

First results of an inter laboratory ring test with the rooted aquatic macrophyte *Myriophyllum* sp. in a sediment containing test system

Agricultural Products



The Chemical Company

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Background information



- participating laboratories: 15 laboratories
- test species: *M. aquaticum* and *M. spicatum*
- test substances: 3,5-Dichlorophenol, Isoproturon, Trifluralin
- medium: Smart and Barko Medium (1985),
- sediment: Artificial soil (OECD 219)
- exposure: *Via* water column or *via* sediment (spiking sediment)
- duration: 7 days (*M. aquaticum*) or 14 days (*M. spicatum*)
- test parameter: shoot length (total length, main shoot, side shoots), wet weight, dry weight, root development, no. of side shoots)

The following results / data are based on a first evaluation and will need further detailed inspection

Background information

Laboratory	3,5-DCP	Isoproturon	Trifluralin
Alterra Corporation	x	x	n.a.
Springborn Smithers Laboratories	x	n.a.	n.a.
BASF SE	x	x	x
Eurofins Agroscience Services	x	x	x
Ibacon GmbH	x	x	x
Fraunhofer IME	x	n.a.	n.a.
University of Novi Sad (Serbia)	x	x	n.a.
Dr. U. Noack Laboratories	n.a.	x	n.a.
Harlan Laboratories	x (spic.)	n.a.	n.a.

Further results expected from: UBA, Bayer Crop Science, Biochem Agrar, Nufarm, University Antwerpen (Belgium), FERA, ECT, IPO

Current status: Control data base

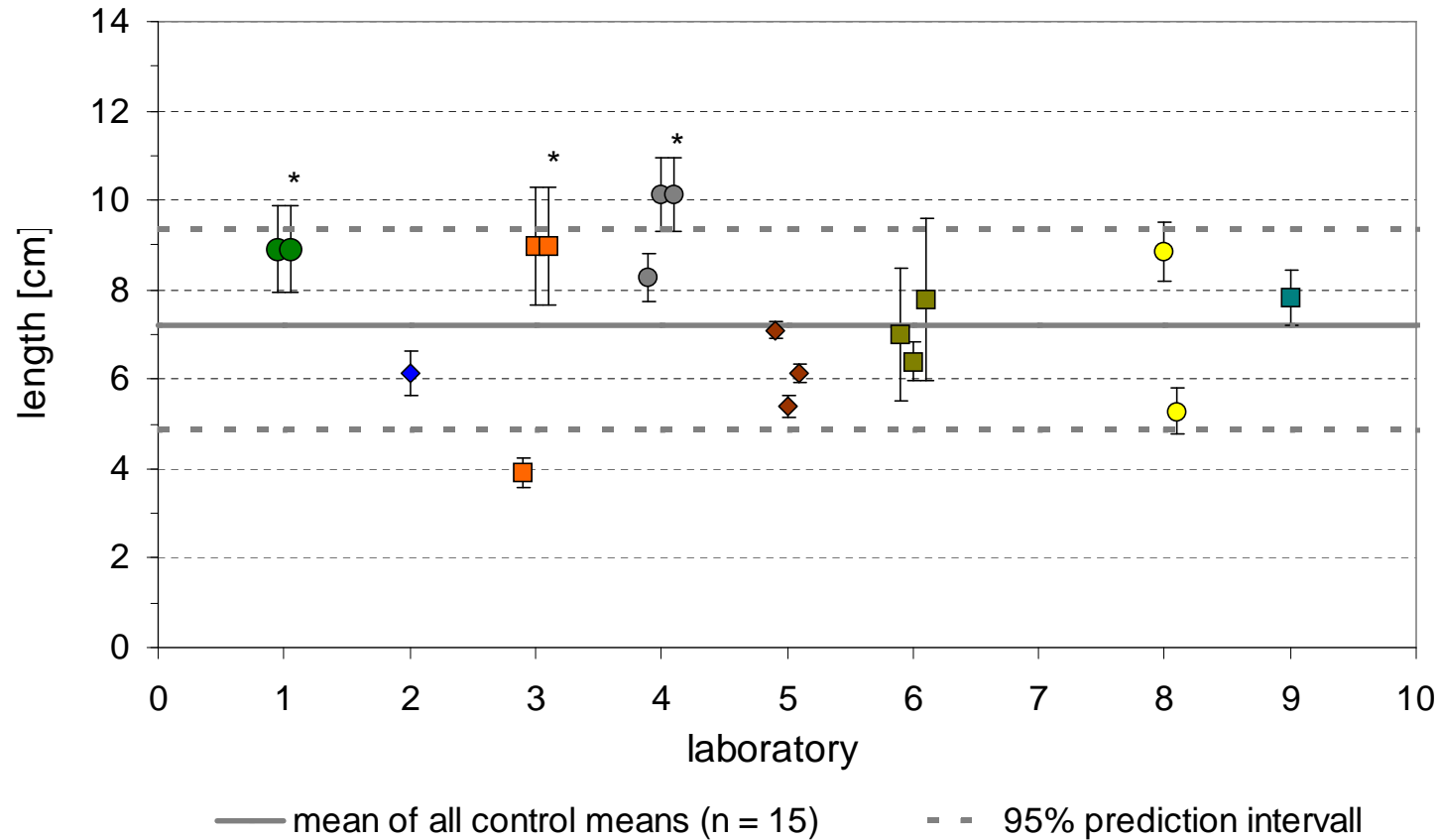
Myriophyllum aquaticum

Parameter	Total no. of tests	Total no. of single control replicates
Length (start data)	15	225
Total length (DAT 0)	19	342
Total length (DAT 7)	19	338
Main shoot length (DAT 7)	15	248
Wet weight (start data)	16	240
Wet weight (DAT 7)	19	338
Dry weight (start data)	15	215
Dry weight (DAT 7)	18	307
Root development	14	252
length of side shoots	16	248
No. Of Side shoots	16	255
Total	182	3008

Remarks: start data = plants from additional pots, harvested before application = DAT 0

Results: Length data

Length - start data (DAT 0)

