F.R.I. PROJECT RECORD NO.

## REPORTS FROM MEMBERS ON CURRENT TRIALS

REPORT NO. 10

MAY 1987

Note: Confidential to Participants of the National Forest Fertilising Co-operative Program

:This material is unpublished and must not be cited as a literature reference

Trial	Costs (FRI)	Costs (Cons)	Comple- tion	Remarks
Nelson				
N28/15/2	1 000	558	1991	Rock P
N28/15/4a		294	1988	Pyrobor - foliage only
N28/15/46		564	1988	Colmanite - foliage only
N412	810	810	1987-88	D/fir sect meas at c/f
N434	1 000		1991	Rabbit Is - sect means at c/f
N468	946	334	2000	Meas controls only
N546	4 396	1.116	2000	Meas controls only
N571	5 618	5 600	1987	Final meas & foliage
N575	1 000	2 480	2000	3 yr meas & sect meas at c/f
N518	7 246	5 618	2005	FRI trial - N*P - Mot forest
N527	2 172	400	1988	FRI trial - Lotus "maku"
	\$24 188	\$17 778		
Westland				
<b>W</b> 399	3 846	3 846		N*P interaction
<b>W</b> 398	2 124	2 124		Rock P
W403/1	6 544	6 544		Rock P at estab.
W403/2	2 956	2 956		Rock types at estab.
W180	4 936	300		Final report
W223	7 080	300		Final report
W232	7 080	300		Final report
W274	4 559	4 559		Legumes * Rock P
W379	6 544	300		Report required
W338	796	4.300		Euc. spp on tailings
W407 W420/1-9	4 120 3 061	4 120		K rates
W423/1-3	5 364	5 364		Pellets & micro nutrients
W423/4	3 312	3 312		Pellets & micro nutrients
W425	1 994	1 994		Lotus "maku"
W446	<del></del>	2 500		New trial
W467		3 000	-	K rates (Nemona) new trial
Wellington	<u>n</u>			
W261	3 115	3 115	1987	P. rad at high altitude
W278	1 288	1 288	1989	Nitrogen
<b>W</b> 356	<u>4 290</u>	4 290	1989	Rock P
	\$8 693	\$8 693		
Rotorua				
R1889	2 828	2 020		
R2002/1	2 828 3 996	2 828 3 996		
R2002/1	4 088	3 996 4 088		
R2063	616	616		
	\$11 528	\$11 528		
	\$112 655	\$83 448		

	Trial	Title	Budget \$					
1.1	The following trials shall be continued with:							
	339 398 403/1 403/2 274 407+ 467 416 423/1-3 423/4	N*P interaction Rock P as an alternative to broad cast fert. Rock P rates at establ. Rock types at establ. Legumes* rock P K rates trials K rates trials (Nemona) Rock P at establ. Pellets & micro nutrients Pellets & micro nutrients	3 846 2 214 6 544 2 956 4 559 4 120 3 000 487 5 364 3 312					
	425	Timing of lotus	1 994 t \$38 297+\$2 500=\$40 797					
1.2	The follow	wing trial has to be budgeted						
	446	Fert* thinning (soluable)	2 500					
1.3	The following trials shall be cut:							
	180 223 232 379 388 420	Long trm growth* fert. Long trm growth* fert. Long trm growth* fert. P.rad* legumes* tailings Euc spp on tailings N fixing legumes	6 780 saved, 300 for rep't 6 780 saved, 300 for rep't 6 780 saved, 300 for rep't 6 544 rep't required 796 1 621					
		Budge	t 16 041					

All trials to be left in a working state and reports written up for the 180, 223 and 232 series trials.

Comments on fertiliser trials - Wellington Conservancy

WN261 - Karioi, P. radiata, high altitude

This trial was evaluated in 1985 at age 6 in FRI Record No. 793 and commented on by District (1985).

The trial consists of a low altitude experiment WN261/2 and a high altitude experiment WN261/1. The low altitude experiment tested cultivation (ripping) and fertiliser (N & P) with little response to either. The high altitude experiment tested cultivation (V-blading) and fertiliser (N & P) with significant response.

This trial has met its original objective and continued measurement will be of low priority for forest management. Greater emphasis is being put on land preparation techniques and low altitude sites at present.

The trial should cease in March 1987.

WN 278 - Santoft, P. radiata, nitrogen

The trial tests response to N (Urea) on calcerous sands at time of first thinning. It has been specifically designed for later extension to test thinning or re-fertilising treatments.

Results to date have shown significant responses and further measurements are warranted. Measurement should continue at the current level of input, i.e. (\$1 300) for at least another 3 years. 1989.

WN 356 - Wellington R.C., P. radiata, rock phosphate

The trial tests response to rock phosphate applied by hand at establishment. It is on Wellington Regional Council land. The forest manager is still considering the costs and length of trial but are very likely to continue at least to age 6 (i.e. 3 years). 1989.

## National Fertiliser Cooperative - current trials

Sincere apologies for the delay. The trial list covers the gambut of site problems we are likely to encounter. I point all trial work can be done cheaper wit local input. We saved \$9 000 odd on an FRI contract by using local input.

## Wellington Fertiliser Research

Re WN261 Karioi. Will leave that in if FRI still need to measure it but it should already have been done (in winter) can you sort out with FRI or do you want me to check with soils and site improvement?

## National Fertiliser Cooperative

As I mentioned at the last cooperative meeting in Nelson. Canterbury accepts FRI's current list of trials and their costings as outlined in 'National Fertiliser Cooperative Schedule of South Island Trials'.

Fertiliser trials

Trial	Costs	(1987)	Trial finish	Remarks
The following	j info	relates	to the current Nels	son trials
28/15/2		558	1991	Rock P
28/15/48		294	1988	Pirobor - foliage unit
28/15/40		584	1988	Colmanite - foliage unit
N412		810	1988	D. fir - sec. meas
N434	-	<del></del>	1991	Rabbit Is. sect. meas @ c/f
N468		334	2000	Meas controls unit
N540	1	116	2000	Meas controls unit
N571	5	600	1987	Final foliage and means
พ575	2	480	2000	3 yr meas sect. meas @ c/f
FRI				
N518	5	618	2000	Photos only - possible
ท527		400	1988	Dry matter meas Nov. '87
	17	774		