

Growth through Diversity

IPPS International Conference 2014

Michael Norris

New Place Nurseries Ltd

“The merits of good supplier relationships”



Who We are : Roundstone Group

- ❑ New Forest Plants-Herbaceous Plant Nursery –Beaulieu New Forest
- ❑ New Place Nurseries Ltd- Liner producer and tree grower – Pulborough West Sussex
- ❑ Roundstone Nurseries – growers of Bedding Plants, Pot Plants ,rooted cuttings and seed raised plugs
- ❑ Form Roundstone group –
- ❑ 73 Acres Glass – 150 Acres of hardy nursery stock production
- ❑ Supply Sheds , Retail outlets,
- ❑ Independent GC and GC Chains
- ❑ 200 People 400 Seasonal staff

Roundstone Group Head Office



Liner Production for Wholesale Nurseries



Container Tree Production for Independent GC



Hebe and Lavender Production on Sand



IPPS Members Survey NPN Production



Why did review Tree Production

- **We had a problem that needed fixing**
- **Coldest Summer in 2012-High levels of Summer Rainfall and cold temperatures**
- **Problem was highlighted in release pattern of crf**
- **3kg 9m Basacote and 3kg 12m Basacote per m³**
- **Severe nutrient problem need corrective action**
- **Ground analysis taken- coldness effect nutrient release**
- **Consultation with KD technical staff**
- **Summary- Coating did not break down enough to give us sufficient release**
- **In Partnership with Klasmann we looked at options**
- **Corrective Top Dressing using Floranid P , 6g/l**

How can we move forward?

- **Consultation with KD Technical staff**
- **Review release pattern of our CRF and did it fit?**
- **We concluded to reduce to and 8-9 month product Osmocote Exact**
- **Exact release pattern to suit crop requirements**
- **Saving 2kgs per m³ on 1200 m³ =2.5Tonnes fertiliser**
- **Monitor closely our progress, graphing nutrient release**
- **Monitor temperature, water and pH**

Background information

- To safeguard tree crop cultivation an analytical monitoring programme was agreed between New Place Nurseries Ltd and KD crop service“
- Sample at different crop stages and the feedback about analytical results with an evaluation by KD and NPN for 2013
- Corrective measures can be taken during crop production at the earliest stage if required



Background information

- Sampling in May, June, July, September 2013, carried out by New Place Nurseries Ltd
- Samples collected and sent to LUFA laboratory, Germany
- Offered by KD as crop service for New Place (costs covered by KD)
- Full NPK-Analysis
- Additionally water analysis conducted in June



Overview samples 2013 for New Place Nurseries Ltd

process-nr.	sample	date	customer	sample name	laboratory	type of analysis
0917	1	22. Mai.	New Place Nursery	Extra Lime Late Apple OR 3	Lufa OL	chemical analysis substrate
0917	2	22. Mai.	New Place Nursery	Extra Lime Late Apple OR 3	Lufa OL	chemical analysis substrate
0917	3	22. Mai.	New Place Nursery	Semi-Eric Late Cotoneaster OC 6	Lufa OL	chemical analysis substrate
0917	4	22. Mai.	New Place Nursery	Semi-Eric Early Birch BE 05	Lufa OL	chemical analysis substrate
0917	1	10. Jun.	New Place Nursery	APPLE ORCHARD 3	nrm	chemical analysis substrate
0917	2	10. Jun.	New Place Nursery	COTONEASTER SEMI ERI	nrm	chem. analysis water
0991	1	20. Jun.	New Place Nursery	MAINS WATER CARV	nrm	chem. analysis water
0991	2	20. Jun.	New Place Nursery	LAKESIDE	nrm	chem. analysis water
0991	3	20. Jun.	New Place Nursery	RESERVOIR	nrm	chem. analysis water
0991	4	20. Jun.	New Place Nursery	AFTER FILTERS	nrm	chem. analysis water
0991	5	20. Jun.	New Place Nursery	BIRCH BED 5	nrm	chem. analysis water
0991	1	23. Jul.	New Place Nursery	Extra Lime (Late) Apple OR 4	Lufa OL	chemical analysis substrate
0991	2	23. Jul.	New Place Nursery	Extra Lime (Early) Prunus OR 2	Lufa OL	chemical analysis substrate
0991	3	23. Jul.	New Place Nursery	Semi-Eric (Late) Cotoneaster DC 6	Lufa OL	chemical analysis substrate
0991	4	23. Jul.	New Place Nursery	Semi-Eric (Early) Birc. Bed 5	Lufa OL	chemical analysis substrate
0991	1	13. Sep.	New Place Nursery	Extra Lime Plum,	Lufa OL	chemical analysis substrate
0991	2	13. Sep.	New Place Nursery	Extra Lime Plum,	Lufa OL	chemical analysis substrate
0991	3	13. Sep.	New Place Nursery	Semi-Eric,	Lufa OL	chemical analysis substrate
0991	4	13. Sep.	New Place Nursery	Semi-Eric (Early),	Lufa OL	chemical analysis substrate
0991	5	13. Sep.	New Place Nursery	Extra Lime Apple,	Lufa OL	chemical analysis substrate
0991	6	13. Sep.	New Place Nursery	Extra Lime Apple,	Lufa OL	chemical analysis substrate
0991	7	13. Sep.	New Place Nursery	Extra Lime, Prunus	Lufa OL	chemical analysis substrate
0991	8	13. Sep.	New Place Nursery	Extra Lime, Apple	Lufa OL	chemical analysis substrate