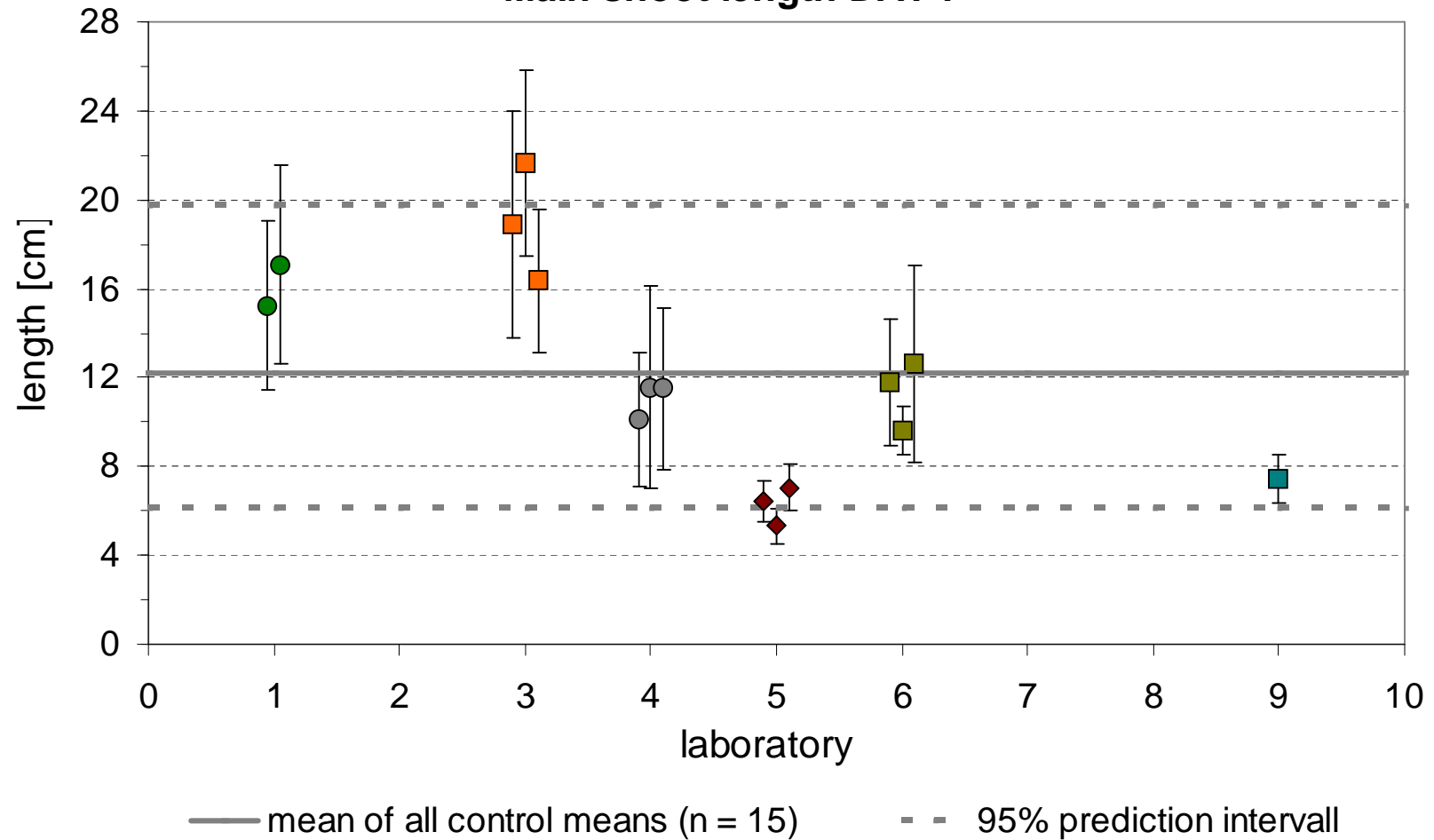


* identical start data (same plants were used for different test runs) were excluded from calculation of the mean of all control means and the 95% prediction interval

