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GOVERNMENT OF KERALA

CONSOLIDATED RESULTS OF CROP  
ESTIMATION SURVEYS  
1981-1982

AGRICULTURAL DIVISION  
DEPARTMENT OF  
ECONOMICS AND STATISTICS  
KERALA

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## FOREWORD

This report on the consolidated results of crop estimation surveys relates to the year 1981-82. The methodology employed in crop cutting experiments in major crops viz., Paddy, Tapioca, Coconut, Arecanut, Cashew and Pepper and three minor crops viz., Jowar, Ragi and Pineapple are briefly described in this.

The report was prepared by the Agricultural Statistics Division of the Directorate.

Trivandrum.  
17-7-1984.

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*Director of Economics and Statistics.*

# CONSOLIDATED RESULTS OF CROP ESTIMATION SURVEYS 1981-82

## 1. Introduction

Crop estimation survey on paddy and Tapioca were being conducted regularly in the State even before the introduction of the scheme of Establishment of an Agency for Reporting Crop Statistics in Kerala. During the year 1976-77 Crop Cutting Surveys were extended to four other important crops viz., Coconut, Arecanut, Cashew and Pepper and they are being conducted regularly. Covering four crops each year, crop cutting experiments on minor crops also are being conducted from 1977-78 onwards. This report deals with the crop estimation survey conducted during the year 1981-82. The minor crops covered during the year were Pineapple, Jowar, Ragi and Cardamom.

## 2. Objective, coverage and design

The primary objective of the surveys was to obtain through crop cutting experiments estimates of average yield per hectare of paddy at the taluk level and of other crops at the district level and to estimate the out-turn of these crops in the state.

### 3. Coverage

The experiment for a crop was limited to the taluks where the area of the crop was sizable. The number of taluks where the surveys were planned and the number where they were actually conducted during the year 1981-82 are furnished in Table-1.

#### *Design*

The crop cutting experiment starts with locating and marking of a plot of specified size in the case of paddy, tapioca, jowar, ragi and cardamom or locating and marking of trees/standards/plants in the case of other tree crops using random sampling method. The produce at harvest obtained from the experimental plot/standards/plants are weighed or counted as the case may be and recorded in the prescribed pro forma together with other relevant details.

#### *Table 2—Paddy*

A stratified multistage random sampling design is adopted for the survey. Crop Cutting experiments on paddy were conducted

### Number of Taluks where the Surveys were planned and conducted

Crop	1981-82	
<i>Crop</i>	<i>Planned</i>	<i>Conducted</i>
1. Paddy		
(a) Autumn	57	53
(b) Winter	57	57
(c) Summer	50	50
2. Tapioca	54	52
3. Coconut	56	54
4. Arecanut	45	45
5. Cashewnut	35	35
6. Pepper	44	44
7. Jowar	4	3
8. Pineapple	55	46
9. Ragi	10	6
10. Cardamom	8	8

separately for Autumn, Winter and Summer in the villages selected for Timely Reporting Survey in each taluk. The taluk is treated as stratum, revenue village as first stage unit, survey subdivision as the second stage unit and square plot of side 5 metres as the ultimate sampling unit. In the case of survey sub-division numbers having more than one kandom (sub-plot) one kandom was selected at random and the square plot of size 5 metres was located in the selected kandom. The produce of the plot was harvested, threshed winnowed and the weight of produce taken. Driage ratio was also determined by processing sample grains taken from a sub sample of the plots harvested.

#### *Tapioca*

The required number of plots were selected from the list of wet and dry plots. The plots were visited by the field staff to ascertain its suitability for conducting the experiment. Where the plot was not found to be suitable, next plot was visited and the process repeated till a suitable plot was found. In cases where the selected plot contained more than one patch, one patch was selected by random sampling method. An area of 2 x 2 metres was fixed for conducting the experiment. All tapioca plants inside the square plot was harvested. The produce were cleaned by removing soil sticking to the tuber and the weight of the produce recorded.

*Coconut, Arecanut, Cashew and Pepper.*

From the list of dryland plots, the required number of plots for each crop was selected by simple random sampling method. The selected plots were visited to verify whether there were the required number of bearing trees of the crop in the plot viz., 5 trees each for Coconut, Arecanut, Cashew and pepper. Where the plot did not contain the required number of bearing trees, the next plot in the list was visited in succession till a suitable plot was obtained.