Analytical monitoring in 2 labs (NRM and LUFA)



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Please quote above code for all enquiries

NEW PLACE
COMPOST

COMPOST ANALYSIS RESULTS

Sample Reference :

APPLE ORCHARD 3

Sample Matrix : COMPOST

Laboratory References	
Report Number	92594
Sample Number	66026

Date Received	06-JUN-2013
Date Reported	07-JUN-2013

The sample submitted was of adequate size to complete all analysis requested.

The sample will be kept under refrigeration for at least 3 weeks.

ANALYTICAL RESULTS on 'as received' basis.

Determinand	Value	Units	Determinand	Value	Units
pH	5.06		Cond. at 20 C	215	uS/cm
Density	287	kg/m3	Ammonia-N	27.2	mg/l
Dry Matter	29.3	%	Nitrate-N	125.9	mg/l
Dry Density	84.1	kg/m3	Total Soluble N	153.1	mg/l
Chloride	29.4	mg/l	Sulphate	113.0	mg/l
Phosphorus	11.0	mg/l	Boron	0.15	mg/l
Potassium	76.5	mg/l	Copper	0.11	mg/l
Magnesium	32.3	mg/l	Manganese	0.18	mg/l
Calcium	119.5	mg/l	Zinc	0.18	mg/l
Sodium	18.2	mg/l	Iron	1.05	mg/l

The extraction is performed by adding a weight of sample equivalent to 60mls volume to 300mls of deionised water (ref BSEN 13652:2)

Samples submitted under 1 litre will necessitate the use of scaled down equipment for density determination.

pH and Conductivity measurements are made at 20°C. I.S. = Insufficient Sample.

Released by A J Morgan

Date 07/06/13

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26121 Oldenburg Telefax: (04 41) 801-863 http://www.lufa-nord-west.de BLZ: 260 501 00 - Kto.: 650 896



Prüfbericht

Seite: 2 von 2

Datum: 23.07.2013

LUFA - Postfach 25 49 - 26015 Oldenburg

Kunden-Nr.: 852215

Probeneingang: 19.07.2013

Klasmann-Deilmann GmbH
Georg-Klasmann-Str. 2-10
49744 Geeste

Beginn der Prüfung: 19.07.2013

Ende der Prüfung: 23.07.2013

Probenehmer/Berater: Extern/ Unbekannt

Alle Angaben in g bzw. mg / Liter

Proben-Nr.	Probenbezeichnung	Nutz- zung #6	Bodenart #6	Volumen- Gewicht trocken g/Liter	Kalk				g H ₂ O	mg N CaO ₂	mg P ₂ O ₅ CAL	Phosphat Ge- halts- klasse CAL	mg K ₂ O CAL	Kali Ge- halts- klasse	Sonstige Untersuchungen
					anzu- streben	festge- stellt	Kalk- bedarf ohne CaO	Ge- halts- klasse							
1413008444	Semi-Eric (Early) Birc. Bed 5	Z	-	110	-	3,9	-	-	1,240	189	123	-	365	-	NO ₃ -N (CaCl ₂) 163 mg/Liter NH ₄ -N (CaCl ₂) 26 mg/Liter Calcium (Formiat) #6 748 mg/Liter Magnesium (CaCl ₂) 108 mg/Liter