Results: Length data

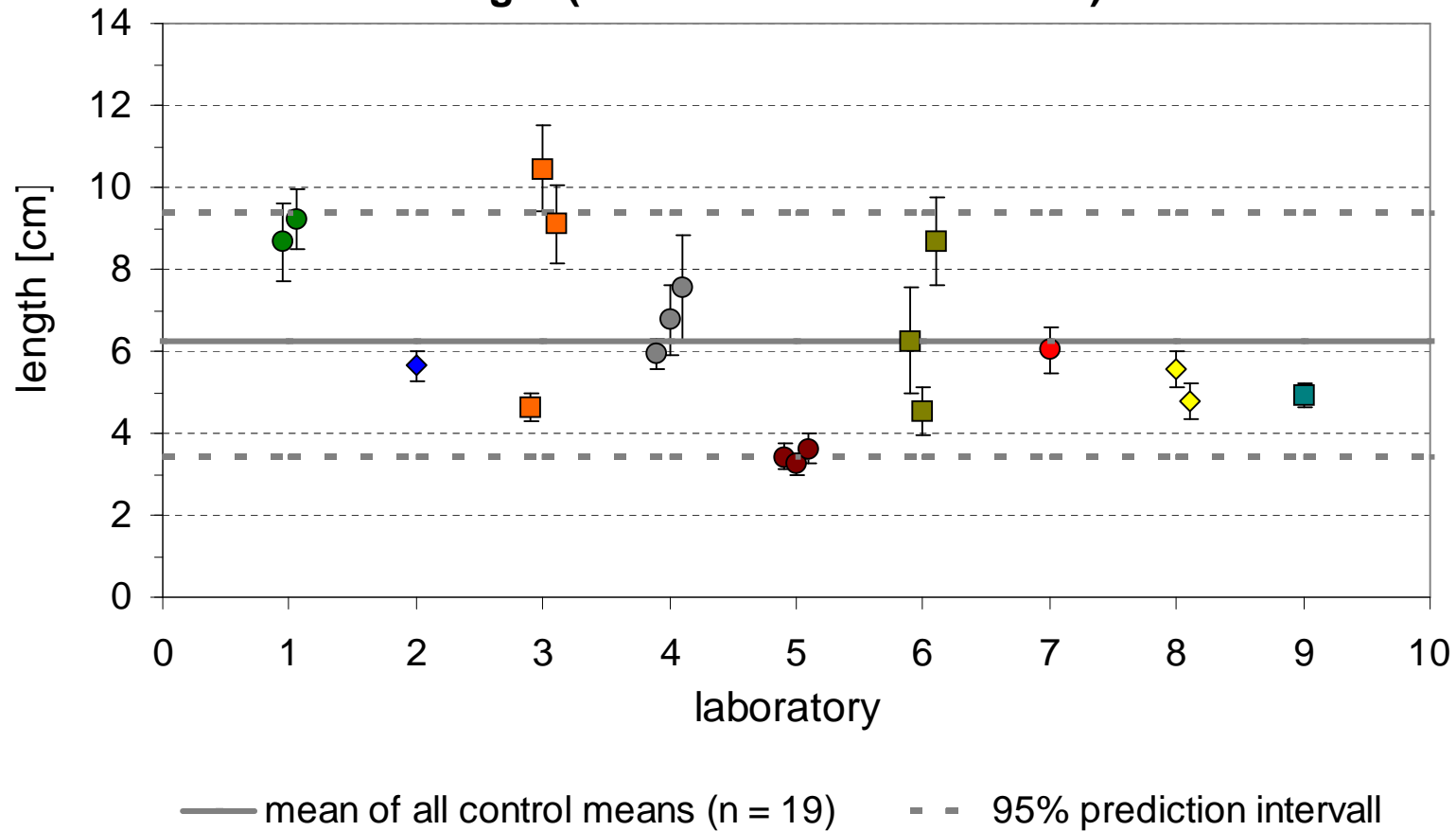


Main shoot length DAT 7



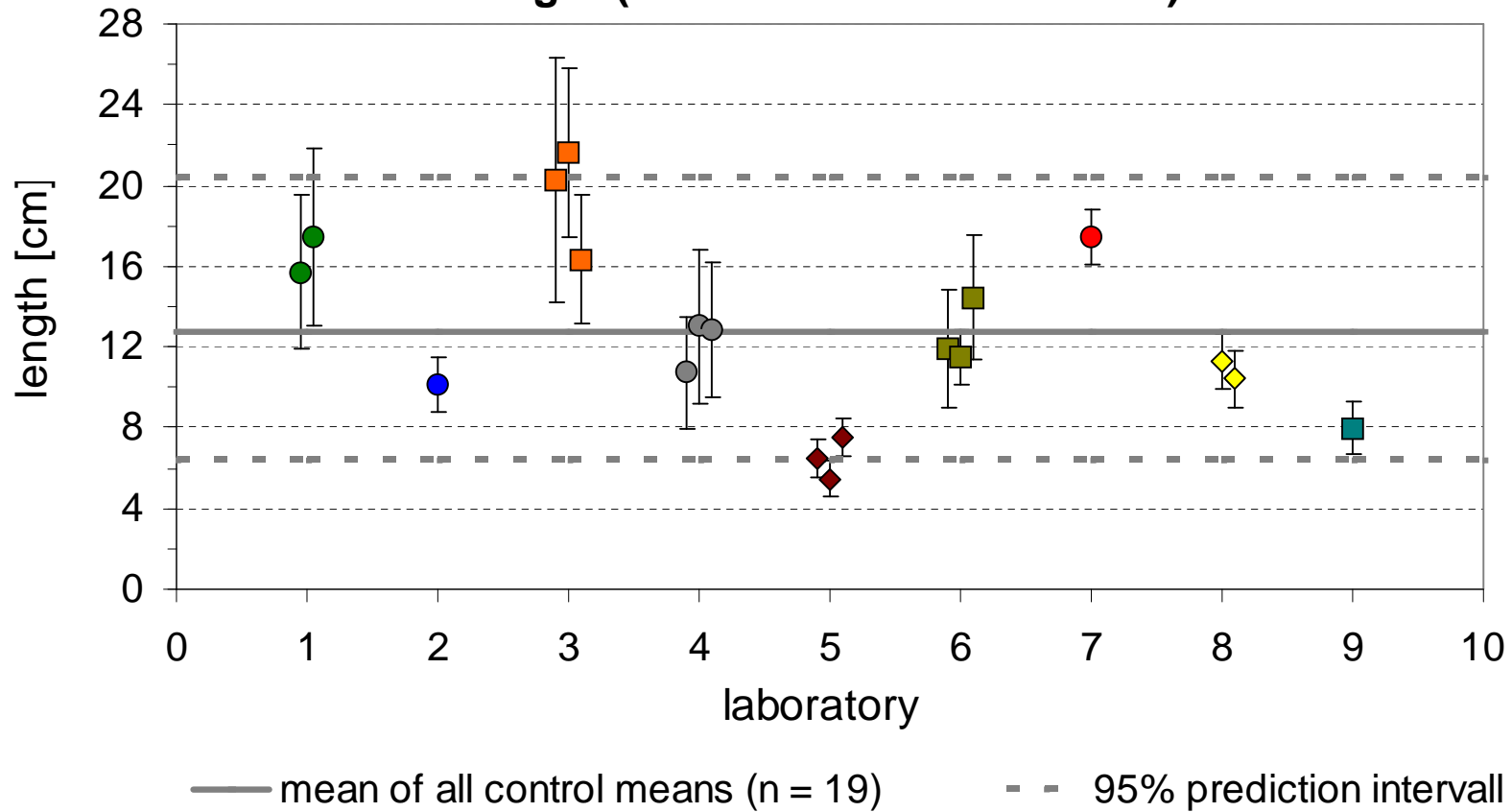
Results: Length data

Total length (main shoot + side shoots) DAT 0

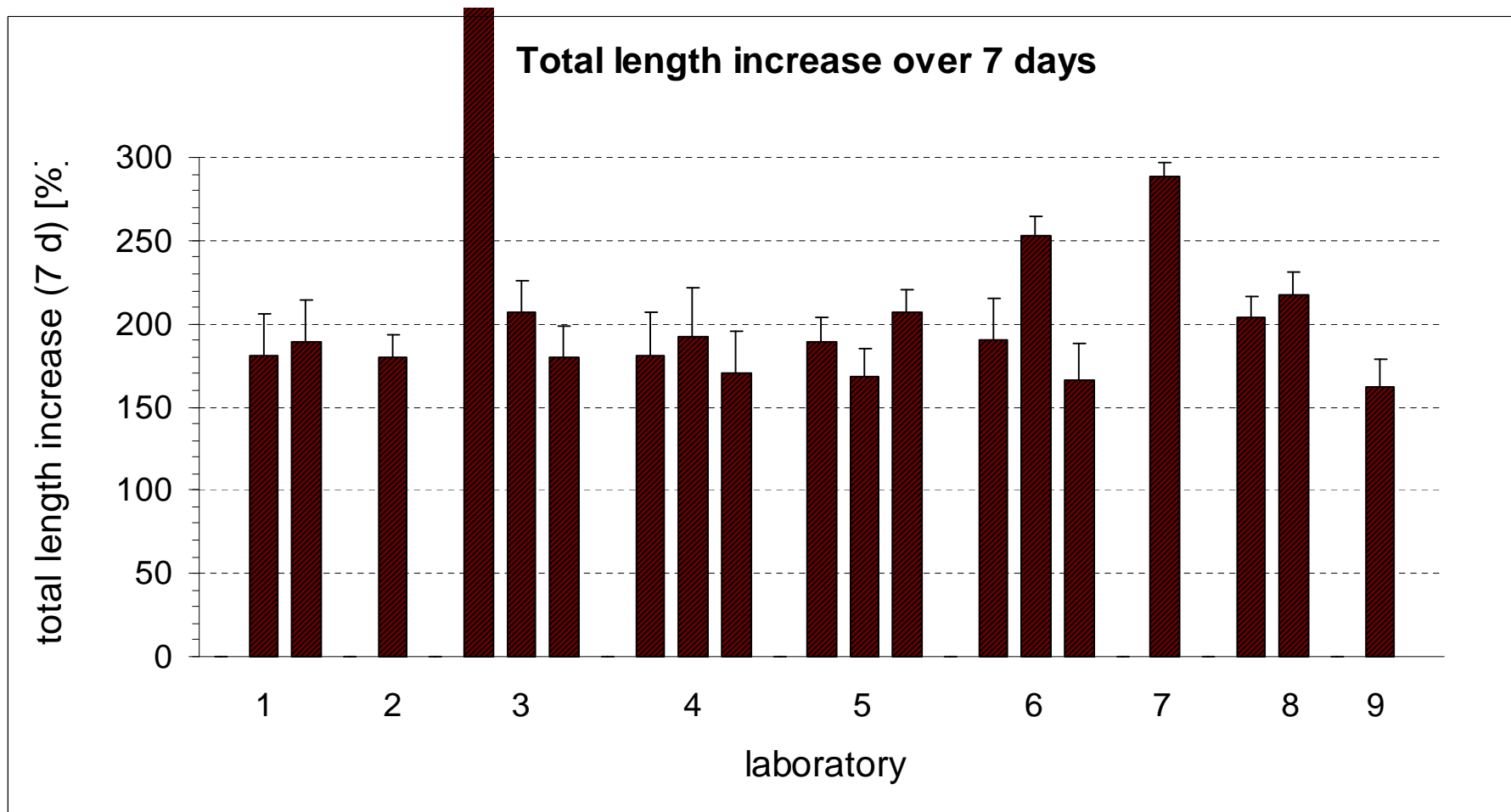


