

Rice Varietal Distribution in Sri Lanka - 2017



Rice Research and Development Institute
Department of Agriculture

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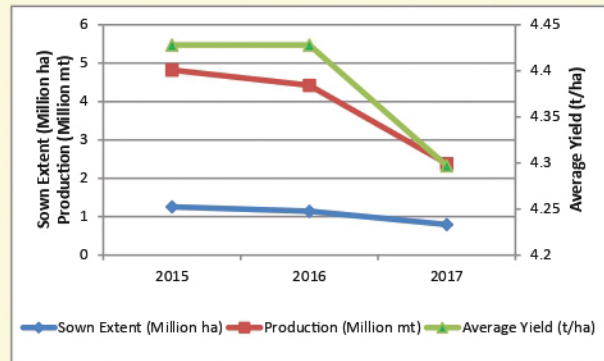


This volume provides rice varietal distribution in Sri Lanka for the year 2017 which includes information of 2016/17 Maha and 2017 Yala seasons. Furthermore, rice varietal distribution trends are also illustrated.

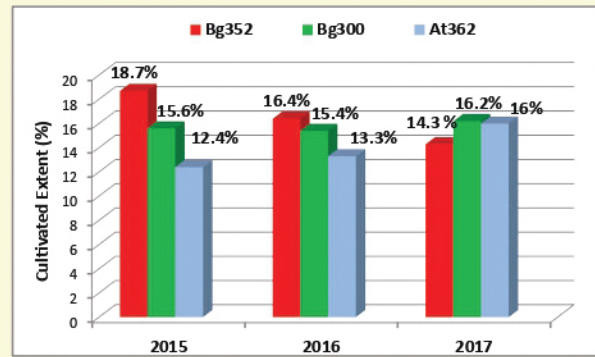
Highlights

- ❖ The most popular rice variety is Bg 300 (16.2% of area) followed by At 362 (16.0% of area).
- ❖ Bg 300 and At 362 are widely cultivated in Kurunegala district and Hambantota district respectively.
- ❖ 3 1/2 months maturity age group is adopted in 70.8% of the area cultivated.
- ❖ Traditional varieties are adopted in 0.4% of the area cultivated. (a reduction of 0.01% compared to 2016).
- ❖ White-pericarp varieties are adopted in 77.2% of the area cultivated.
- ❖ Long grain rice varieties are adopted in 75.1% of the area cultivated.

Sown Extent, Production and Productivity (2015 - 2017)



Top three varieties (2015 - 2017)



Grain type comparison (2014-2017)

