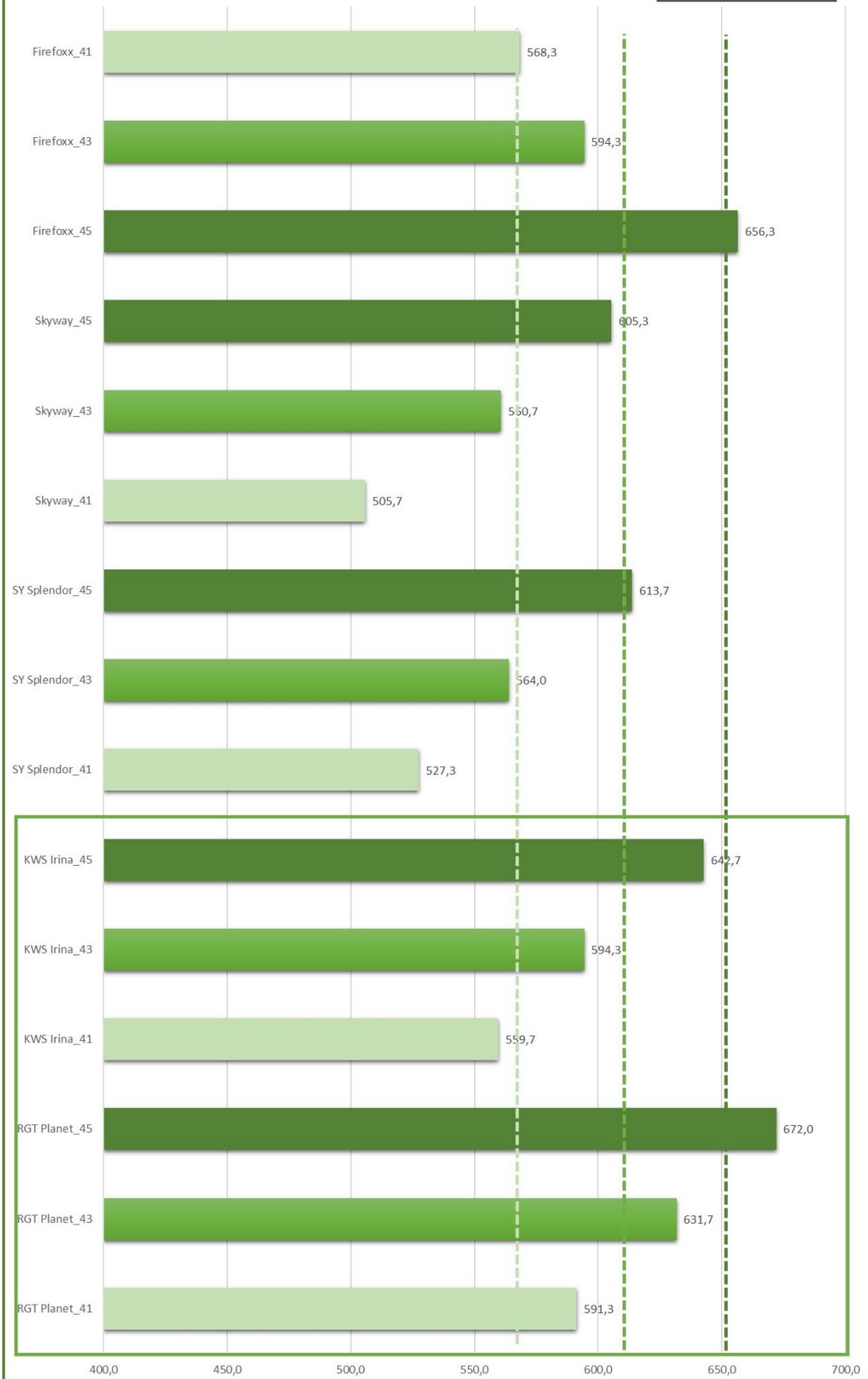


FAN AS FUNCTION OF BETAGLUCAN



Opløselig N

Positiv værdi: balanceret