*Minor crops—Pineapple, Jowar, Ragi and Cardamom*

During the year under report, the minor crops covered were pineapple, Jowar, Ragi and Cardamom. As in the case of other crops, suitable plot in the list were used for selection.

*Field work*

The Primary field work of the surveys such as selection of field, identification of selected field, location and marking of plot or trees for the crop cutting experiments, recording the weight or the number of nuts of the harvested produce was done by the investigators of the department. The supervision of the work was done by the Taluk Statistical Inspectors, Additional statistical Inspectors, Additional District Statistical Officers and District Statistical Officers.

The planning of the survey and the statistical analysis of the data collected were done at the Directorate. The quality check of the work of the field staff and tabulation in respect of the survey on paddy were conducted by the Deputy Directors, Regional Tabulation Centres.

*Training*

Training classes were conducted both at regional level and district level for Supervisors and investigators respectively. Officers from the head quarters and from National Sample Survey Organisation also participated in the training.

*Response*

The number of experiments planned, analysed and the percentage response relating to paddy during Autumn 1981, Winter 1982 and Summer 1982 are given in table 1 appended. Details regarding number of experiments planned, analysed and mean yield per hectare in respect of all crops for the year 1981-82 are shown in Tables 2 to 14.

*Supervision*

The field work of the Investigators were supervised by the statistical Inspectors at Taluk level. District level Officers and Regional Officers also conducted inspections. All Inspecting Officers at district level had to

conduct harvest stage inspections at the rate of one experiment in each taluk in the case of paddy while the taluk level supervisors had to supervise one randomly selected experiment in each investigator unit subject to a minimum of six experiments in a taluk in each season. As far as Tapioca is concerned district level officers had to conduct inspections at the rate of 3 experiments in a district while the taluk statistical Inspectors had to inspect 5 experiments or 50% of the experiments planned in a taluk, whichever is less. Over and above these inspections pre-harvest and post harvest stages were done by the Statistical Inspectors and District Statistical Officers.

### *Results*

The estimated mean yield of dry paddy, the percentage sampling error and the total production of rice during the three seasons for the year 1981-82 is given in Table No. 3 in the Appendix.

The details showing the percentage area under different agricultural practices during the year 1981-82 for autumn, winter and summer are given in Table Nos. 5.1, 5.2 and 5.3. The estimated mean yield rates of raw tapioca in each district and the state is shown in Table No. 6 in the appendix. Similar data for Coconut, Arecanut, Cashew, Pepper, Pineapple, Jowar, Ragi and Cardamom are given in Tables 7 to 14 in the appendix.

## Coverage, sample size and response

Year: 1981-82

Crop: Paddy

Total 1981-82

Summer 1982

Winter 1982

Autumn 1981

District	Autumn 1981			Winter 1982			Summer 1982			Total 1981-82		
	No. of experiments	Planned	Analysed	No. of experiments	Planned	Analysed	No. of experiments	Planned	Analysed			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Trivandrum	114	114	100	114	113	99	96	92	96	324	319	93
Quilon	152	151	99	152	150	99	103	103	100	407	404	99
Alleppey	192	188	98	192	189	98	144	137	95	528	514	97
Kottayam	110	101	92	104	104	100	60	60	100	274	265	97
Idukki	66	41	62	66	66	98	..	..	..	132	106	80
Ernakulam	200	198	99	180	179	99	120	117	98	500	494	99
Trichur	140	137	98	140	140	100	126	125	99	406	402	99
Palghat	150	146	97	150	146	97	126	121	96	426	413	97
Malappuram	114	107	94	114	111	97	102	94	92	330	312	95
Kozhikode	108	84	78	84	81	96	80	79	99	272	244	90
Wynad	..	..	..	60	60	100	60	59	98	120	119	99
Cannanore	162	149	92	150	149	99	150	150	100	462	448	97
Total	1508	1416	94	1506	1487	99	1167	1137	97	4181	4040	97

TABLE 2

Supervision of field work—Rice—Independent estimate of meanyield of paddy based on harvest stage inspection 1981-82