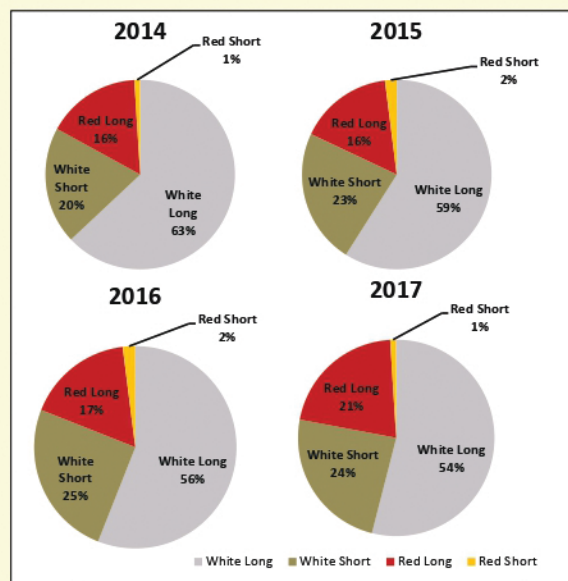


Table 1: Summary of rice varietal distribution in Sri Lanka – 2017

Variety	Grain Type	2016/17 Maha		2017 Yala		Annual		
		(ha)	%	(ha)	%	(ha)	%	
New Improved Varieties (NIV)								
2 1/2 months	Bg750	Red,LG	299	0.056	15	0.006	314	0.039
	Bg250	White,LG	4,215	0.786	3,632	1.400	7,847	0.986
	Bg251	White,LG	46	0.009	31	0.012	77	0.010
	Other		0	0.000	42	0.016	42	0.005
	Sub Total		4,561	0.851	3,720	1.434	8,280	1.041
3 months	Bw272-6b	Red,LG	828	0.154	802	0.309	1,630	0.205
	Bg300	White,LG	83,383	15.552	45,724	17.623	129,107	16.228
	At303	Red,LG	962	0.179	2,640	1.018	3,602	0.453
	Bg304	White,LG	572	0.107	149	0.057	721	0.091
	Bg305	White,LG	1,162	0.217	558	0.215	1,720	0.216
	At306	White,LG	0	0.000	66	0.025	66	0.008
	At307	White,LG	25,957	4.841	6,276	2.419	322,32	4.051
	At308	White,SG	20,870	3.893	5,203	2.005	26,073	3.277
	At309	White,LG	6	0.001	0	0.000	6	0.001
	Bg310	White,LG	783	0.146	178	0.068	961	0.121
	At311	Red,LG	6	0.001	17	0.007	23	0.003
	Other		629	0.117	54	0.021	683	0.086
	Sub Total		135,157	25.209	61,667	23.768	196,824	24.739
3 1/2 months	Bg94-1	White,LG	26,324	4.910	12,393	4.777	38,717	4.866
	Bw267-3	White,LG	16	0.003	13	0.005	29	0.004
	Bg350	Red,LG	216	0.040	1,455	0.561	1,671	0.210
	Bw351	Red,LG	0	0.000	378	0.146	378	0.048
	Bg352	White,LG	71,298	13.298	42,105	16.228	113,402	14.254
	At353	Red,LG	6,739	1.257	1,386	0.534	8,124	1.021
	At354	White,LG	8	0.001	10	0.004	18	0.002
	Ld356	Red,SG	563	0.105	494	0.190	1,057	0.133
	Bg357	White,LG	10,911	2.035	6,979	2.690	17,891	2.249
	Bg358	White,SG	29,060	5.420	11,781	4.541	40,841	5.133
	Bg359	White,LG	16,076	2.998	9,036	3.482	25,112	3.156
	Bg360	White,SG	62,070	11.577	18,526	7.140	80,595	10.130
	Bw361	Red,LG	723	0.135	964	0.371	1,687	0.212
	At362	Red,LG	76,003	14.176	51,565	19.874	127,568	16.034
	Bw363	White,LG	0	0.000	972	0.375	972	0.122
	Bw364	Red,LG	2,685	0.501	816	0.315	3,501	0.440
	Ld365	Red,SG	2,295	0.428	1,654	0.637	3,949	0.496
	Bg366	White,LG	31,575	5.889	15,080	5.812	46,655	5.864
	Bw367	White,SG	21,927	4.090	7,733	2.980	29,660	3.728
	Ld368	Red,SG	3,612	0.674	2,752	1.061	6,363	0.800
	Bg369	White,LG	12	0.002	0	0.000	12	0.001
	Bg370	White,SG	686	0.128	58	0.022	744	0.094
	Ld371	White,SG	65	0.012	173	0.067	238	0.030
	Bw372	Red,LG	1,152	0.215	1,237	0.477	2,389	0.300
	Bg374	White,LG	0	0.000	1,647	0.635	1,647	0.207
	Other		4,519	0.843	1,164	0.449	5,683	0.714
	Sub total		368,534	68.738	190,368	73.372	558,902	70.249

	Variety	Grain Type	2016/17 Maha		2017 Yala		Annual	
			(ha)	%	(ha)	%	(ha)	%
4-4 1/2 months	Bg11-11	White,SG	11	0.002	0	0.000	11	0.001
	Bg379-2	White,LG	2,684	0.501	574	0.221	3,258	0.410
	Bg380	White,LG	1	0.000	0	0.000	1	0.000
	Bg400-1	White,LG	246	0.046	135	0.052	381	0.048
	At402	Red,LG	125	0.023	10	0.004	135	0.017
	Bg403	White,LG	1,468	0.274	662	0.255	2,130	0.268
	At405	White,LG	1	0.000	0	0.000	1	0.000
	Bg406	Red,LG	10,184	1.899	0	0.000	10,184	1.280
	Bg407 H	White,LG	0	0.000	4	0.002	4	0.001
	Ld408	Red,LG	0	0.000	27	0.011	27	0.003
	Bg450	White,SG	1,075	0.200	76	0.029	1,151	0.145
	Bg455	Red,LG	0	0.000	20	0.008	20	0.002
	Pokuru Samba**	White,SG	3,848	0.718	1,056	0.407	4,904	0.616
	Other		562	0.105	170	0.066	732	0.092
		Sub total		20,205	3.769	2,734	1.054	22,939