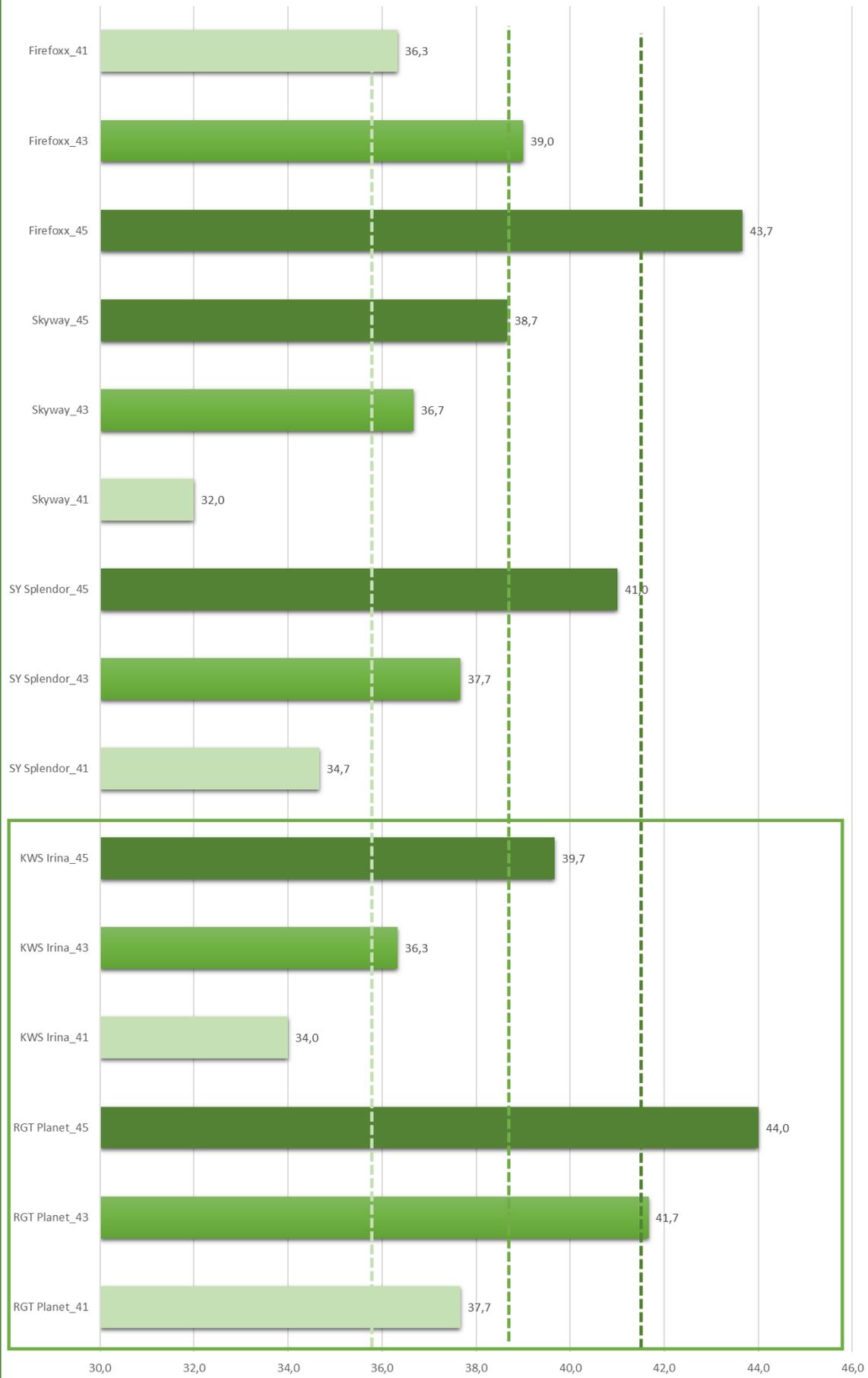


SOLUBLE NITROGEN AS FUNCTION OF BETAGLUCAN

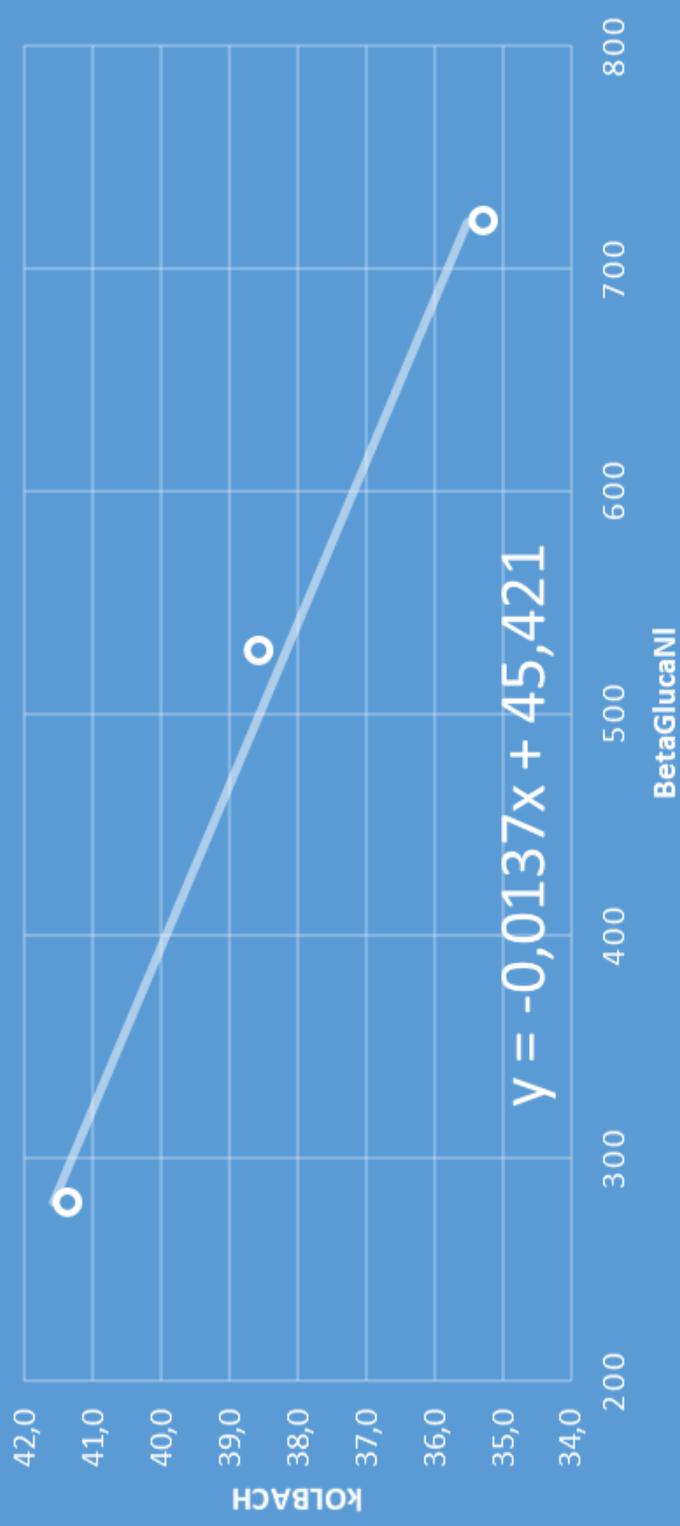