Results: Length data

Total length (main shoot + side shoots) DAT 7

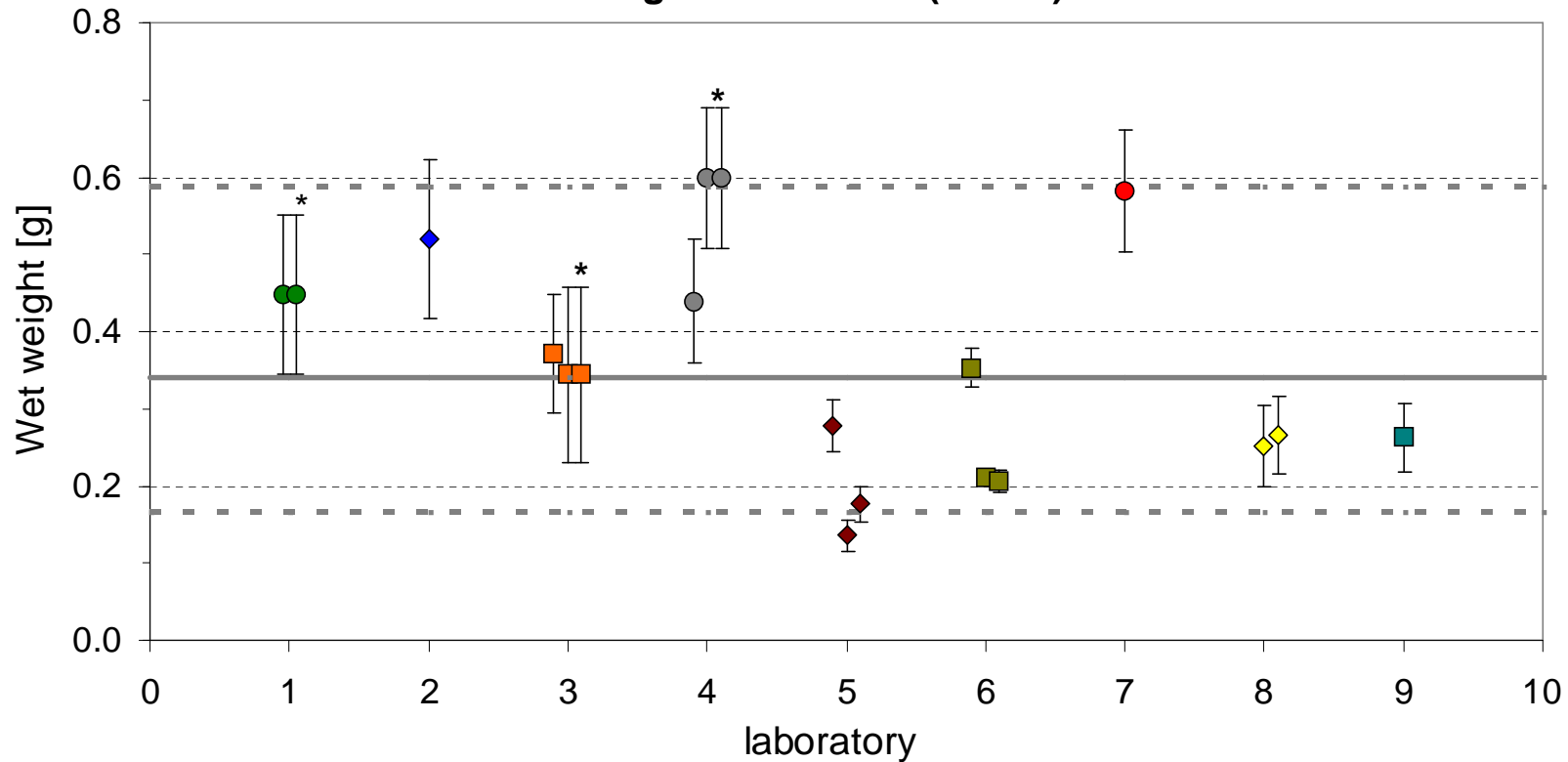


Shoot length



Results: Wet weight data

Wet weight - start data (DAT 0)

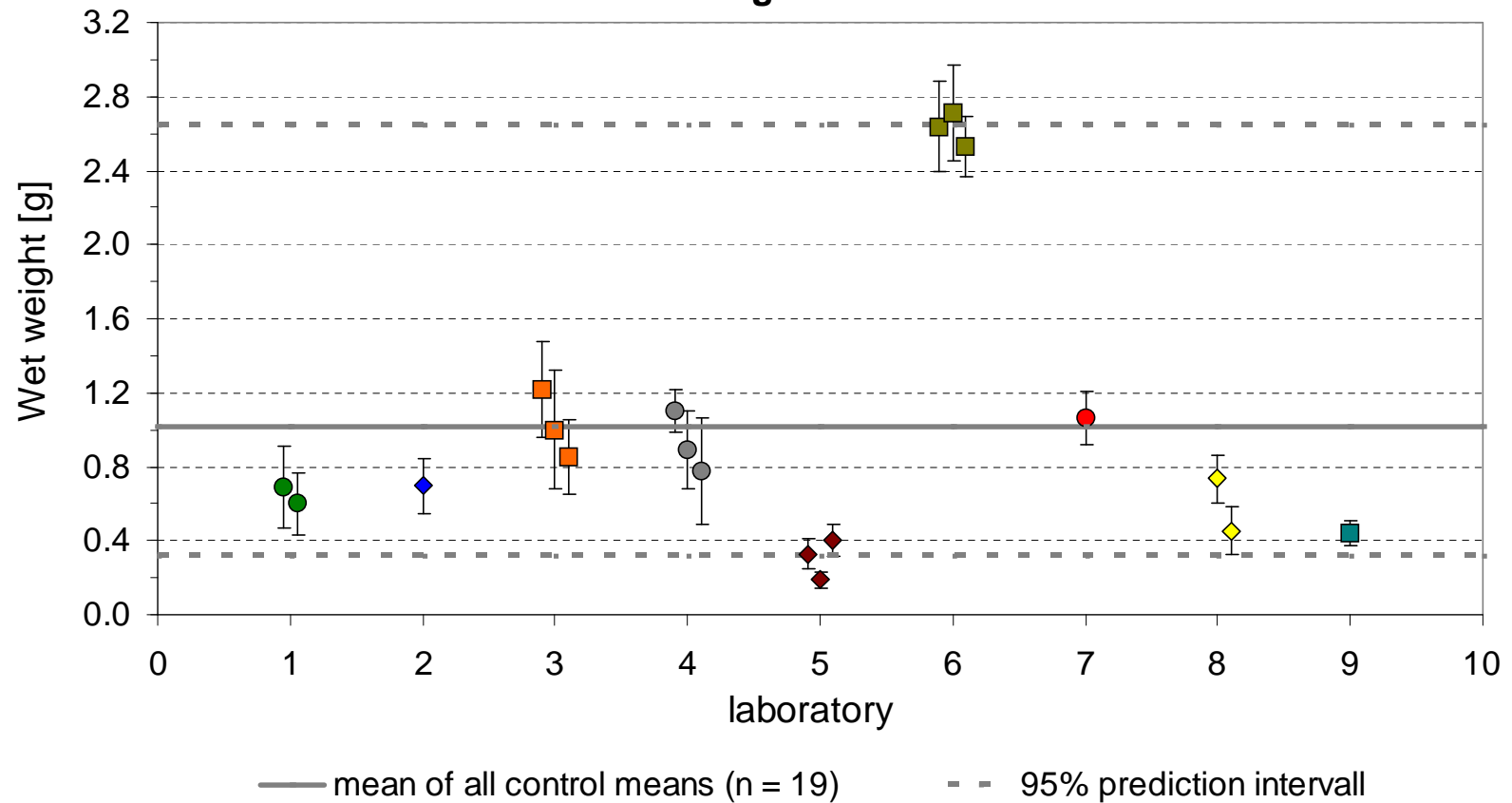


