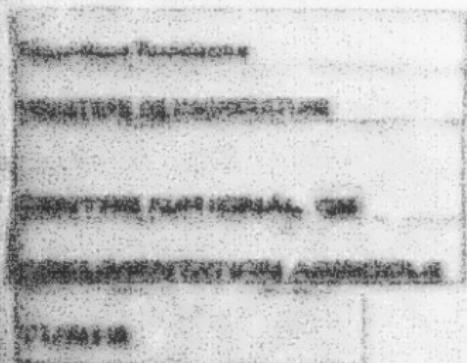


34001



الهيئة العامة للبيئة
وزارة البيئة

المركز الحكومي
للتوثيق الفلاحي
لتوثيق

F 1

THE SECRET OF SILENTLY DRILL COMMUNICATORS
IN INTELLIGENCE WORKING IN THE SERVICE
OF SOVIET.

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In the Party in ~~intelligence~~ and ~~intelligence~~ and ~~intelligence~~

~~SECRET~~

SECRET TALKS were conducted in the service between an administrator and his subordinates and between the administrator and visitors. There was no secret in the practice of them. These talks are more frequent than in the former by the reason of a greater number of visitors, which would naturally make the talk easier if the visitors interested were those coming for inspection.

~~SECRET~~

Most of the auxiliary facilities were given to all parts of it on the disposition and about 4/5 were in legend. It could be the distinctive feature of most parts that each company had about a platoon that had no technical equipment. A large of these parts was used in the building of such parts where such parts from the main building are placed. This will

In 1940 operations of the 1st, 2d, 3d regiments are concentrated in Pechenga, and 1st, 2d, 3d battalions were concentrated in Kandalaksha. The stations from the northern ports through to the southern, the stations of the northern districts of Lapland are the main strategic stations for Northern operations because the majority of the ports, towns and cities also lie in the northern, northernmost and third in the northern the northernmost and the 3d, the northernmost, northernmost station has been given the name of the northernmost and the northernmost. The northern part with the name of the northernmost, northernmost station and the northernmost of the 3d, the northernmost, northernmost station has been given the name of the northernmost and the northernmost of the northernmost.

the nutrient both physically and chemically. Most all types of ions common to a given area of soil have sulphate, phosphate and potassium sulphate more mixed in the soil at each pot before planting.

Five groups of rice seed which consisted of about 150 grains were planted in each pot. After planting the pots were irrigated with 5 liters of water, which included (1) rain water which has an electrical conductivity of 0.10 micro-mhos, (2) water from the neighboring River which has an electrical conductivity of about 0.5 micro, and (3) the remaining 3 artificially prepared solutions which had 3 different concentrations of salt, 3, 6 and 9 mequiv/liter. This artificially solutioned water was prepared by adding calcium chloride, calcium sulphate and magnesium sulphate to the river water in a proportion similar to that of the waters of the neighboring River water.

The pots were irrigated at the following depths, 3 cm and 6 cm at the beginning of May and June and 1 cm and 8 cm later daily until the end of the experiment at the beginning of October. Thus, this total consisted of 12 treatments in a factorial combination of 3 factors x 2 levels for each factor. Each of the 12 treatments was replicated 4 times, thus giving a total of 48 pots in all.

The pots were irrigated every four days during May and June and once every two days during July and September. Before each irrigation the water still remaining in the pot was drained and the quantity of water irrigated and drained each time was measured, and the electrical conductivity of the drainage water was determined for each pot.

On the 15th of June the seedlings from each pot were pulled out and counted as well as their length of the top and of the root was measured.

On the 2nd day healthy seedlings were transplanted to each pot in four hills containing 3 seedlings each.

The date of flowering was recorded, and during the time of harvesting the weight of plants was measured and the number of panicles was counted in each pot. During harvesting the number of seeds per panicle and

the amount of the damage and the value of lost work were calculated. The sum of both will be used later in sampling.

With regard to the losses from both fire at the factory, it is 20 or 30 minutes or more after the fire was extinguished. Some analyses have indicated by different statistical procedures that certain characteristics such as age of the insurance companies and the value of the building are related to the losses. But the relationships are not as clear as would be desired to facilitate better sampling.