Kolbach

Positiv værdi: balanceret

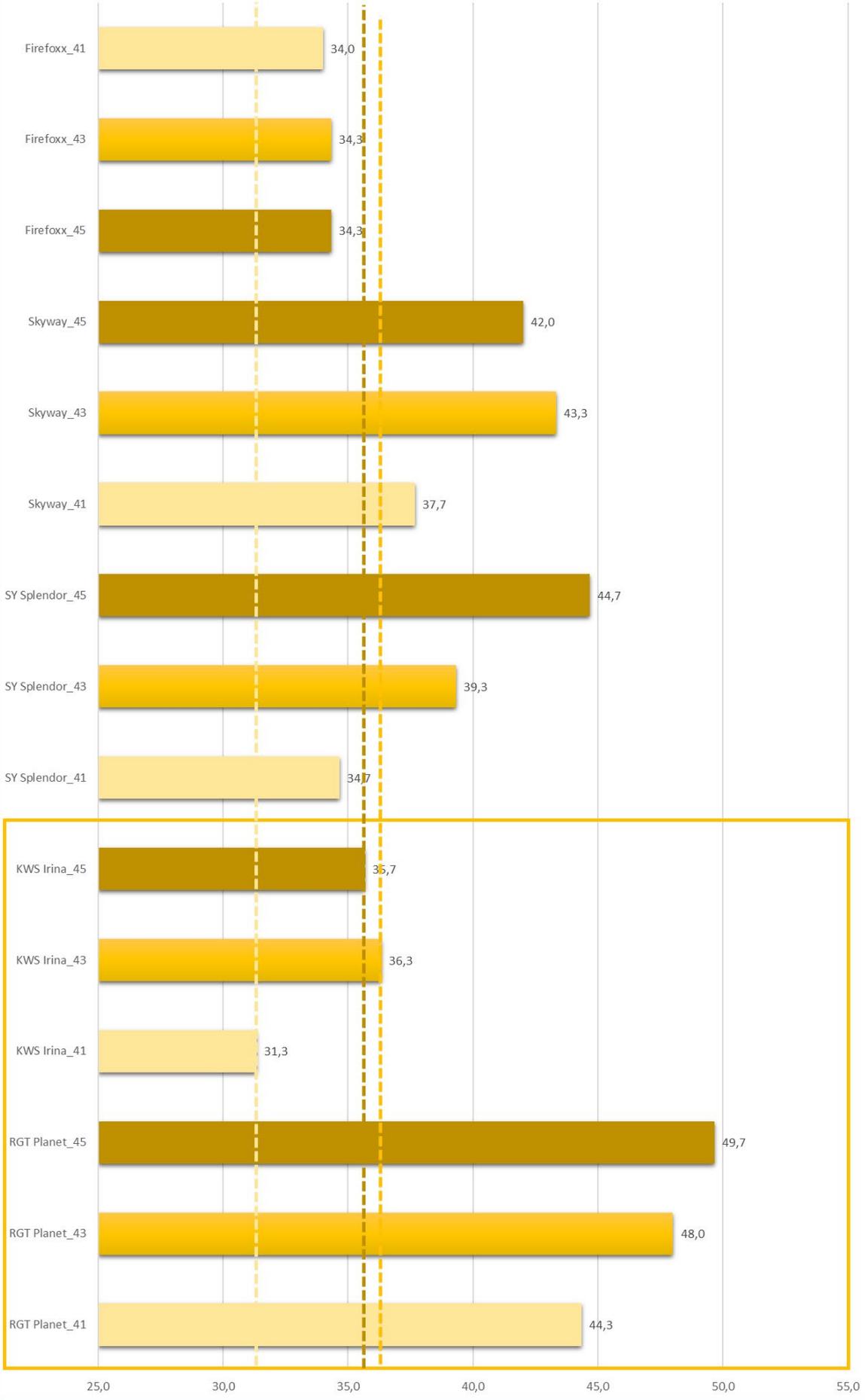


KOLBACH AS FUNCTION OF BETAGLUCAN