5-6 months	Bg745	White,SG	120	0.022	17	0.007	137	0.017
	Bg3-5	White,LG	12	0.002	13	0.005	25	0.003
	Bg38	White,SG	314	0.058	18	0.007	331	0.042
	Sub Total		445	0.083	47	0.018	492	0.062

Old Improved Varieties (OIV)

3 1/2 months	CO-10	Red,LG	36	0.007	0	0.000	36	0.005
	Attakari	Red,LG	3,586	0.669	0	0.000	3,586	0.451
	Sub Total		3,622	0.676	0	0	3,622	0.455

4- 4 1/2 months	H4	Red,LG	536	0.100	155	0.060	690	0.087
	Other		119	0.022	223	0.086	342	0.043
	Sub total		655	0.122	378	0.146	1,032	0.130

Traditional Rice Varieties

3 months	Pachchaperumal	Red, LG	195	0.036	9	0.004	204	0.026
	Sub Total		195	0.036	9	0.004	204	0.026

3 1/2 months	Suwadel	White,SG	381	0.071	127	0.049	508	0.064
	Kalu Heenati	Red,LG	87	0.016	8	0.003	96	0.012
	Madathawalu	Red,LG	15	0.003	14	0.005	29	0.004
	Suduru Samba	White,SG	4	0.001	0	0.000	4	0.001
	Kahawanu	White,SG	5	0.001	6	0.002	11	0.001
	Sinna Vellai	Red,LG	2	0.000	0	0.000	2	0.000
	Hodarawalu	Red,LG	2	0.000	0	0.000	2	0.000
	Weda heenati	Red,LG	1	0.000	0	0.000	1	0.000
	Sub Total		498	0.093	155	0.060	653	0.082

	Variety	Grain Type	2016/17 Maha		2017 Yala		Annual	
			(ha)	%	(ha)	%	(ha)	%
4-4 1/2 months	Kurulu thuda	Red,LG	59	0.011	45	0.017	104	0.013
	Sudu Heenati	Red,LG	13	0.002	6	0.002	19	0.002
	Moddaikaruppan	Red,LG	1,345	0.251	0	0.000	1,345	0.169
	Peria sivappu	Red,LG	101	0.019	0	0.000	101	0.013
	Peria kooran	Red,LG	16	0.003	0	0.000	16	0.002
	siriya kooran	Red,LG	10	0.002	0	0.000	10	0.001
	Other		55	0.010	247	0.095	302	0.038
	Sub Total		1,599	0.298	299	0.115	1,897	0.238
5-6 months	Maa wee	Red,LG	0	0.000	54	0.021	54	0.007
	Gonabaru	White,LG	0	0.000	21	0.008	21	0.003
	Hathiyal	Red,LG	1	0.000	2	0.001	3	0.000
	Rathel	White,SG	4	0.001	4	0.002	8	0.001
	Murungakayan	Red,LG	514	0.096	0	0.000	514	0.065
	Periya Velladiyan	Red,LG	157	0.029	0	0.000	157	0.020
	Sub Total		676	0.126	81	0.031	757	0.095
Total		536,146	100.00	259,457	100.00	795,603	100.00	

Note: LG=Long Grain (Nadu), SG=Short Grain (Samba), *Not a recommended rice variety