District/State	Season	No. of experiments		Meanyield rate of paddy (Kg./hect.)		
		Planned for inspection at harvest stage (50%)	Inspected at harvest stage	Before drriage	After drriage	Drriage ratio used
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Trivandrum	Autumn	61	39	2588	2252	0.869
	Winter	61	47	2644	2295	0.868
	Summer	52	49	1936	1704	0.879
Quilon	Autumn	82	51	2336	2038	0.872
	Winter	82	82	2916	2595	0.890
	Summer	57	70	1964	1758	0.895
Alleppey	Autumn	103	90	2544	2156	0.848
	Winter	103	101	2688	2392	0.881
	Summer	78	74	4294	3894	0.907
Kottayam	Autumn	60	59	2900	2610	0.901
	Winter	57	73	2880	2601	0.903
	Summer	34	28	3356	3145	0.937
Idukki	Autumn	37	21	3080	2556	0.829
	Winter	37	37	2956	2628	0.889
	Summer	..	..	..	..	..
Ernakulam	Autumn	107	122	2420	2130	0.879
	Winter	96	86	2648	2354	0.902
	Summer	66	77	2544	2310	0.908
Trichur	Autumn	75	24	1980	1698	0.857
	Winter	75	44	2148	1938	0.884
	Summer	68	31	2788	2540	0.911
Palghat	Autumn	80	73	3784	3311	0.876
	Winter	80	50	3400	3087	0.908
	Summer	68	44	2959	2657	0.898
Malappuram	Autumn	61	76	2288	1973	0.863
	Winter	61	49	2476	2253	0.910
	Summer	55	40	2409	2151	0.893
Kozhikode	Autumn	58	34	1812	1604	0.885
	Winter	45	36	1800	1629	0.905
	Summer	43	25	2265	2082	0.919
Wynad	Autumn	..	..	..	..	..
	Winter	33	21	3192	2921	0.915
	Summer	33	16	2652	2490	0.939
Cannanore	Autumn	87	68	2420	2176	0.899
	Winter	80	45	2352	2161	0.919
	Summer	80	60	2242	2056	0.917
State	Autumn	811	657	2596	2265	0.872
	Winter	810	671	2692	2415	0.897
	Summer	634	514	2698	2450	0.908



TABLE 3

## Yield Estimate — Rice — 1981-82

Crop: Paddy

District	Season	Area under crop			No. of experiments			Estimated yield in Kgl hect. of dry paddy	Sampling error%	Total production of rice in tonnes
		Total	Coverage %	Planned	Analysed	Response %				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Trivandrum	Autumn	14800	100	114	114	100	2129	2.91	20707	
	Winter	14868	100	114	113	99	2344	2.73	22997	
	Summer	1107	100	96	92	96	1695	5.37	1233	
Quilon	Autumn	24540	100	152	151	99	2425	2.68	39102	
	Winter	25087	100	152	150	99	2631	2.17	43371	
	Summer	779	100	103	103	100	1751	2.97	896	
Alleppey	Autumn	34047	100	192	188	98	2403	3.29	53748	
	Winter	26231	100	192	189	98	2606	2.46	44917	
	Summer	28328	100	144	137	95	4003	4.50	74497	
Kottayam	Autumn	14435	100	110	101	92	2967	5.59	28138	
	Winter	12704	100	104	104	100	2507	4.03	21180	
	Summer	7289	100	60	60	100	3192	6.58	15285	
Idukki	Autumn	3514	100	66	41	62	2649	4.87	6114	
	Winter	5138	100	66	65	65	2868	2.86	9682	
	Summer	305	100	..	..	..	1557	..	312	
Ernakulam	Autumn	40102	100	200	198	99	2169	3.04	57198	
	Winter	41379	100	180	179	99	2316	2.07	62974	
	Summer	19403	100	120	117	98	2266	3.97	28883	

Table 3 (contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Trichur	Autumn	41794	100	140	137	98	1719	3.84	47193
	Winter	51570	100	140	140	100	2193	3.97	74310
	Summer	22147	100	126	125	99	2335	5.87	39970
Palghat	Autumn	90044	100	150	146	97	3440	2.85	209506
	Winter	86816	100	150	146	97	3069	2.25	175043
	Summer	4018	100	126	121	96	2591	4.71	6840
Malappuram	Autumn	37516	100	114	107	94	1820	4.84	44860
	Winter	35830	100	114	111	97	2219	3.06	52248
	Summer	5628	100	102	94	92	2186	5.40	8082
Kozhikode	Autumn	10133	100	108	84	78	1378	5.30	9176
	Winter	14034	100	84	81	96	1565	6.71	14427
	Summer	2833	100	80	79	99	2117	6.90	3941
Wynad	Autumn	22693	100	60	60	100	2824	4.50	42109
	Winter	7328	100	60	59	98	2683	5.55	12916
	Summer								
Cannanore	Autumn	36152	100	162	149	92	1989	3.37	47236
	Winter	19724	100	150	149	99	2006	3.24	25996
	Summer	4535	100	150	150	100	2171	3.92	6467
State	Autumn	347077	100	1508	1416	94	2442	1.32	556918
	Winter	356074	100	1506	1487	99	2518	1.03	589154
	Summer	103700	100	1167	1137	97	2837	2.22	193321