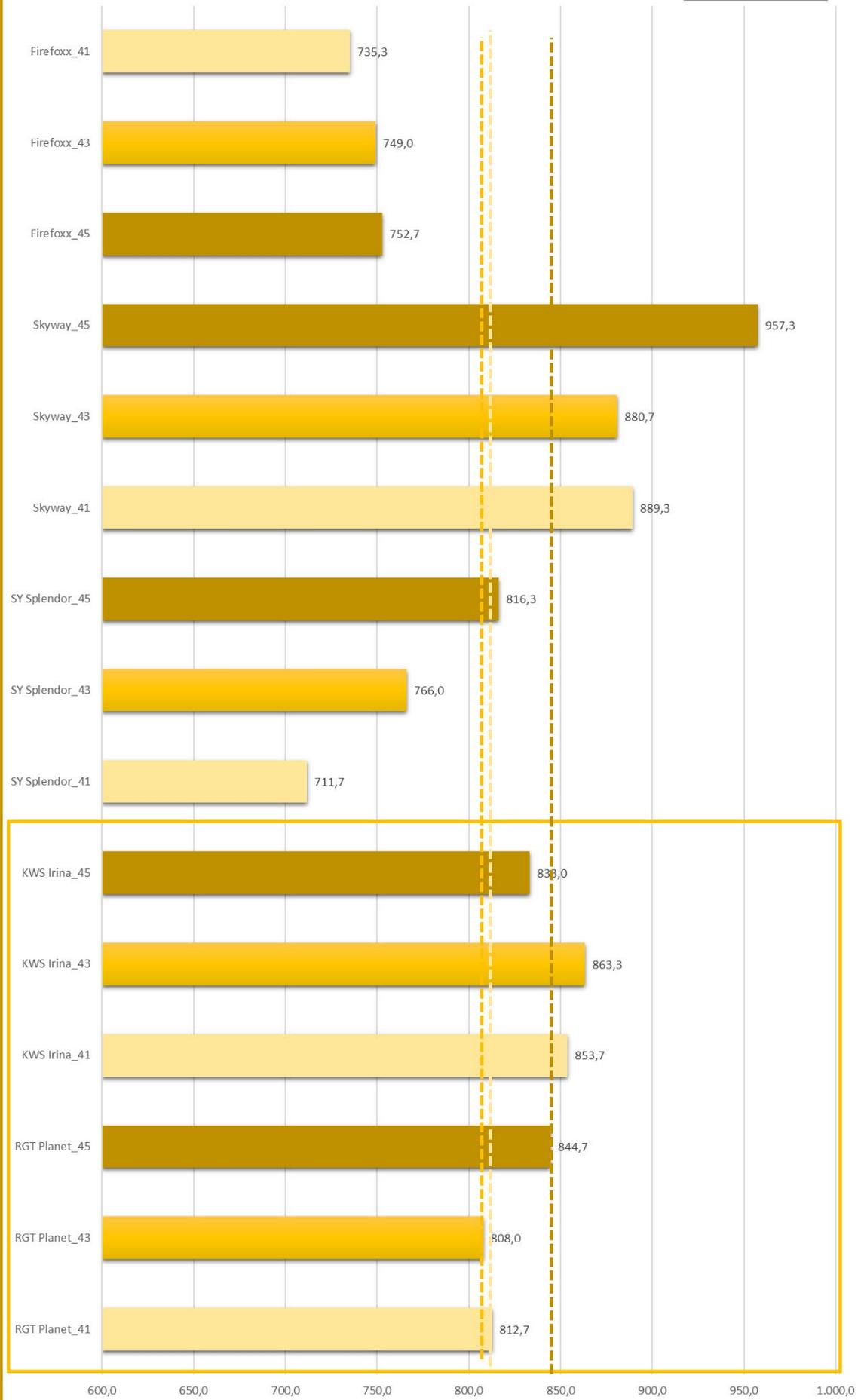
Alpha-Amylase

Positiv værdi: HØJ



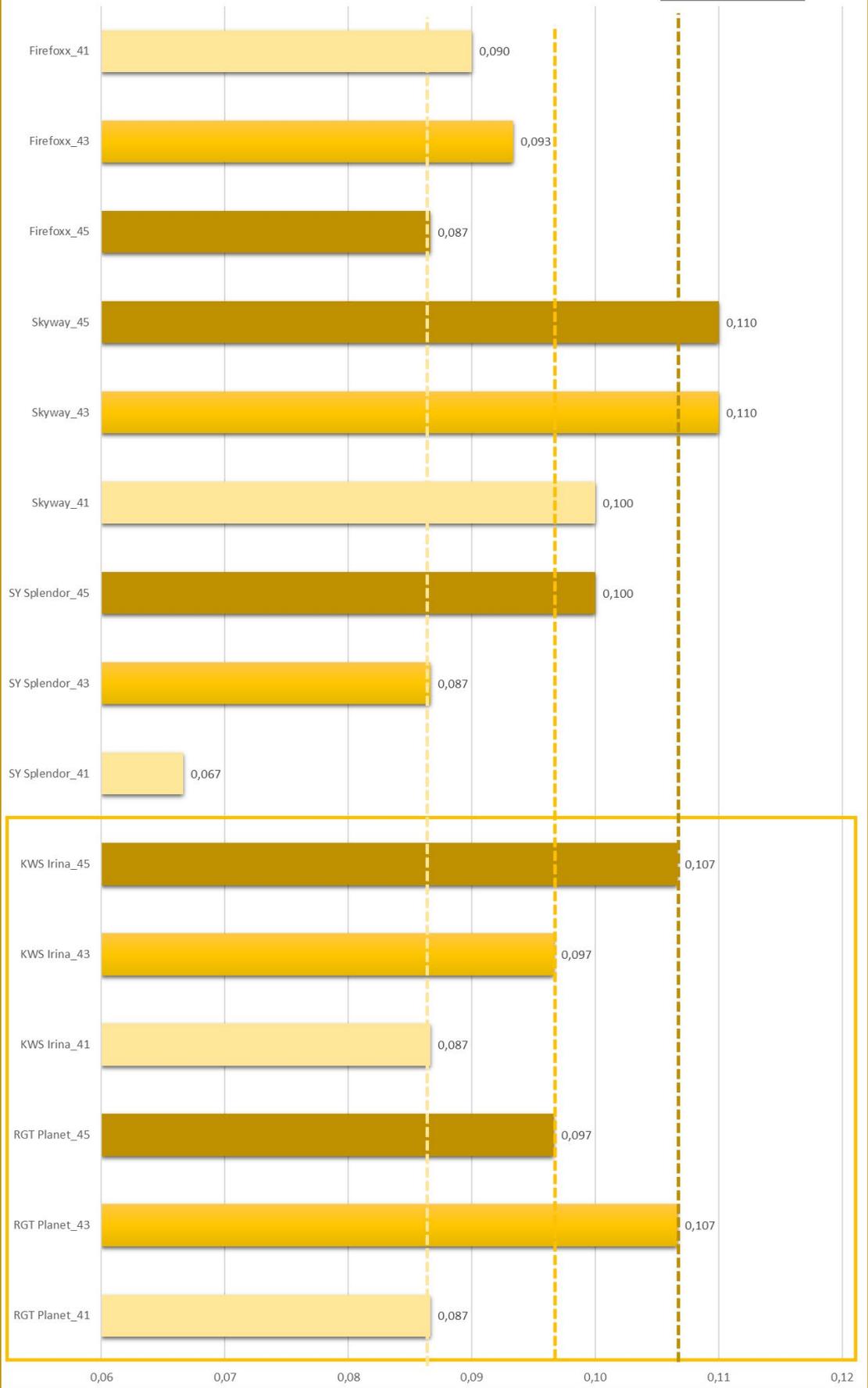