Name/Firma: New Place Nurseries, Great Britain
Berater: W. Bailey, H. Konnemann

H. Eilers (Laborleiter)

8441 - 8444: Umhüllte Dünger vor Untersuchung ausgelesen

= IT, Oldenburg #3 = IL, Oldenburg #4 = IB, ID, Nahrn, #5 = Untersuchungsergebnis im Fremdbereich, #6 = unterliegt nicht der Akkreditierung. * = Ergebnis ist kleiner als die nachstehende untere Grenze des Arbeitbereichs
Die Untersuchungsergebnisse beziehen sich auf das uns vorliegende Probenmaterial. Dieser Prüfbericht darf ohne schriftliche Genehmigung der LUFA Nord-West nicht anzugewiesene veräußert werden.
Anmerkung: Die Analysenergebnisse können bei der LUFA Nord-West angefragt werden. Methodennummer: Salznährstoff: Volumengewicht: VOLUFA1A 13.2.1; Mg (CaCl₂): VOLUFA1A 8.2.4.1; P und K (Ca): VOLUFA1A 8.2.1.1; pH-Wert: VOLUFA1A 5.1.1; Salzegehalt: VOLUFA1A 13.4.1; Cu und Zn (OHNO₃): VOLUFA1A 7.3.1; N, P, K, Mg, Ca, Zn, Mn, B, Fe, Na (CAT): VOLUFA1A 13.1.1; Carbonate: VOLUFA1A 5.3.1; Gehaltsklassen eine Identifikation der LUFA
LUFA NORD-WEST: Ein Unternehmen der Landwirtschaftskammer Niedersachsen - Sitz: 26121 Oldenburg - Jägerstraße 23-27 - UST-Ident.Nr.: DE 245 610 284

KLASMANN DEILMANN
we make it grow

Matrix of pH test results of orders for New Place Nursery, UK

Mix Name	Sample Name	Potting date	production date	Target pH	Post production pH	Lufa** pH (CaCl2)	Lufa** pH (CaCl2)	treatment	Lufa** pH (CaCl2)
				CaCl2 (H2O)	CaCl2 (H2O)	CaCl2 (H2O)	CaCl2 (H2O)		CaCl2 (H2O)
					day of production	23.05.2013	23.07.2013		13.09.2013
NP#3 Apple Mix	Early Prunus	Nov 12	15.11.2013	5.6 (6.30)	5,6	5.4 (5.90)***	3.8 (5.90)	+	5.0 (5.50)
NP#3 Apple Mix	Apple orchard 3	Feb 13	25.02.2013	5.6 (6.30)	5,3	5.0 (5.50)	4.2 (5.50)	+	5.0 (5.50)
further samples for comparison									
retained sample NP#3 Apple Mix	8081128302	-	12.12.2012	5.6 (6.30)	5,4	-	-		-
retained sample NP#3 Apple Mix	8081427001	-	16.01.2013	5.6 (6.30)	5,5	-	-		-
NP#2 Tree Mix (semi Ericaceous)	Birch	Jan 13	07.01.2013	4.7 (5.20)	4,7	4.2 (4.70)	3.9 (4.40)		4.5 (5.00)
NP#2 Tree Mix (semi Ericaceous)	Cotoneaster	Apr 13	29.03.2013	4.7 (5.20)	4,7	4.5 (5.00)	3.7 (4.20)		3.6 (4.10)
further samples for comparison									
retained sample NP#2 Tree Mix	8081128301	-	12.12.2012	4.7 (5.20)	4,8	-	-		-
retained sample NP#2 Tree Mix	8081561901	-	24.01.2013	4.7 (5.20)	4,5	-	-		-
retained sample NP#2 Tree Mix	8081969902	-	27.02.2013	4.7 (5.20)	4,6	-	-		-

**CaCl2 method (LUFA method) for comparison, all processes of pH measurement at Klasmann are based on the more exact German CaCl2 method

***NRM tested in H2O (water analysis), difference between both methods is usually about ~0,5 pH steps but variation is possible

Conclusion 2013

- Overall nutrient supply turned out to be adequate in 2013
- But a surprise drop of pH value in the substrate became obvious after the first testing in May
- Water analysis was carried out and carbonate levels turned out to be very low
- Treatment of plants to increase pH-value was considered and actioned
- For future deliveries of substrate, the mix composition was adjusted to supply more calcium carbonate for balancing ph / water influence



SUMMARY

- Don't beat your supplier up
- Work together , you need them as much as they need you
- Its not all about price.....
- Be professional, listen and apply what technical trained people tell you
- That is what they are paid to do
- If you include them they become part of your team
- We don't have the answers to all the questions
- Stick to the plan –too often trial work falls by the bottom of your desk
- Be proactive –look for new ideas to make it better
- Include your team in all discussions and formulate new ideas with them



Working together for future growth

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