TABLE 4

Data on drirage [percentage recovery of final product (dry paddy)  
from harvested produce] 1981-82

District	Season	Driirage experiment 1981-82		
		No. Planned	No. Analysed	Driirage ratio %
(1)	(2)	(3)	(4)	(5)
Trivandrum	Autumn	12	12	86.9
	Winter	12	12	86.8
	Summer	12	12	87.9
Quilon	Autumn	18	18	87.2
	Winter	18	18	89.0
	Summer	15	15	89.5
Alleppey	Autumn	21	21	84.8
	Winter	21	21	88.1
	Summer	18	18	90.7
Kottayam	Autumn	15	15	90.1
	Winter	15	15	90.3
	Summer	12	11	93.7
Idukki	Autumn	6	6	82.9
	Winter	12	12	88.9
	Summer	..	..	..
Ernakulam	Autumn	21	21	87.9
	Winter	18	18	90.2
	Summer	18	18	90.8
Trichur	Autumn	15	15	85.7
	Winter	15	15	88.4
	Summer	15	12	91.1
Palghat	Autumn	15	15	87.6
	Winter	15	15	90.8
	Summer	15	15	89.8
Malappuram	Autumn	12	12	86.3
	Winter	12	12	91.0
	Summer	12	12	89.3
Kozhikode	Autumn	9	9	88.5
	Winter	9	9	90.5
	Summer	9	9	91.9
Wynad	Autumn	..	..	..
	Winter	9	9	91.5
	Summer	9	9	93.9
Cannanore	Autumn	15	15	89.9
	Winter	15	15	91.9
	Summer	15	15	91.7

TABLE 5.1

Crop estimation survey 1981-82 statement showing the percentage area under different improved agricultural practices

District	Percentage area under**								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Trivandrum		9.65	90.35	95.61	4.39	..	33.33	66.67	
Quilon		49.67	50.33	85.43	14.57	..	13.91	86.09	
Alleppey		37.23	62.77	81.92	11.70	6.38	37.77	62.23	
Kottayam		61.39	38.61	94.06	1.98	3.96	61.39	38.61	
Idukki		73.17	26.83	100.00	..	..	78.05	21.95	
Ernakulam		40.40	59.60	75.76	7.57	16.67	46.46	53.54	
Trichur		20.44	79.56	49.63	41.61	8.76	37.23	62.77	
Palghat		49.32	50.68	77.40	19.18	3.42	21.23	78.77	
Malappuram		27.10	72.90	54.21	39.25	6.54	21.50	78.50	
Kozhikode		26.19	73.81	33.33	57.14	9.53	16.67	83.33	
Wynad		..	..	..	..	..	..	..	
Cananore		30.20	69.80	53.02	43.62	3.36	12.08	87.92	
State		37.01	62.99	72.32	21.61	6.07	31.99	68.01	

\*\*based on the number of Crop Cutting experimental plots

Crop: Paddy

Autumn 1981

TABLE 5.2

Crop estimation surveys on principal crops—statement showing the percentage of area under different improved agricultural practices