— mean of all control means (n = 16) - - 95% prediction intervall

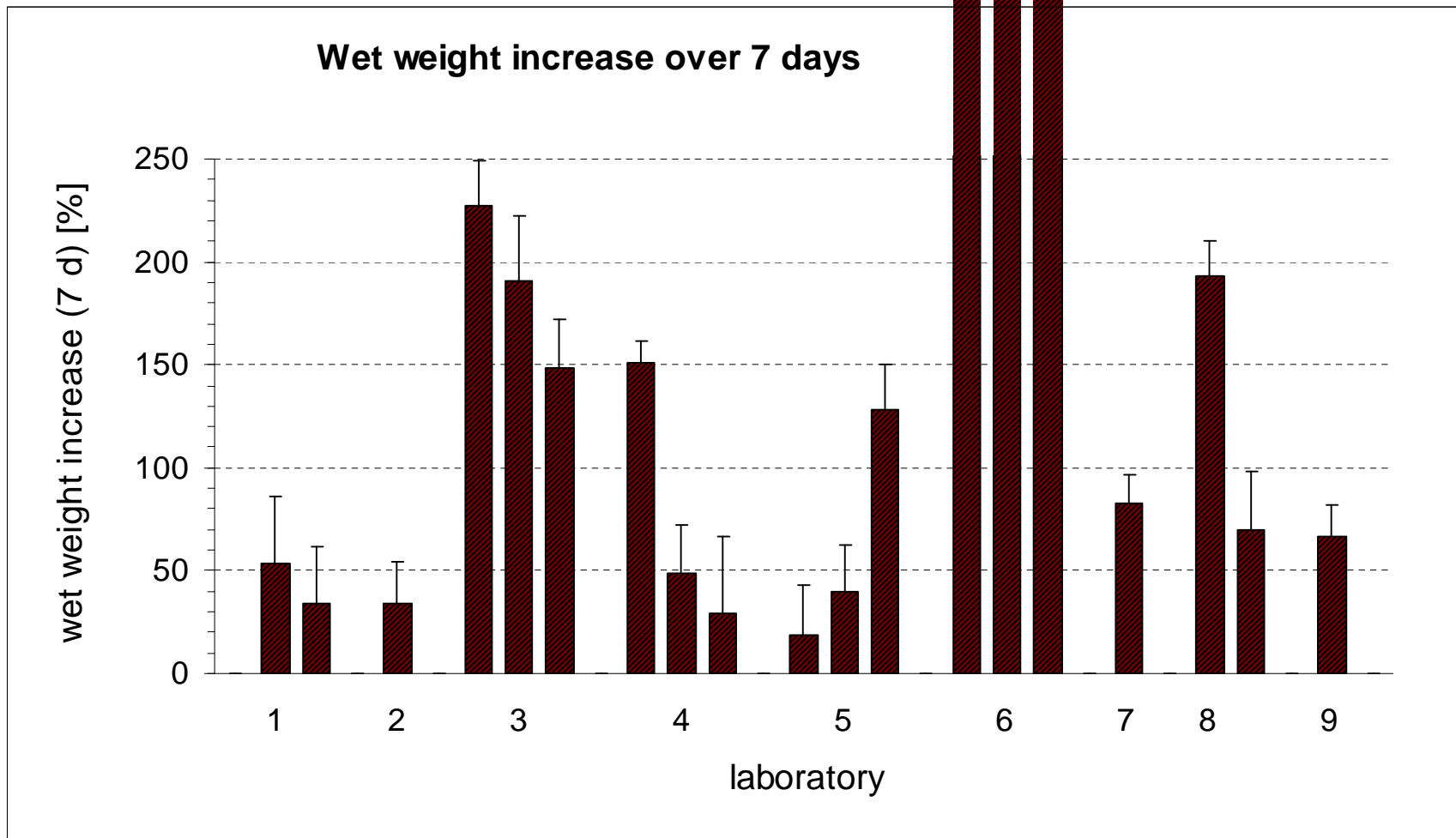
* identical start data (same plants were used for different test runs) were excluded from calculation of the mean of all control means and the 95% prediction interval