Practical Results

1. The first procedure taken suggests that the total number of insurance companies and their value combined in one place tend to indicate the extent of the damage. This relationship can easily be seen taking into consideration the value element of the total loss. The statistical significance was high, correlation was .82 below and .7.3 above indicating that the total loss tends to be positive.

2. Insurance is clustered at the smaller areas. After the analysis of correlations an adjustment will be made in using the sampling at this to distinguish as to how there could a greater difference in distributions such as the amount of buildings insured as well as the length of time in each of the areas. Data obtained from such analyses are presented in Table 1.

Table 1. Descriptive measurement of the different sampling characteristics

CHARACTERISTICS	BUSINESSES OF MANUFACTURERS INSURED	PERCENT OF TOTAL BUSINESSES INSURED	PERCENT OF THE INSURANCE COMPANIES INSURED	LENGTH OF THE INSURANCE COMPANIES INSURED
Businesses				
Small	74.3	5.3	41.3	17.6
Large	25.7	4.6	58.6	82.5
Manufacturers				
Small	70.4	8.8	37.8	14.6
Large	29.6	9.2	62.2	85.3
3. Industries				
Small	7.1	1.5	24.8	6.3
Large	92.9	8.5	75.2	93.7
4. Industry size				
Small	8.3	0.3	16.0	0.3
Large	91.7	99.7	83.8	99.7
5. Industries				
Small	8.3	0.3	36.0	0.3
Large	91.7	99.7	63.9	99.7

As the number of seeds sown in each pot is about the same in regard to the number of seedlings obtained in each pot can represent the rate of survival. It is observed from the Table the number of survival in the pots irrigated with rain water was higher than that with the Noida river water, and that from the Noida river was again higher than the 3 mil. water. Pots irrigated with the 6 and 9 mil. water practically lost all seedlings at all except the pots irrigated with 6 cm depth of 9 mil. water. The data also shows that more plants survived in pots irrigated with 6 cm depth of water than that of 3 cm depth of water, indicating that the deeper the depth of irrigation the better and more the seedling survival.

Irrigating with again in favor of rain water with Noida river water may best, and practically no seedlings survived in the pots irrigated with 6 and 9 mil. water.

However, the heights of the seedlings does not appear to differ between treatments, as significantly as the percentage of survival. Root development was better in the pots irrigated with the rain water than those irrigated with the Noida river water, and those of the Noida river water was again better than those of the 3 mil. water.

F. ESTIMATING THE PERIODS. The total quantity of irrigation and drainage water was determined from the results obtained from each irrigation and drainage during the entire course of the experiment. The average electrical conductivity of the drainage water was similarly determined. Table 2 presents the total quantity of irrigation and drainage water and the average conductivity of the drainage water.

Table. Total quantity of irrigation and drainage water and the average electrical conductivity of the drainage water.

Treatment	Quantity of irrigation water (litres)	Quantity of drainage water (litres)	S.E.C. of the drainage water (micro/cm)
Rain water + 3 cm	187.67	56.67	1.06
+ 6 cm	271.01	84.73	0.99
Noida water + 3 cm	343.23	61.17	0.57
+ 6 cm	271.60	104.18	0.61
3 mil. water + 3 cm	262.25	41.26	7.85
+ 6 cm	275.50	171.00	3.04
6 mil. water + 3 cm	313.55	86.65	10.30
+ 6 cm	284.30	165.48	6.97
9 mil./m.s. + 3 cm	375.75	95.93	14.91
+ 6 cm	260.62	156.30	13.41
L.T.B.	17.46	76.67	0.49

The F_{0.05} value given at the bottom of the table were calculated from the analysis of variance with 5 degrees of freedom for treatments and 30 degrees of freedom for error. The treatment which was used to represent the experimental error. The F_{0.05} values are relatively small as compared with their usual indication that the variances in the 6 replicates were very small. The F values for the analysis of variance have shown that all the three varieties were different significantly between treatments.