Beta-Amylase

Positiv værdi: HØJ



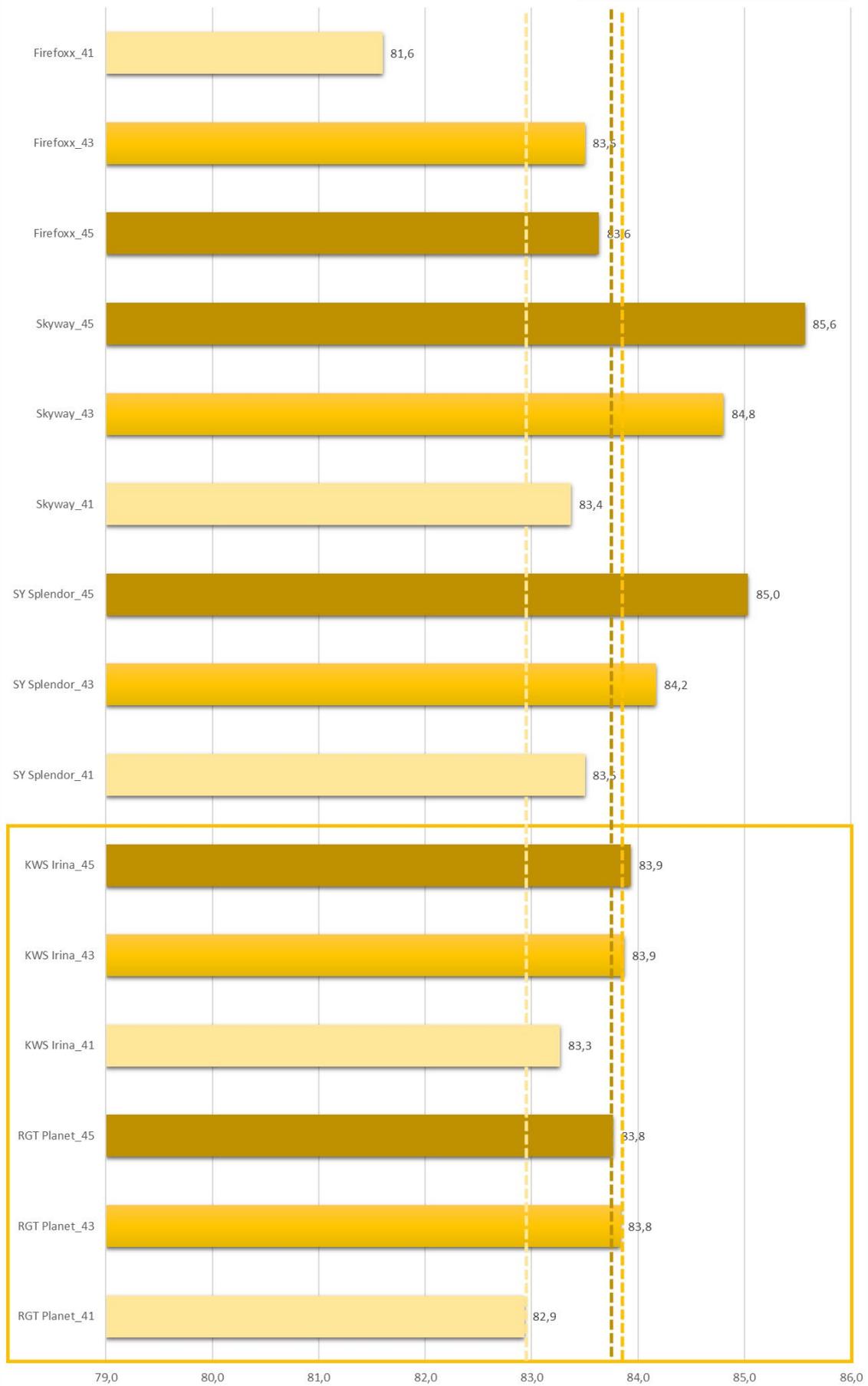
Limit Dextrinase