Results: Wet weight data

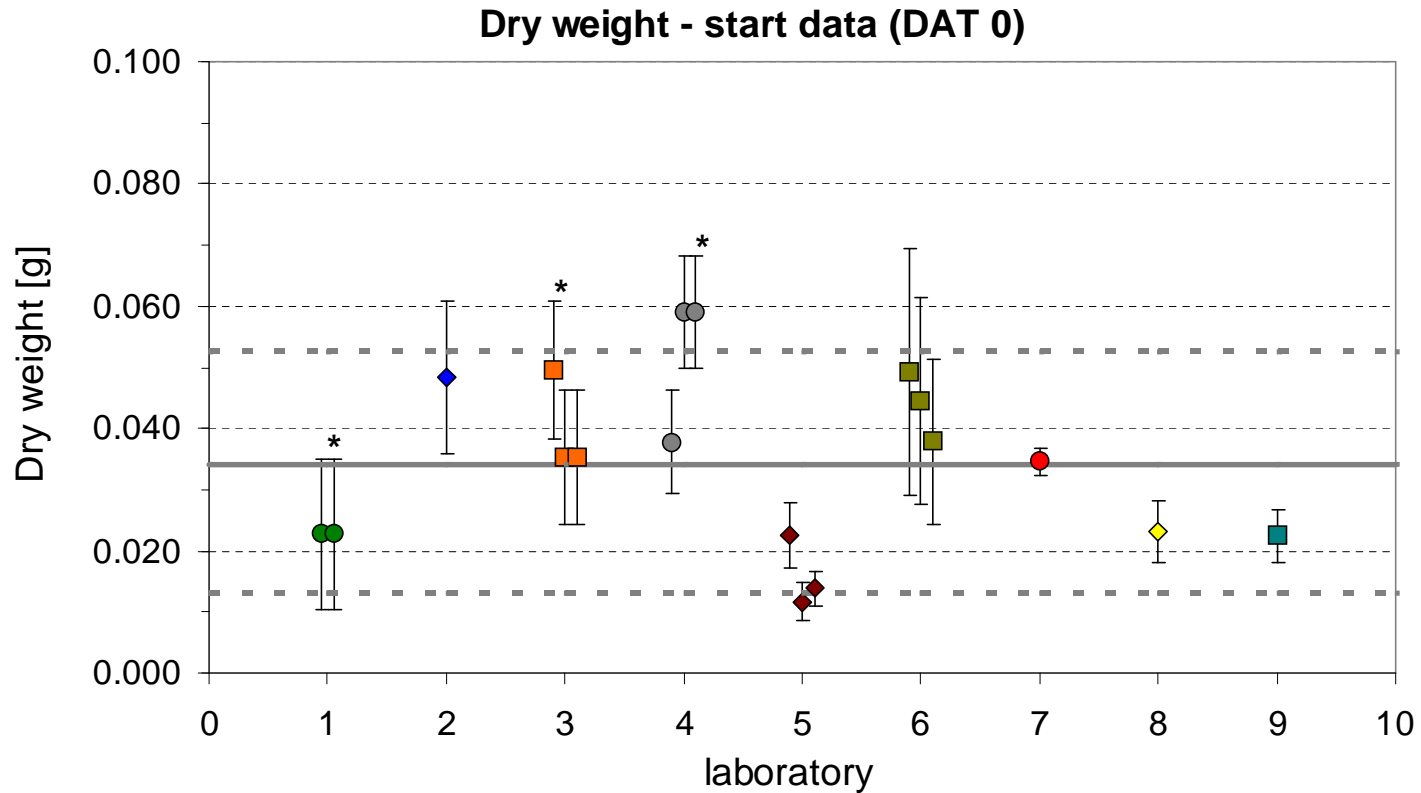
Wet weight - DAT 7



Wet weight



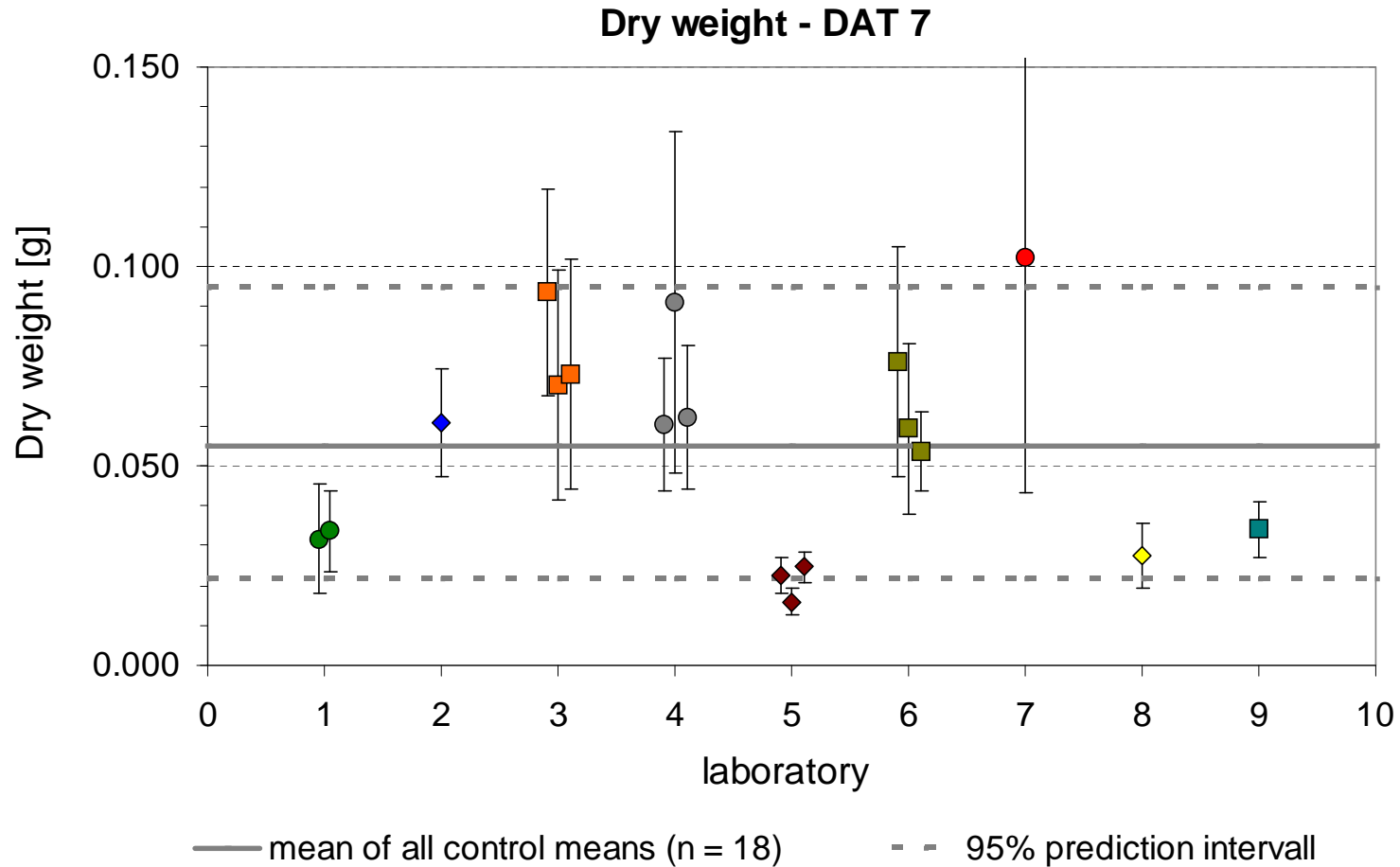
Results: Dry weight data



— mean of all control means (n = 15) - - 95% prediction interval

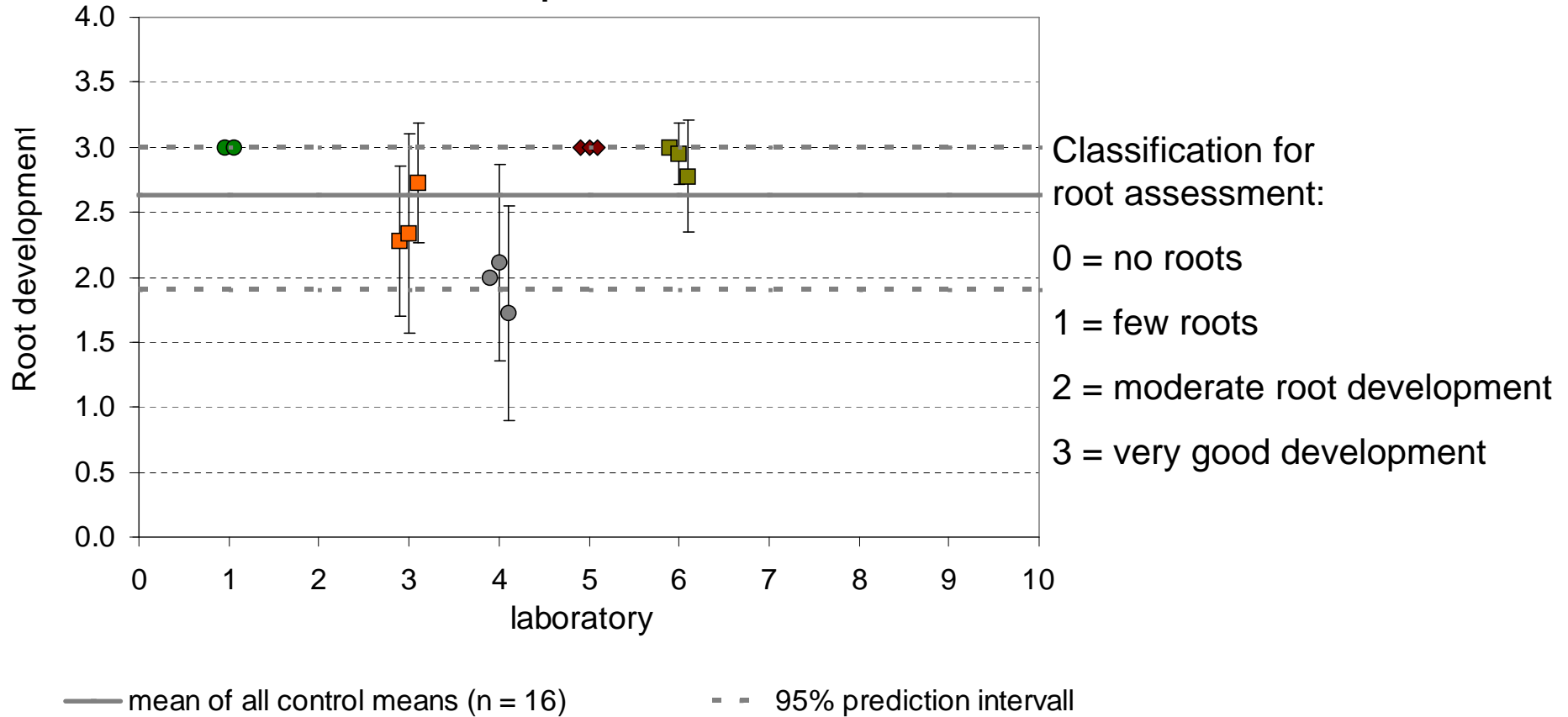
* identical start data (same plants were used for different test runs) were excluded from calculation of the mean of all control means and the 95% prediction interval