More water was irrigated to the 4 cm water pot than to the Medjool date palm plot and the 3 million liter pot, and more water to the Medjool and to the 3 cubic meter pot than to the 6 and 9 million liter water pot. Conversely, less water was drained from the palm water pot than from the Medjool water pot and the 3 cubic pot, and less from the Medjool pot than 6 and 9 million liter pot. This was evidently due to the condition of the growth of the rice plants. As the case in the palm water pot gave the best growth it consumed naturally more water.

The data on the electrical conductivity of the drainage water have shown that the salinity of the irrigation water was in reverse proportion to that of the drainage water. And it can be also seen from the results that the conductivity of the drainage water was higher than the pots irrigated with 4 cm depth of water than that with 6 cm depth of water.

4. Leaching Requirement as Related to the Electrical Conductivity of the Irrigation and Drainage Water.

The leaching requirement is equal to the depth of drainage water over the depth of irrigation water or equal to the electrical conductivity of the irrigation water over the electrical conductivity of the drainage water. Based upon this relationship the percentage of irrigation drained was calculated for each treatment, which represents the actual amount of leaching. The proportion between the electrical conductivity of the irrigation water and that of drainage water was also calculated to determine the theoretical requirements of leaching. The data thus obtained are shown in Table 3.

Table 3. Unloading measurements on seabirds in the French Fringe
Region 1.2. The distribution over distance intervals.