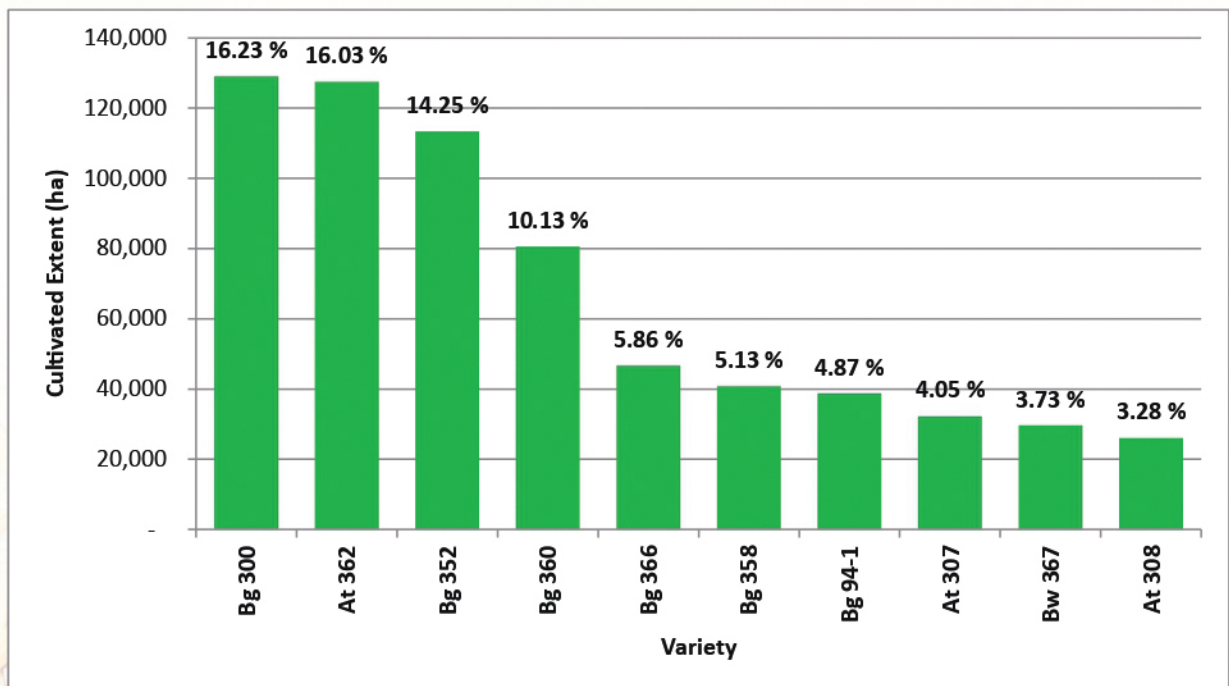


Figure 1: Cultivated extents of ten most popular rice varieties in Sri Lanka - 2017

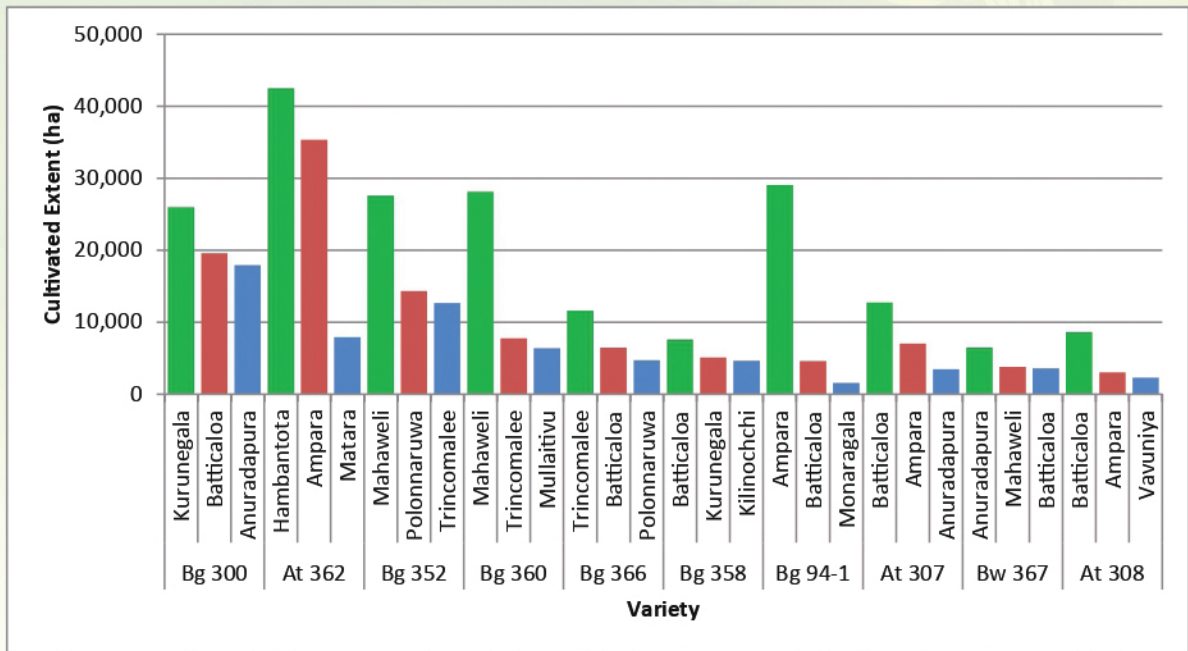


Figure 2: Cultivated extents of ten most popular rice varieties in major three districts of Sri Lanka 2017