Positiv værdi: HØJ



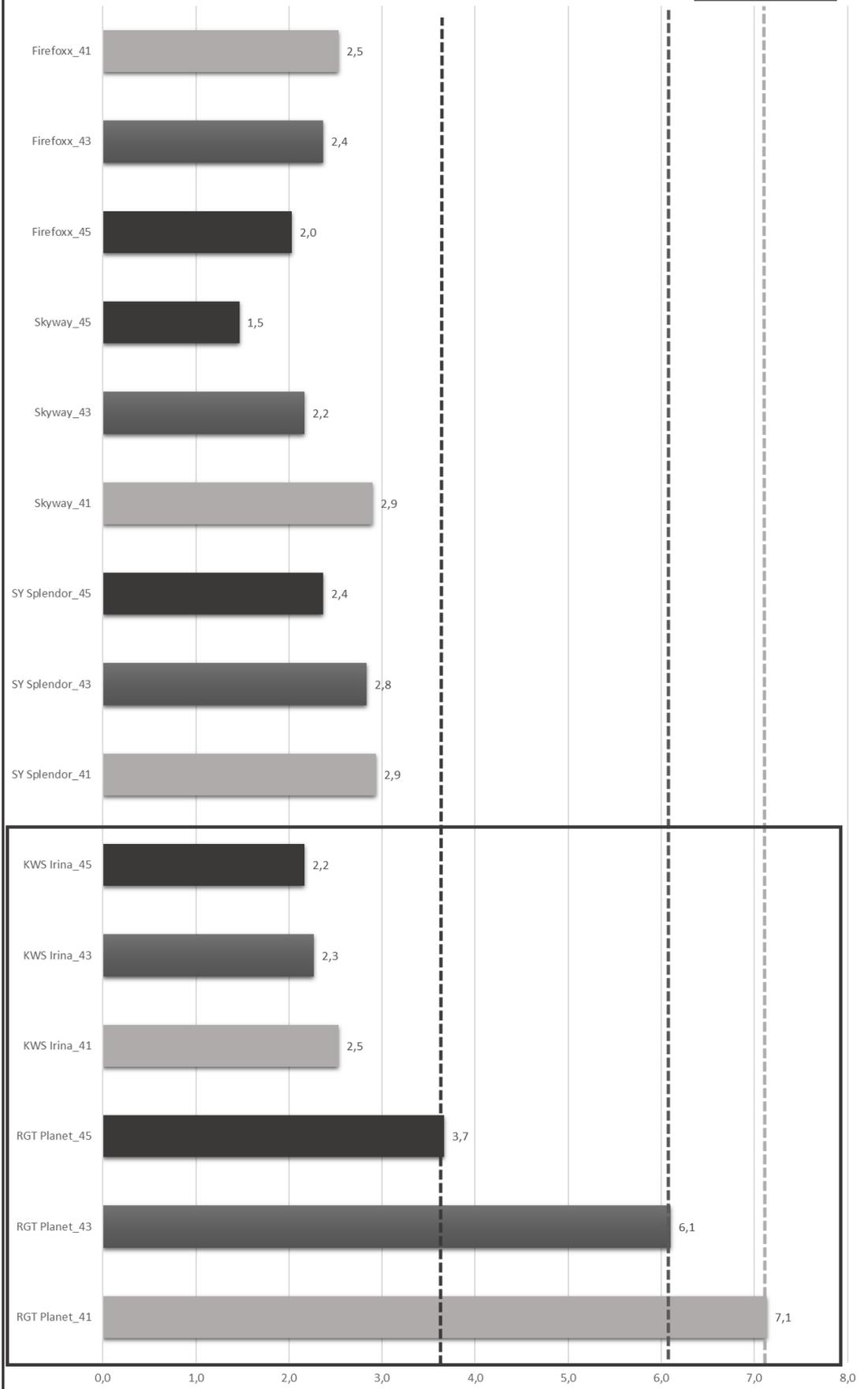
Slutførgæring

Positiv værdi: HØJ (med undtagelser)