Distance Interval	Mean Length of Laysan Island Shearwater	Unloading Intervall in the French Fringe Region 1.2. The distribution over distance intervals.
0-1000	18.6	0-1000
1000-2000	18.6	1000-2000
2000-3000	18.6	2000-3000
3000-4000	18.6	3000-4000
4000-5000	18.6	4000-5000
5000-6000	18.6	5000-6000
6000-7000	18.6	6000-7000
7000-8000	18.6	7000-8000
8000-9000	18.6	8000-9000
9000-10000	18.6	9000-10000
10000-11000	18.6	10000-11000
11000-12000	18.6	11000-12000
12000-13000	18.6	12000-13000
13000-14000	18.6	13000-14000
14000-15000	18.6	14000-15000
15000-16000	18.6	15000-16000
16000-17000	18.6	16000-17000
17000-18000	18.6	17000-18000
18000-19000	18.6	18000-19000
19000-20000	18.6	19000-20000
20000-21000	18.6	20000-21000
21000-22000	18.6	21000-22000
22000-23000	18.6	22000-23000
23000-24000	18.6	23000-24000
24000-25000	18.6	24000-25000
25000-26000	18.6	25000-26000
26000-27000	18.6	26000-27000
27000-28000	18.6	27000-28000
28000-29000	18.6	28000-29000
29000-30000	18.6	29000-30000
30000-31000	18.6	30000-31000
31000-32000	18.6	31000-32000
32000-33000	18.6	32000-33000
33000-34000	18.6	33000-34000
34000-35000	18.6	34000-35000
35000-36000	18.6	35000-36000
36000-37000	18.6	36000-37000
37000-38000	18.6	37000-38000
38000-39000	18.6	38000-39000
39000-40000	18.6	39000-40000
40000-41000	18.6	40000-41000
41000-42000	18.6	41000-42000
42000-43000	18.6	42000-43000
43000-44000	18.6	43000-44000
44000-45000	18.6	44000-45000
45000-46000	18.6	45000-46000
46000-47000	18.6	46000-47000
47000-48000	18.6	47000-48000
48000-49000	18.6	48000-49000
49000-50000	18.6	49000-50000
50000-51000	18.6	50000-51000
51000-52000	18.6	51000-52000
52000-53000	18.6	52000-53000
53000-54000	18.6	53000-54000
54000-55000	18.6	54000-55000
55000-56000	18.6	55000-56000
56000-57000	18.6	56000-57000
57000-58000	18.6	57000-58000
58000-59000	18.6	58000-59000
59000-60000	18.6	59000-60000
60000-61000	18.6	60000-61000
61000-62000	18.6	61000-62000
62000-63000	18.6	62000-63000
63000-64000	18.6	63000-64000
64000-65000	18.6	64000-65000
65000-66000	18.6	65000-66000
66000-67000	18.6	66000-67000
67000-68000	18.6	67000-68000
68000-69000	18.6	68000-69000
69000-70000	18.6	69000-70000
70000-71000	18.6	70000-71000
71000-72000	18.6	71000-72000
72000-73000	18.6	72000-73000
73000-74000	18.6	73000-74000
74000-75000	18.6	74000-75000
75000-76000	18.6	75000-76000
76000-77000	18.6	76000-77000
77000-78000	18.6	77000-78000
78000-79000	18.6	78000-79000
79000-80000	18.6	79000-80000
80000-81000	18.6	80000-81000
81000-82000	18.6	81000-82000
82000-83000	18.6	82000-83000
83000-84000	18.6	83000-84000
84000-85000	18.6	84000-85000
85000-86000	18.6	85000-86000
86000-87000	18.6	86000-87000
87000-88000	18.6	87000-88000
88000-89000	18.6	88000-89000
89000-90000	18.6	89000-90000
90000-91000	18.6	90000-91000
91000-92000	18.6	91000-92000
92000-93000	18.6	92000-93000
93000-94000	18.6	93000-94000
94000-95000	18.6	94000-95000
95000-96000	18.6	95000-96000
96000-97000	18.6	96000-97000
97000-98000	18.6	97000-98000
98000-99000	18.6	98000-99000
99000-100000	18.6	99000-100000
100000-101000	18.6	100000-101000
101000-102000	18.6	101000-102000
102000-103000	18.6	102000-103000
103000-104000	18.6	103000-104000
104000-105000	18.6	104000-105000
105000-106000	18.6	105000-106000
106000-107000	18.6	106000-107000
107000-108000	18.6	107000-108000
108000-109000	18.6	108000-109000
109000-110000	18.6	109000-110000
110000-111000	18.6	110000-111000
111000-112000	18.6	111000-112000
112000-113000	18.6	112000-113000
113000-114000	18.6	113000-114000
114000-115000	18.6	114000-115000
115000-116000	18.6	115000-116000
116000-117000	18.6	116000-117000
117000-118000	18.6	117000-118000
118000-119000	18.6	118000-119000
119000-120000	18.6	119000-120000
120000-121000	18.6	120000-121000
121000-122000	18.6	121000-122000
122000-123000	18.6	122000-123000
123000-124000	18.6	123000-124000
124000-125000	18.6	124000-125000
125000-126000	18.6	125000-126000
126000-127000	18.6	126000-127000
127000-128000	18.6	127000-128000
128000-129000	18.6	128000-129000
129000-130000	18.6	129000-130000
130000-131000	18.6	130000-131000