Table 2: Cultivated extent of rice varietal categories - 2017

	2016/17 Maha		2017 Yala		Annual	
	(ha)	%	(ha)	%	(ha)	%
New Improved Varieties	528,902	98.65	258,536	99.65	787,438	98.97
Old Improved Varieties	4,277	0.80	378	0.15	4,654	0.59
Traditional Rice Varieties	2,967	0.55	544	0.21	3,511	0.44

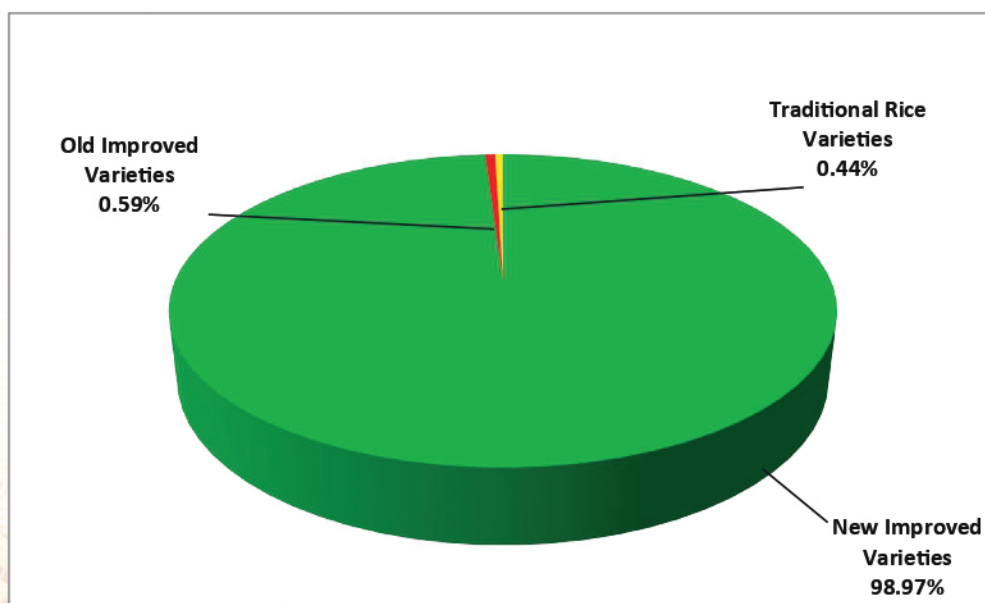
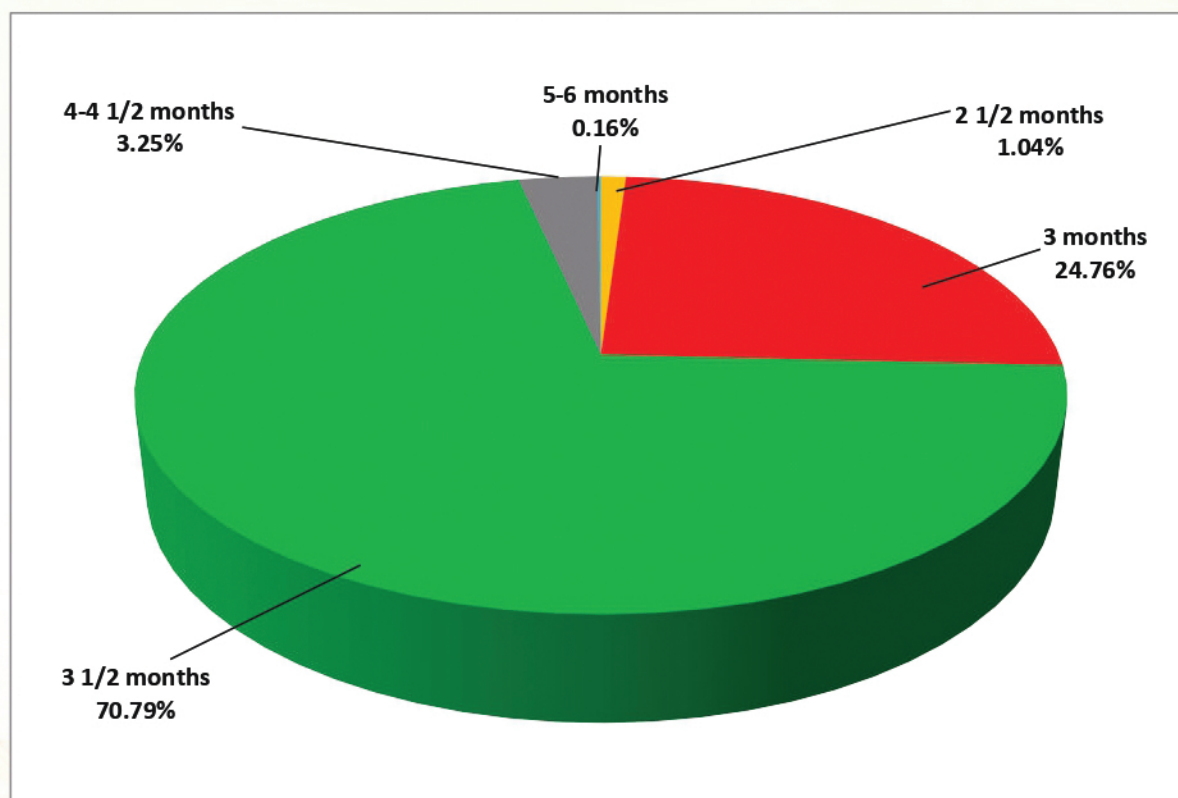


