

Disease Position in the Province. A case of plant poisoning was investigated at Kollegal taluk of Coimbatore district. The village affected was Kamakarai about 10 miles from Kollegal situated on the border of the hills. It was reported that a batch of fifteen animals belonging to two owners died suddenly within half an hour after eating a wild variety of grass called "Kagayanagallu" in Canarese. The plant resembles elephant grass, growing upto 4½ to 5 feet in height. Animals exhibited shivering, salivation, giddiness, rolling of eyeball, dilatation of the pupil, tympany prostration, struggling and death. Since the symptoms were highly suggestive of Hydrogen cyanide, samples of grass were sent to the Government Analyst, Guindy and the Research Officer, Toxicology Section, Medical College, Madras both of whom confirmed the findings as positive for Hydrogen Cyanide".

Artificial Insemination. In May 1949 the number of animals inseminated was 85. Five calves born by Artificial Insemination were verified. In June 1949, the number inseminated was 45 and the number of calves verified was 5.

Research Notes

In the crop-weather data collected in 1948—49 in regard to the two varieties of cholam, viz., Co. 1 (Periamanjai) and Co. 3 (Talaivirichan), grown side by side, it appears that Co. 3, inspite of its tillering habits, has got the capacity to utilise the soil moisture in a more economical manner than Co. 1.

Fortnightly soil samples at three different depths in the portions of the same field occupied respectively by these two strains were taken for assessing, in duplicate, the moisture contents. The mean of the averages of the soil moisture data as percentage are presented hereunder—'depth-war',—with reference to each important growth phase of these two varieties of cholam :—

S. No.	Details of the growth phase	Depth at which the soil sample is taken						Total rainfall in inches during the period	Acre yield in lb.			
		3"		6"		12"			Co.1		Co.3	
		Co.1	Co.3	Co.1	Co.3	Co.1	Co.3		Grain	Straw	Grain	Straw
1.	Sowing to flowering (3—8—1948 to 15—11—1948).	6.35	6.96	9.63	10.74	12.40	14.25	2.75	114	2544	124	2707
2.	Flowering to ear formation (16—11—1948 to 31—12—1948)	10.27	10.96	10.58	10.79	13.40	14.59	2.78				
3.	Seed maturing stage (1—1—1949 to 25—1—1949)	4.04	4.53	6.90	6.47	10.85	9.64	Nil.				

If the water requirements of these two strains of cholam are similar, there should not be any difference between the moisture contents at everyone of these stages and that too in regard to each depth. In the first two phases of growth, Co. 1 seems to have consumed more soil moisture than Co. 3; but in the third phase of growth, Co. 3 looks like requiring more soil moisture, particularly from deeper

layers, than Co. 1, perhaps for meeting the needs of its physiological processes at the time of grain maturity. This is also explainable in one way, namely, the possibility of the variety Co. 3 having more ears than the number of plants due to its inherent habit of putting forth side shoots when once the survival of the main shoot becomes an uncertainty due to "Dead Hearts". The experiment is being continued with these two strains of cholam and further observations in regard to this aspect will be recorded.

The facilities given by the Central Farm authorities and the Millet Specialist for the conduct of the experiment and the Government Agricultural Chemist for the soil moisture estimations are gratefully acknowledged.

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28th September, 1949.

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TWO POTATO CROPS FROM ONE TUBER.

The temperate and equable climate of Nilgiris is suited to raise three crops of potatoes in one year namely irrigated, main and second crop. The usual method is to plant whole tubers. At the time of harvest these tubers which are known as mother tubers can be found as a shrunken mass of tissue. They are generally unfit for any further use and hence are usually thrown away. While harvesting the irrigated crop of 1949, a few mother tubers were found to be quite healthy, and well filled, unlike the usual shrivelled remnants. These were replanted during the main crop season of 1949 to find out whether they would yield again. It is surprising to note that these tubers not only gave another crop but gave also a fairly good yield. The yields are given below :—

Variety	Mother Tuber No.	Yield in ozs.		
		Irrigated crop 1949	Main crop 1949	Total
Green Mountain	I	8	2	10
Golden Wonder	II	4	15	19
Golden Wonder	III	3	10	13

This shows that it is possible to raise two crops from one tuber, provided the tuber is healthy at the time of the harvest of the crop.

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Dated 6th September, 1949.

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Crop and Trade Reports

Cotton Raw, in the Madras Presidency : The receipts of loose cotton at presses and spinning mills in the Madras Presidency from 1st February 1949 to 28-10-1949 amounted to 3,72,581 bales of 392 lb. lint. The receipt in the corresponding period of the previous year were 3,37,443 bales. 4,88,253 bales mainly of pressed cotton were received at spinning mills and 5,426 bales were exported by sea while 92,623 bales were imported by sea mainly from Karachi and Bombay.

(Director of Agriculture).