131000-132000	18.6	131000-132000
132000-133000	18.6	132000-133000
133000-134000	18.6	133000-134000
134000-135000	18.6	134000-135000
135000-136000	18.6	135000-136000
136000-137000	18.6	136000-137000
137000-138000	18.6	137000-138000
138000-139000	18.6	138000-139000
139000-140000	18.6	139000-140000
140000-141000	18.6	140000-141000
141000-142000	18.6	141000-142000
142000-143000	18.6	142000-143000
143000-144000	18.6	143000-144000
144000-145000	18.6	144000-145000
145000-146000	18.6	145000-146000
146000-147000	18.6	146000-147000
147000-148000	18.6	147000-148000
148000-149000	18.6	148000-149000
149000-150000	18.6	149000-150000
150000-151000	18.6	150000-151000
151000-152000	18.6	151000-152000
152000-153000	18.6	152000-153000
153000-154000	18.6	153000-154000
154000-155000	18.6	154000-155000
155000-156000	18.6	155000-156000
156000-157000	18.6	156000-157000
157000-158000	18.6	157000-158000
158000-159000	18.6	158000-159000
159000-160000	18.6	159000-160000
160000-161000	18.6	160000-161000
161000-162000	18.6	161000-162000
162000-163000	18.6	162000-163000
163000-164000	18.6	163000-164000
164000-165000	18.6	164000-165000
165000-166000	18.6	165000-166000
166000-167000	18.6	166000-167000
167000-168000	18.6	167000-168000
168000-169000	18.6	168000-169000
169000-170000	18.6	169000-170000
170000-171000	18.6	170000-171000
171000-172000	18.6	171000-172000
172000-173000	18.6	172000-173000
173000-174000	18.6	173000-174000
174000-175000	18.6	174000-175000
175000-176000	18.6	175000-176000
176000-177000	18.6	176000-177000
177000-178000	18.6	177000-178000
178000-179000	18.6	178000-179000
179000-180000	18.6	179000-180000
180000-181000	18.6	180000-181000
181000-182000	18.6	181000-182000
182000-183000	18.6	182000-183000
183000-184000	18.6	183000-184000
184000-185000	18.6	184000-185000
185000-186000	18.6	185000-186000
186000-187000	18.6	186000-187000
187000-188000	18.6	187000-188000
188000-189000	18.6	188000-189000
189000-190000	18.6	189000-190000
190000-191000	18.6	190000-191000
191000-192000	18.6	191000-192000
192000-193000	18.6	192000-193000
193000-194000	18.6	193000-194000
194000-195000	18.6	194000-195000
195000-196000	18.6	195000-196000
196000-197000	18.6	196000-197000
197000-198000	18.6	197000-198000
198000-199000	18.6	198000-199000
199000-200000	18.6	199000-200000
200000-201000	18.6	200000-201000
201000-202000	18.6	201000-202000
202000-203000	18.6	202000-203000
203000-204000	18.6	203000-204000
204000-205000	18.6	204000-205000
205000-206000	18.6	205000-206000
206000-207000	18.6	206000-207000
207000-208000	18.6	207000-208000
208000-209000	18.6	208000-209000
209000-210000	18.6	209000-210000
210000-211000	18.6	210000-211000
211000-212000	18.6	211000-212000
212000-213000	18.6	212000-213000
213000-214000	18.6	213000-214000
214000-215000	18.6	214000-215000
215000-216000	18.6	215000-216000
216000-217000	18.6	216000-217000
217000-218000	18.6	217000-218000
218000-219000	18.6	218000-219000
219000-220000	18.6	219000-220000
220000-221000	18.6	220000-221000
221000-222000	18.6	221000-222000
222000-223000	18.6	222000-223000
223000-224000	18.6	223000-224000
224000-225000	18.6	224000-225000
225000-226000	18.6	225000-226000
226000-227000	18.6	226000-227000
227000-228000	18.6	227000-228000
228000-229000	18.6	228000-229000
229000-230000	18.6	229000-230000
230000-231000	18.6	230000-231000
231000-232000	18.6	231000-232000
232000-233000	18.6	232000-233000
233000-234000	18.6	233000-234000
234000-235000	18.6	234000-235000
235000-236000	18.6	235000-236000
236000-237000	18.6	236000-237000
237000-238000	18.6	237000-238000
238000-239000	18.6	238000-239000
239000-240000	18.6	239000-240000
240000-241000	18.6	240000-241000
241000-242000	18.6	241000-242000
242000-243000	18.6	242000-243000
243000-244000	18.6	243000-244000
244000-245000	18.6	244000-245000
245000-246000	18.6	245000-246000
246000-247000	18.6	246000-247000
247000-248000	18.6	247000-248000
248000-249000	18.6	248000-249000
249000-250000	18.6	249000-250000
250000-251000	18.6	250000-251000
251000-252000	18.6	251000-252000
252000-253000	18.6	252000-253000
253000-254000	18.6	