Results: Dry weight data



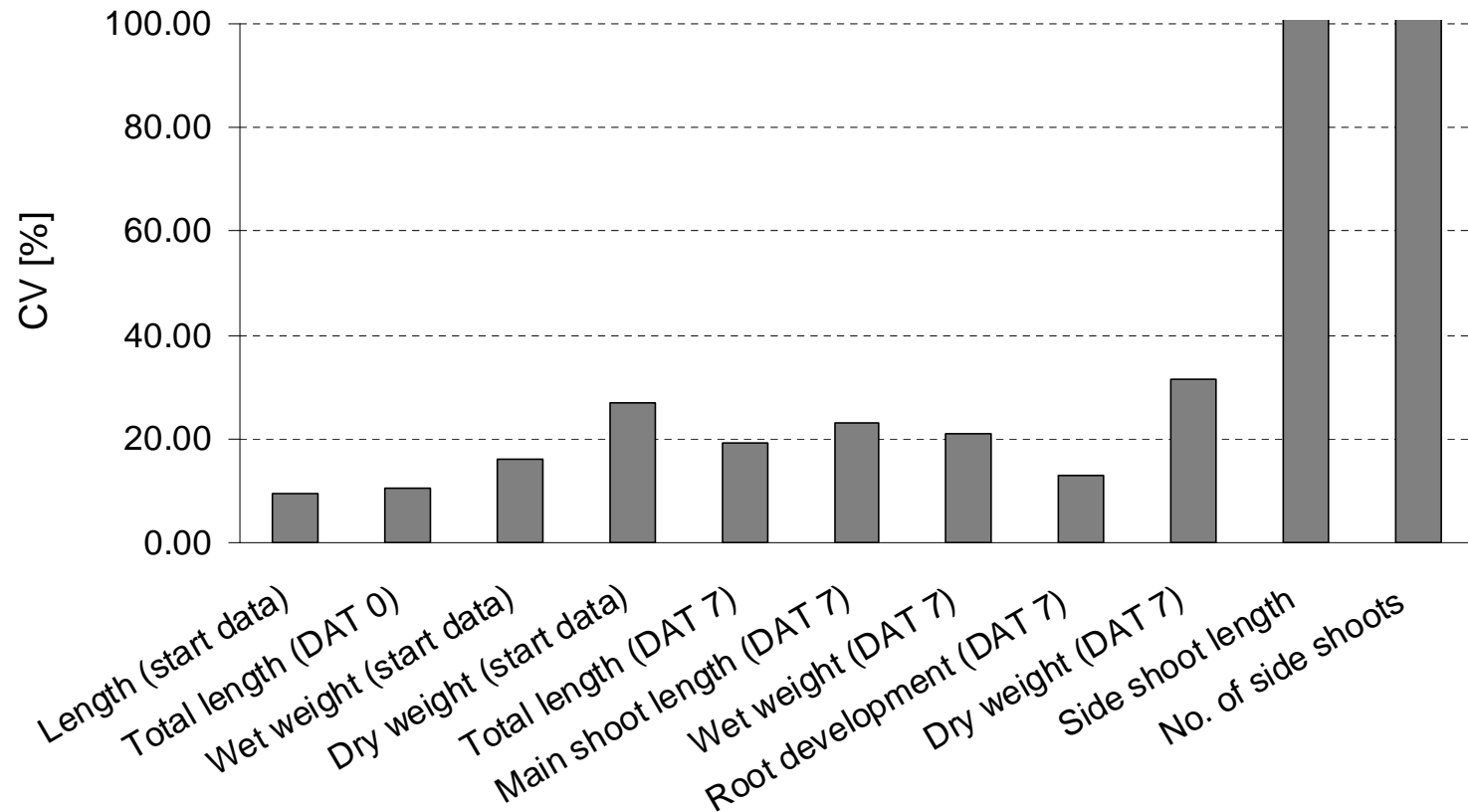
Results: Additional data

Root development - DAT 7



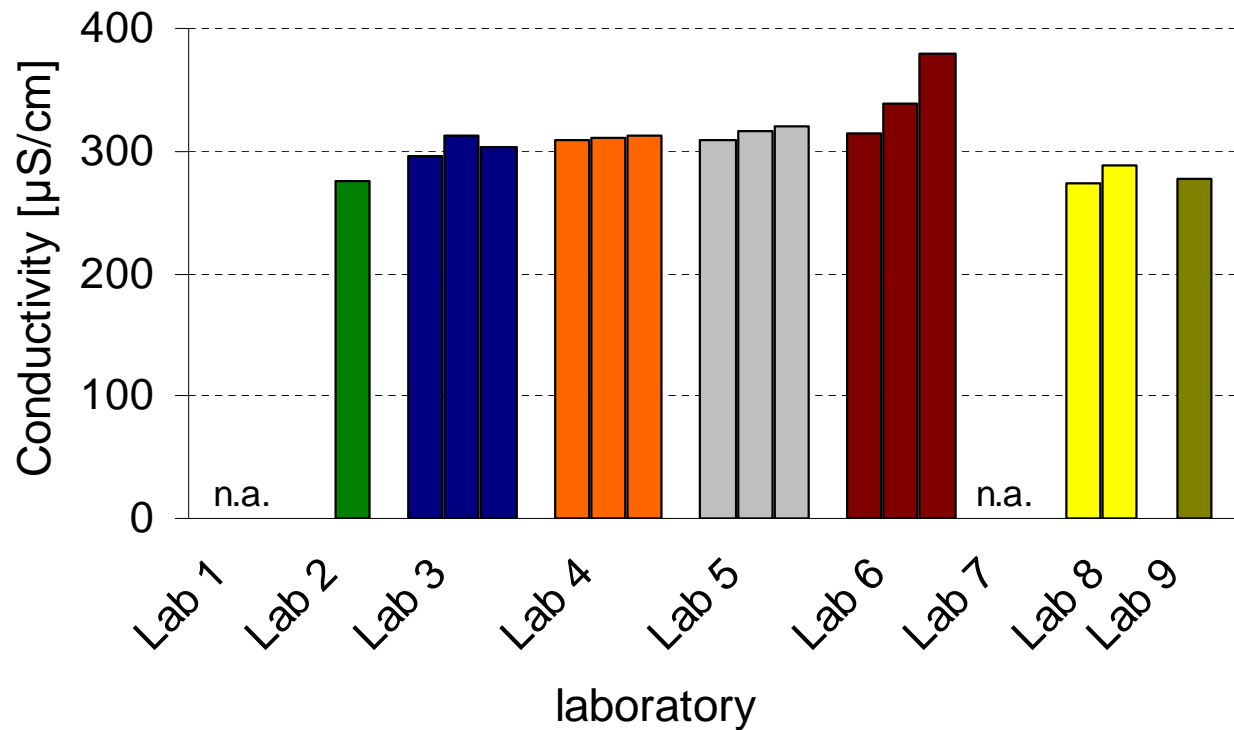
Variability

Coefficients of variations (all parameters; n = 14 to 19)



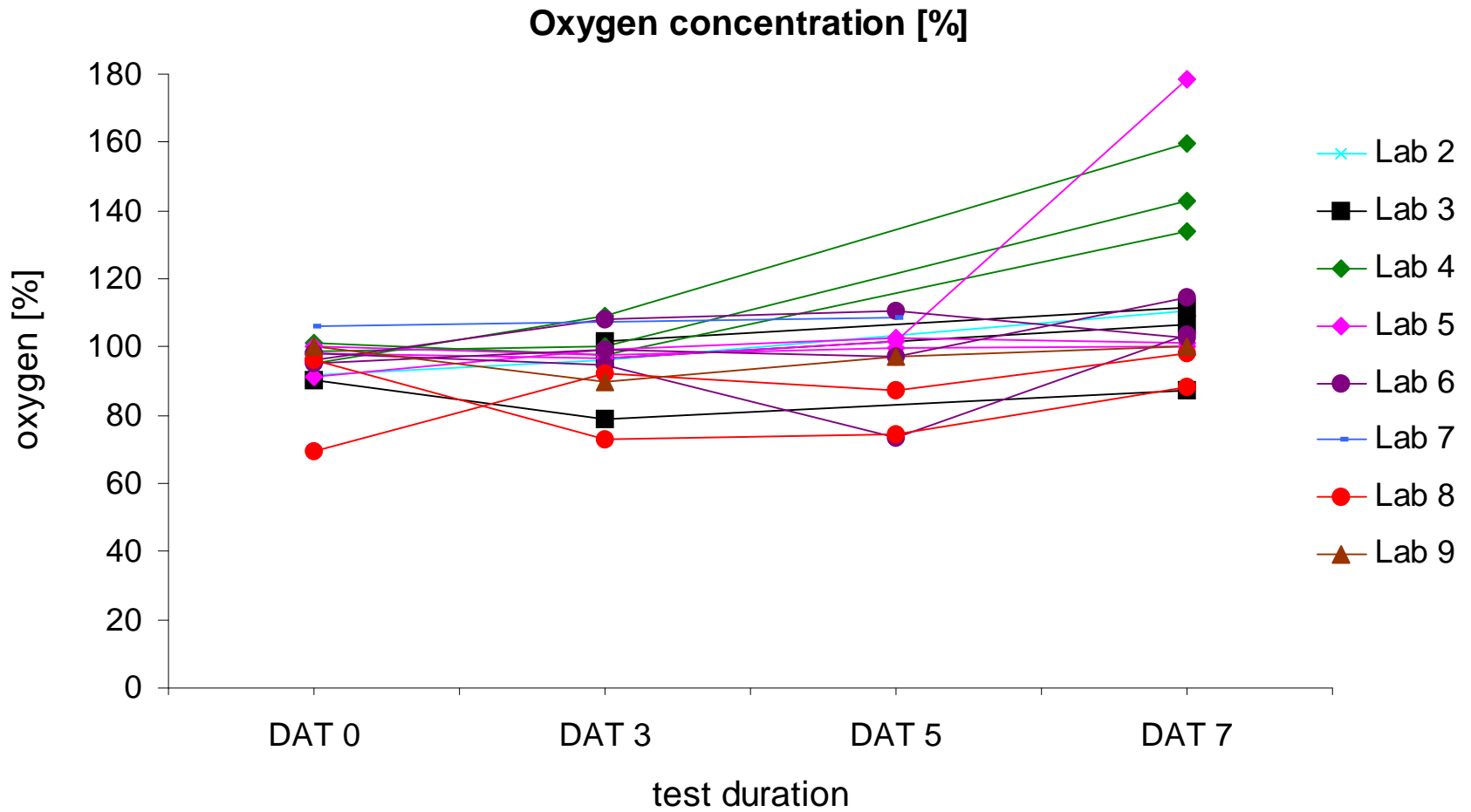
Water parameters

Conductivity at DAT 0 (n = 1)