Winter 1982

District	Percentage area under								
	Improved variety	Other variety	Chemical fertilizers	Other manures	Un-manure	Treatment of insecticides/pesticides	Un treated by pesticides/ insecticides	Remarks	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Trivandrum	7.08	92.92	99.11	0.89	0.00	46.02	53.98		
Quilon	8.00	92.00	85.33	14.67	0.00	24.67	75.33		
Alleppey	20.11	79.89	75.13	19.58	5.29	49.74	50.26		
Kottayam	67.31	32.69	98.08	0.96	0.96	85.58	14.42		
Idukki	32.31	67.69	87.69	10.77	1.54	72.31	27.69		
Ernakulam	6.70	93.30	89.38	5.03	5.59	55.87	44.13		
Trichur	20.00	80.00	65.00	22.14	12.86	54.29	45.71		
Palghat	40.41	59.59	83.56	16.44	..	28.08	71.92		
Malappuram	18.02	81.98	63.06	33.33	3.61	42.34	57.66		
Kozhikode	13.58	86.42	41.98	46.91	11.11	38.27	61.73		
Wynad	11.67	88.33	78.33	20.00	1.67	21.67	78.33		
Cannanore	30.87	69.13	83.22	14.77	2.01	66.44	33.56		
State	22.33	77.67	79.96	16.21	3.83	48.82	51.58		

TABLE 5.3

Crop estimation surveys on principal crops statement showing the percentage of area under different improved agricultural practices

Crop: Paddy

Summer 1982

District	Percentage area under								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Improved variety	Other variety	Chemical fertilizers	Other manures	Un-imitates pesticides	Treatment of insecticides by pesticides	Un-imitates pesticides	Un-imitates insecticides	Remarks
Trivandrum	53.26	46.74	97.83	2.17	..	75.00	25.00		
Quilon	31.07	68.93	92.23	6.80	0.97	86.41	13.59		
Alleppey	65.69	34.31	70.80	17.52	11.68	97.08	2.92		
Kottayam	56.67	43.33	76.67	23.33	..	95.00	5.00		
Idukki	..	..	..	..	..	..	..		
Ernakulam	20.51	79.49	95.73	4.27	..	82.05	17.95		
Trichur	43.20	56.80	90.40	7.20	2.40	76.80	23.20		
Palghat	50.41	49.59	80.99	16.53	2.48	50.41	49.59		
Malappuram	50.00	50.00	84.04	14.90	1.06	56.38	43.62		
Kozhikode	75.95	24.05	97.47	2.53	..	54.43	45.57		
Wynad	50.85	49.15	55.93	37.29	6.78	23.73	76.27		
Cananore	45.33	54.67	83.33	16.00	0.67	58.00	42.60		
State	48.28	51.72	84.87	12.58	2.55	70.18	29.82		

**TABLE 6**  
**Yield Estimates**  
**Tapioca 1981-82**

Sl. No.	District	No. of Experiments		Estimated mean yield Per Hectare (tonnes)
		(3) Planned	(4) Analysed	
(1)	(2)	(3)	(4)	(5)
1.	Trivandrum	126	123	15.00
2.	Quilon	144	144	13.68
3.	Alleppey	82	81	13.98
4.	Kottayam	108	107	16.50
5.	Idikki	56	56	21.13
6.	Ernakulam	100	100	19.63
7.	Trichur	106	104	12.45
8.	Palghat	90	90	15.05
9.	Malappuarm	128	125	13.00
10.	Kozhikode	90	86	13.38
11.	Wynad	45	45	22.35
12.	Cannanore	170	170	15.30
	State	1245	1231	15.10

TABLE 7

## Yield Estimates—Coconut—1981-82

<i>District</i>	<i>Number of Experiments Planned</i>	<i>Analysed</i>	<i>Average yield/tree Nos.</i>	<i>Estimated mean yield (Number of Nuts/hect.)</i>
(1)	(2)	(3)	(4)	(5)
Trivandrum	50	50	36	4824
Quilon	60	60	34	4216
Alleppey	45	42	29	4756
Kottayam	40	40	23	3933
Idukki	20	20	23	2507
Ernakulam	40	40	40	5520
Trichur	45	44	44	6644
Palghat	28	28	27	3348
Malappuram	55	55	30	4260
Kozhikode	75	75	29	4553
Wynad	15	5	21	1260
Cannanore	60	60	26	3380
State	533	519	31	4509



TABLE 8

## Yield Estimates—Arecaanut—1981-82

<i>District</i>	<i>Number of experiments Planned</i>	<i>Analysed</i>	<i>Average yield/tree (Nos.)</i>	<i>Estimated mean yield (Number of Nuts/hect)</i>
(1)	(2)	(3)	(4)	(5)
Trivandrum	25	25	55	95040
Quilon	31	31	101	151096
Alleppey	21	21	85	114580
Kottayam	25	25	81	141588
Idukki	10	10	118	172634
Ernakulam	52	52	104	189280
Trichur	50	50	115	211140
Palghat	16	16	94	143726
Malappuam	58	58	103	170877
Kozhikode	40	40	168	297696
Wynad	30	30	96	138912
Cannanore	72	72	124	160580
State	430	430	109	172111