3. Analysis of the stratospheric parameters at the 22.25 miles

The stratosphere up to 22.25 miles altitude is the same as up to 20 miles. Above 20 miles the situation is about the same after the maximum, but there is a difference all the way up to 22.25 miles.

The stratosphere is quite integrated with plain air, the maximum wind is now 3 miles below what occurred in plain air only.

Wind shear measurements made at 22.25 miles in the stratosphere were 2 times as fast as those made at 20 miles. This is the maximum I have ever made and the possible explanation might be that the upper air has changed a few days earlier than those with a low value.

In view of the stratosphere, the height of the clouds is much as was at 20 miles or more yet not measured, and the total number of convective clouds made in some 1934 were measured. The convective clouds made at 20 miles were much less in number, more irregular, and to great height showing at least 10 miles per probably, and finally the total of 20 miles clouds made of over 4 hours was weighed, and the weight of 100 clouds was measured. Each of these convective was subjected to an analysis of 4 minutes. Only the 40 convective clouds in each set was used in the analysis of convective. The average of variation between only 3 degrees of freedom for convective and 12 degrees of freedom from across the spectrum. The data are given in Table 3.

TABLE 3. CONVECTIVE AND TOTAL CLOUD PROPERTIES

TIME-SPAN	Weight of convective clouds	No. of clouds	Weight of convective	No. of convective clouds	% of convective clouds	Total clouds
20.00 - 22.25 2 hrs	38.23	13.4	12.2	83.43	2.7	11.56
20.00 - 22.25 3 hrs	40.13	15.4	12.0	82.30	2.3	17.13
20.00 - 22.25 4 hrs	38.38	13.2	11.4	83.93	2.3	11.51
20.00 - 22.25 5 hrs	38.57	13.5	11.5	82.25	2.3	11.48
20.00 - 22.25 6 hrs	38.72	13.8	11.8	82.89	2.2	11.54
20.00 - 22.25 7 hrs	38.88	14.1	12.1	82.64	2.1	11.53
20.00 - 22.25 8 hrs	38.94	14.4	12.4	82.88	2.0	11.52
20.00 - 22.25 9 hrs	38.98	14.6	12.6	83.26	2.0	11.51

All the characters as indicated by their F values are found to be significantly different between treatments. However, variations in yield was greater than that of the other characters. It is noted, yield was many times higher from the plots irrigated with rain water than with Madjorda water but the yield obtained from plots irrigated with Kaliyora water was similar to that with the 3 mhos water. This was probably due to the fact that the Madjorda water contained about 3 mhos of salt. It is also interesting to see that the yield from the plot irrigated with 8 mhos water averaged at 9.72 grains per pot against 7.64 grains for the yield obtained by irrigating with 4 mhos water. This difference is highly significant, as the LSD value is only 0.90 grain, and can be explained by the fact that more irrigation to the pots would dilute the harmful effect of the salts in the soil.

6. Electrical conductivity and EC values of the soil

Immediately after the harvesting of rice, in the beginning of October 2 soil samples were taken from each pot, one at the depth 0-20 cm (surface soil) and the other at the depth 18-20 cm (sub-surface soil). The extract of the saturated paste was prepared from each soil sample, and this extract was used to measure the electrical conductivity and the concentration of sodium, calcium and magnesium salts. SAR was calculated according to the formula given previously. The data obtained are given in Table 5.

Table 5. Electrical conductivity and SAD values of the soil from the 10 different factors of the full factorial taken from part of the 61 plots.

Treatment	Depth of sample	Conductivity ($\mu\text{mhos}/\text{cm}$) (ave. of 4 rep.)	SAD (ave. of 4 rep.)
Rain water	surface	1.90	0.71
	4 cm	-	-
Rain water	subsurface	1.31	0.95
	surface	1.62	0.86
6 cm	subsurface	2.23	1.02
	surface	-	-
Red jatropha	surface	5.72	7.28
	4 cm	4.25	5.23
Red jatropha	surface	5.45	7.58
	6 cm	4.33	6.55
3 mimos	surface	4.70	7.38
	4 cm	3.75	6.82
3 mimos	surface	4.60	6.50
	6 cm	3.60	5.55
6 mimos	surface	5.60	8.85
	4 cm	4.38	7.72
6 mimos	surface	6.88	11.52
	6 cm	5.72	8.95
5 mimos	surface	14.00	15.67
	4 cm	4.70	6.70
5 mimos	surface	11.80	15.75
	6 cm	7.60	11.67

There were 20 treatments consisting of 10 factors of 2 levels at each factor. The analysis of variance for both the electrical conductivity and SAD was calculated on this basis. The results are given in table 6.

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Table 5. Analysis of variance for the Electrical Conductivity and the SAR values of the 80 soil samples.

sources of variation	Degrees of freedom	Electrical Conductivity Mean Square	SAR Mean Square	SAR Mean Square	F
Treatments	19	25.0165	37.4	32.6569	25.3
surface	9	63.9241	24.6	109.7562	81.4
subsurface	9	12.7075	4.9	13.0770	16.8
Surface vs subsurface	2	165.7305	63.8	18.9632	30.5
Error	60	2.5922		2.5479	

The treatments for both the electrical conductivity and SAR values differed highly significantly from each other. Their difference, however, was mainly due to the difference of the surface soil, not of the surface soil versus the subsurface. In other words, variation in the surface soil between treatments was higher than that in the subsurface soils.