n.a. = no data available

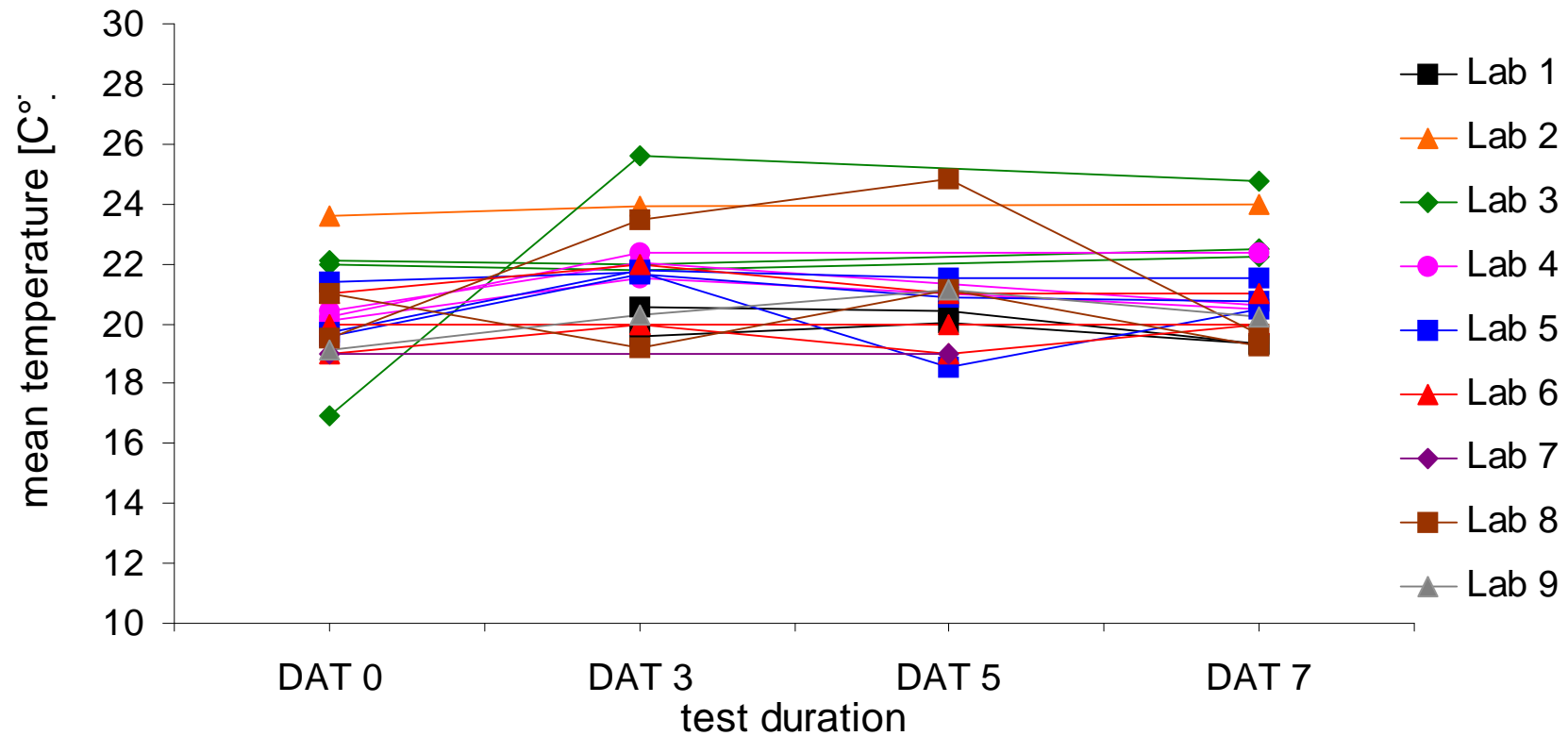
Water parameters



Water parameters

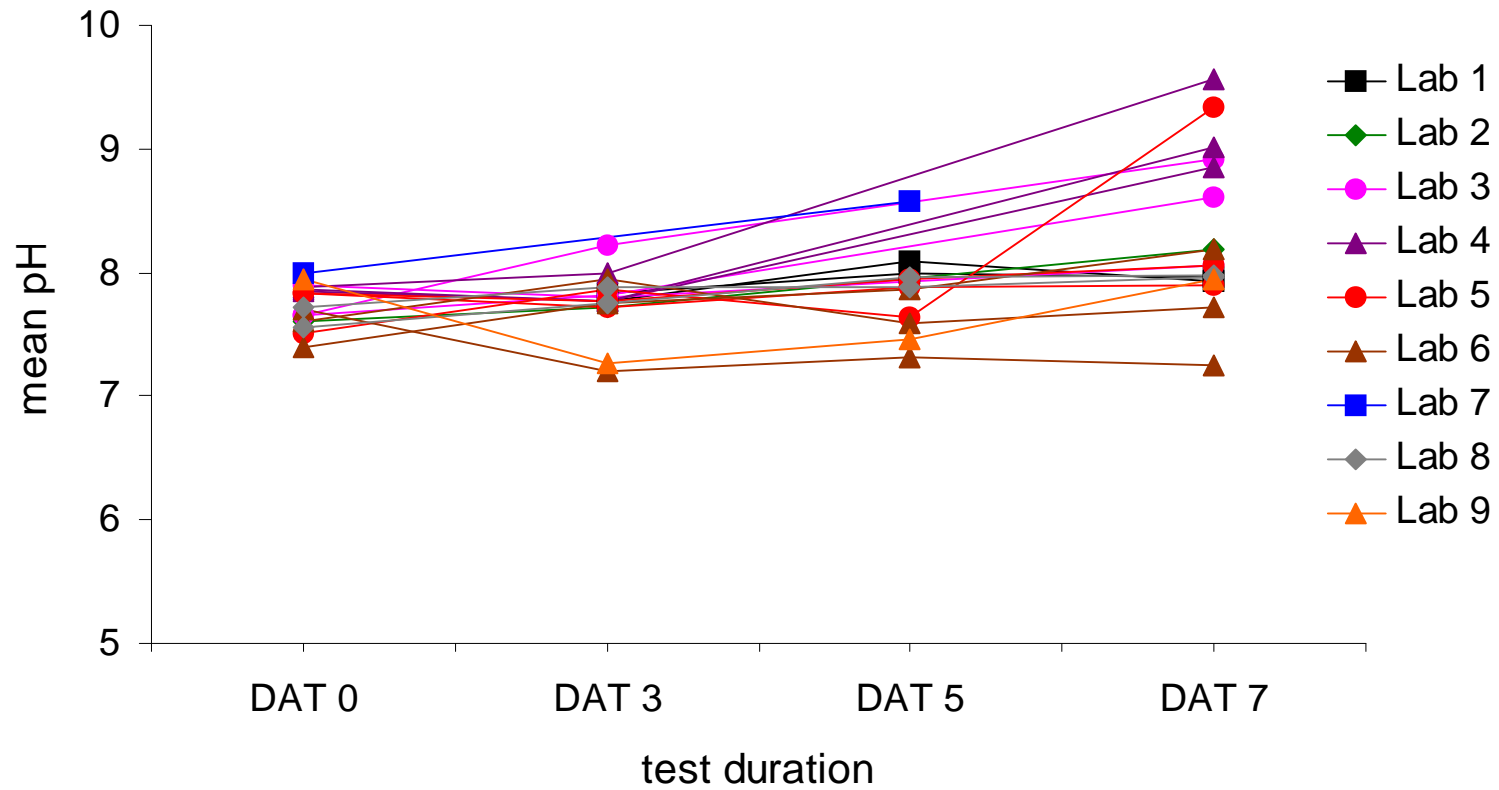


Temperature



Water parameters

pH values



Water parameters

Issues

Myriophyllum aquaticum: Sometimes very rapid growth (already during the pre-rooting phase)

Myriophyllum spicatum: Availability of plants

Ring test is ongoing and further results expected within the next couples of month mainly on *M spicatum*

Water parameters

Method has been submitted to OECD (has got support by members)

OECD TEST GUIDELINES PROGRAMME

Standard Project Submission Form

If you require further information please contact the OECD Secretariat
Return completed forms to:

env.tgcontact@oecd.org

PROJECT TITLE

Aquatic Macrophytes, *Myriophyllum* sp., Growth Inhibition Test