TABLE 9

## Yield Estimate—Cashew—1981-82

District	No. of Experiments		Average yield/tree (kg)	Estimated mean yield kg./hect.
	Planned	Analysed		
(1)	(2)	(3)	(4)	(5)
Trivandrum	21	21	3.44	622
Quilon	25	25	3.62	687
Alleppey	15	15	2.75	544
Kottayam	5	5	5.57	987
Idukki	5	5	5.81	1162
Ernakulam	18	17	2.86	598
Trichur	21	19	1.06	227
Palghat	41	40	1.32	236
Malappuram	75	75	2.06	424
Kozhikode	19	19	4.97	998
Wynad	18	6	7.13	1447
Cannanore	135	135	2.62	622
State	398	382	2.69	581

TABLE 10

## Yield estimate—Pepper—1981-82

District	Number of Experiments		Average yield/standard	Estimated mean yield
	Planned	Analysed		
(1)	(2)	(3)	(4)	(5)
Trivandrum	23	21	0.84	322
Quilon	30	29	0.66	284
Alleppey	20	20	0.48	201
Kottayam	35	35	0.29	131
Idukki	65	60	0.46	165
Ernakulam	27	27	0.42	164
Trichur	18	18	0.33	133
Palghat	10	10	0.38	121
Malappuram	20	20	0.70	267
Kozhikode	41	41	0.87	346
Wynad	30	30	0.92	417
Cannanore	70	70	0.66	296
State	389	381	0.62	259

TABLE 11

## Yield Estimates—Tapioca—1981-82

District	No. of Experiments		Estimated mean yield per Hectare
	Planned	Analysed	
(1)	(2)	(3)	(4)
Trivandrum	126	123	15.00
Quilon	144	144	13.68
Alleppey	82	81	13.98
Kottayam	108	107	16.50
Idukki	56	56	21.13
Ernakulam	100	100	19.63
Trichur	106	104	12.45
Palghat	90	90	15.05
Malappuram	128	125	13.00
Kozhikode	90	86	13.38
Wynad	45	45	22.35
Cannanore	170	170	15.30
State	1245	1231	15.10

TABLE 12  
Yield Estimates—Pineapple—1981-82

District	Number of Experiments		Estimated mean yield (Kg./hect.)
	Planned	Analysed	
(1)	(2)	(3)	(4)
Trivandrum	20	20	12.68
Quilon	30	25	11.74
Alleppey	35	35	10.32
Kottayam	25	25	10.80
Idukki	20	10	11.51
Ernakulam	35	29	11.02
Trichur	25	15	8.33
Palghat	25	14	12.18
Malappuram	20	20	10.68
Kozhikode	15	15	13.49
Wynad	..	..	13.49*
Cannanore	25	25	17.21
State	275	233	12.43

\* Mean yield of Kozhikode district is accepted.

TABLE 13

## Yield Estimates—Jowar—1961-62

District	No. of Experiments		Average yield Wt./hectare
	Planned	Analysed	
(1)	(2)	(3)	(4)
Trivandrum	..	..	..
Quilon	..	..	..
Alleppey	..	..	..
Kottayam	..	..	..
Idukki	..	..	..
Ernakulam	..	..	..
Trichur	..	..	..
Palghat	24	24	54.4 Kg. (0.046 tonnes)
Malappuram	..	..	..
Kozhikode	..	..	..
Wynad	..	..	..
Cannanore	..	..	..
State	24	24	54.4 Kg. (0.046 tonnes)

TABLE 14  
Yield Estimates—Ragi—1981-82

District	No. of Experiments		Average yield Kgs./hectare
	Planned	Analysed	
(1)	(2)	(3)	(4)
Trivandrum	...	..	...
Quilon	..	..	..
Alleppey	..	..	..
Kottayam	..	..	..
Idukki	..	..	..
Ernakulam	..	..	..
Trichur	..	..	..
Palghat	25	19	0.700
Malappuram	..	..	..
Kozhikode	..	..	..
Wynad	..	..	..
Cannanore	10	7	1.500
State	35	26	0.770



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