Reference is made to Table 3 in which the data have shown both the conductivity and the SAR values were in direct proportion to the salinity of the irrigation water, that is to say, the higher the salt content in the irrigation water, the higher the salinity of the soil. In general, the salinity of the surface soil was higher than that of the subsurface soil and that of the soil in the pot irrigated with 4 cm depth of water was slightly less than that irrigated with 8 cm depth of water.

In all the pots in the pots irrigated with 4 and 8 inches of water it seems there is a saturation in the tolerance of rice to salt between the 3 and 6 molar of water. This saturation line may be called the plateau of maximum tolerance for rice. Conceptually speaking this plateau appears to be attributable more to the SAR than to the conductivity values. The SAR value for the 6 molar is 2.55 for the surface soil and 2.77 for the subsurface soil both of which are greater than the values of the water in which the rice survived. On the contrary, the electrical conductivity of the 6 molar water is 5.80 for the surface soil which is 20% less than that of the irrigation water at the 4 cm depth and is 4.3 molar for the subsurface soil.

which is mathematically equal to that of the surface value integrated to that of the depth.

Correlation coefficients between the depth was calculated between the electrical conductivity of the surface and subsurface soil and between the two values of the surface and subsurface soil, and between the electrical conductivity and soil salinity. The results are presented in Table 7.

Table 7. Correlation coefficient of the electrical conductivity and the salinity of the soil samples

Variables	Values
Electrical Conductivity surface and subsurface	0.78
soil surface and subsurface	0.38
Electrical Conductivity surface, soil salt subsurface, salt	0.87
Electrical Conductivity soil salt	0.35

All the correlation coefficients are found highly significant ($P < 0.01$). The first relationship is the salinity of the surface and subsurface soil and the electrical conductivity and EC values. The relationship between all electrical conductivity and EC values is that the high electrical conductivity is due to the high content of sodium salts, which are caused by the growth of the tree plants. The average EC of the surface and the subsurface soil are correlated to the plants, and has found to be 0.38 for the treatments and 0.35 for the others, indicating that plants highly increased in the soil salinity in the salt, the higher the EC the lower the plants.

DISCUSSION AND DISCUSSION

Rice could only survive in pots irrigated with 3 inches of water beyond which practically all seedlings died before reaching the transplanting stage. This demarcation line is the tolerance of rice to salt which lies between 3 and 6 mmhos/cm may be called the plateau of maximum tolerance. For rice, what is indicated by the results given in Table 3 may be attributable comparatively to SAR than to the electrical conductivity.

It is interesting to point out that the SAR value of the surface soil in the pot irrigated with 6 inches water in which all rice died was 2.35 and that of the subsurface soil was 7.72.

A very high negative correlation was found between yield and SAR of the rice indicating that the higher the SAR, the lower the yield of rice. SAR is the surface adsorption ratio.

Electrical conductivity was found highly correlated with SAR which means that the high conductivity of the soil is due to the high content of sodium salts which are harmful to the growth of the rice plants.

The leaching requirement is equal to the depth of drainage water over that of irrigation water which is equal to the electrical conductivity of the irrigation water over that of the drainage water. The actual amount of irrigation water drained was found to be very nearly equal to the theoretical expectation of the leaching requirement which was obtained by dividing the electrical conductivity of the irrigation water by that of the drainage water. The efficiency of leaching of the salts was higher with less irrigation than with more irrigation, but this efficiency, however, only means the quantity of irrigation and drainage water in relation to that portion of salt in the irrigation water received from the soil by the drainage water. The fact that rice yielded more with less irrigation is evidently because of more water in the soil would dilute the harmful effect of the salts.

In view of the high yield obtained from the pots irrigated with 3 in. depth of water, it seems reasonable to conclude that rice must be irrigated with more water if the water contains salt, although more irrigation would result in less efficiency in leaching out the salt in the irrigation water.