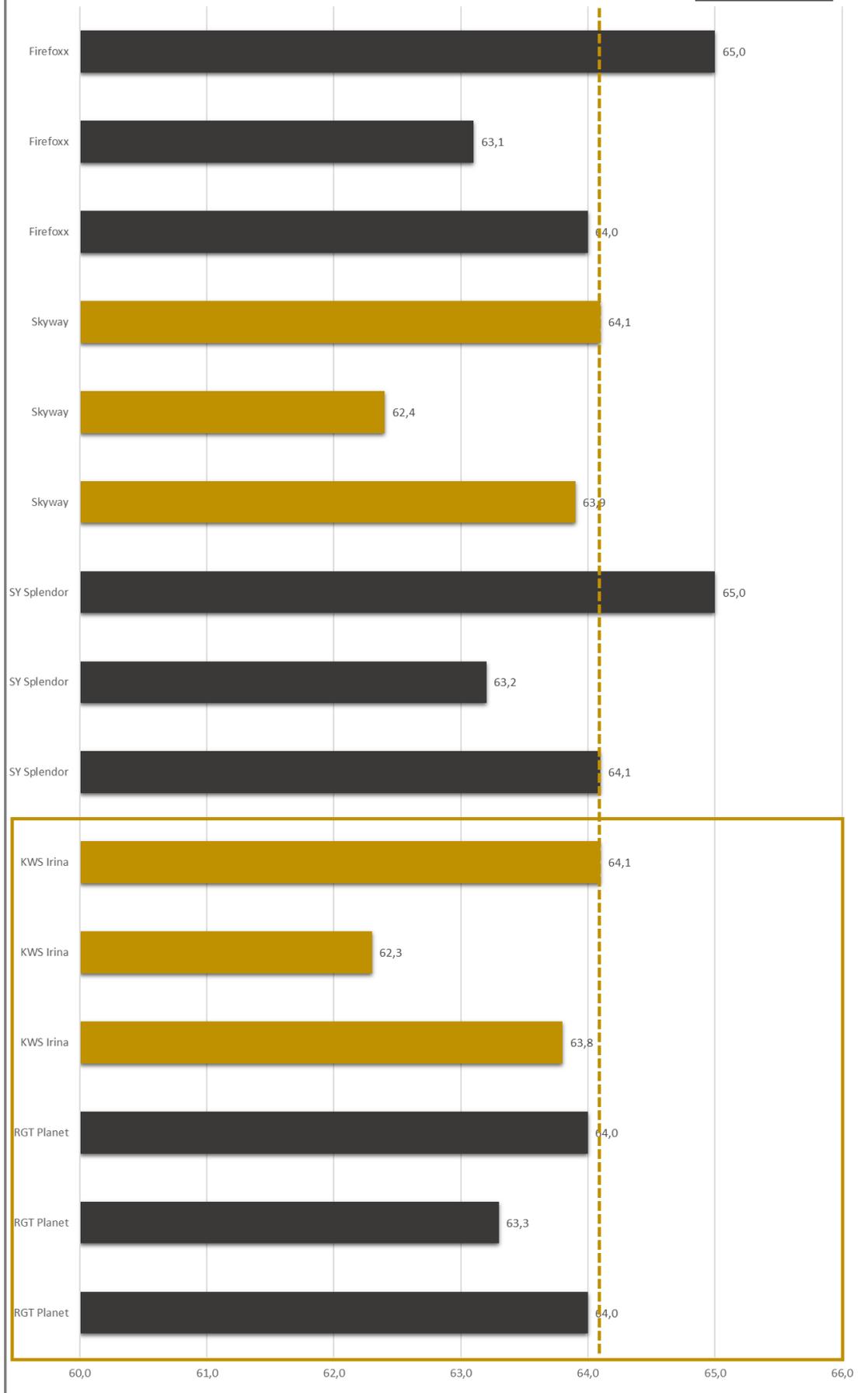
Turbidity

Positiv værdi: LAV



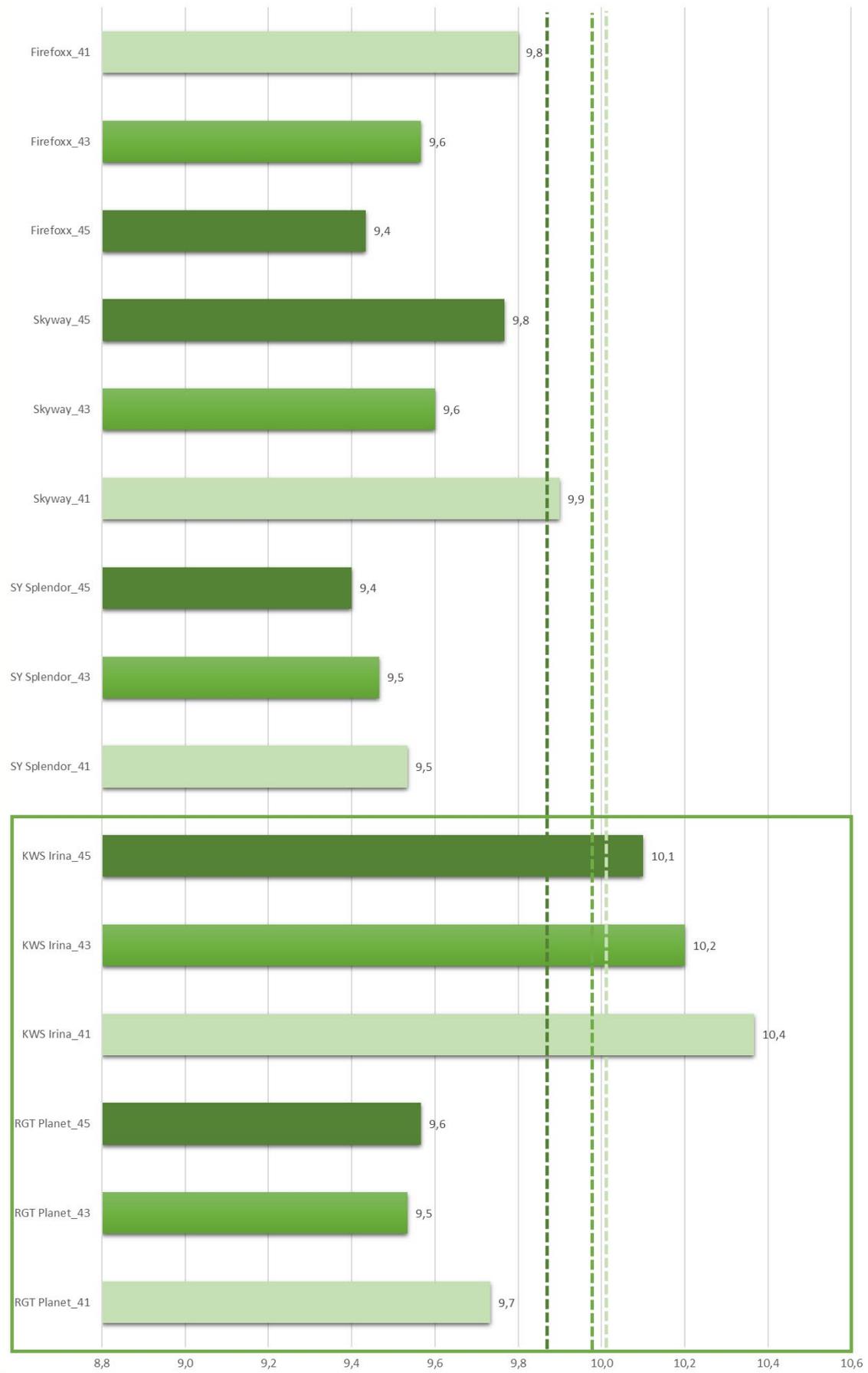
Gelatiniserins-temp., Byg

Positiv værdi: LAV



Protein i malt

Indifferent



Urt farve

Positiv værdi: LAV (til pilsner)