Figure 3: Cultivated extent of rice varietal categories – 2017

Table 3: Varietal distribution of New Improved Rice varieties according to age groups - 2017

Age Class	2016/17 Maha		2017 Yala		Annual Extent	
	(ha)	%	(ha)	%	(ha)	%
2 ½ Months	4,561	0.85	3,720	1.43	8,280	1.04
3 Months	135,352	25.25	61,676	23.77	197,028	24.76
3½ Months	372,654	69.51	190,524	73.43	563,177	70.79
4-4½ Months	22,458	4.19	3,411	1.31	25,868	3.25
5-6 Months	1,121	0.21	128	0.05	1,249	0.16

**Figure 4: Varietal distribution of new improved varieties according to age groups - 2017**

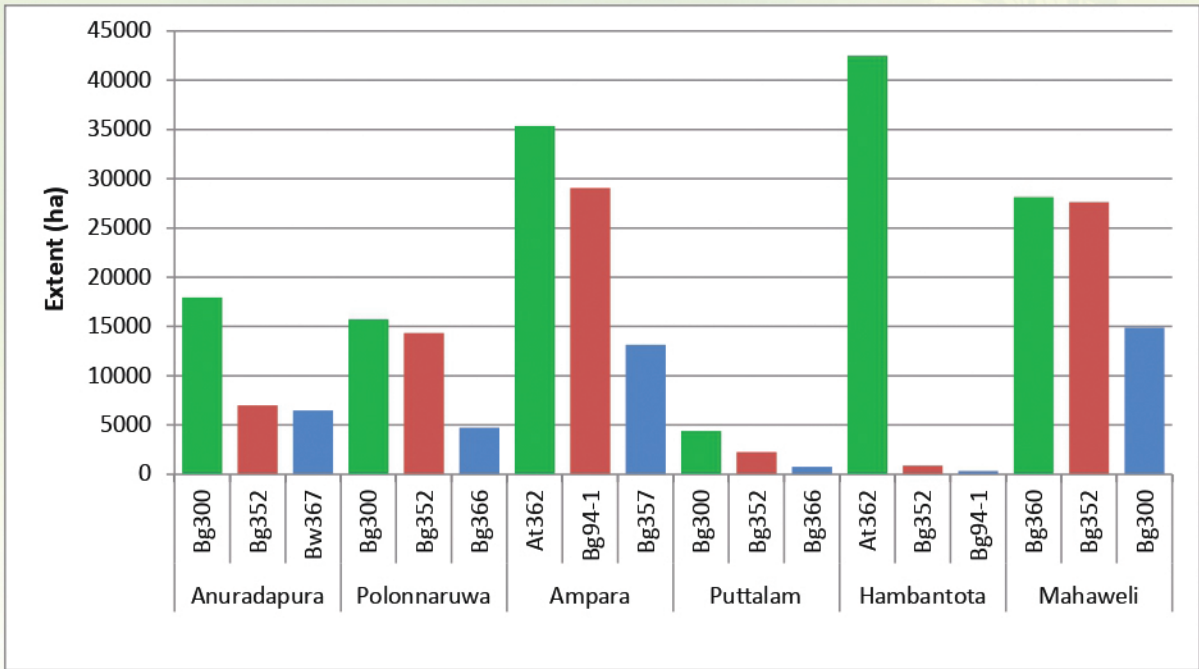


Figure 5 a: Spread of three major rice varieties including Mahaweli areas in Dry Zone- 2017

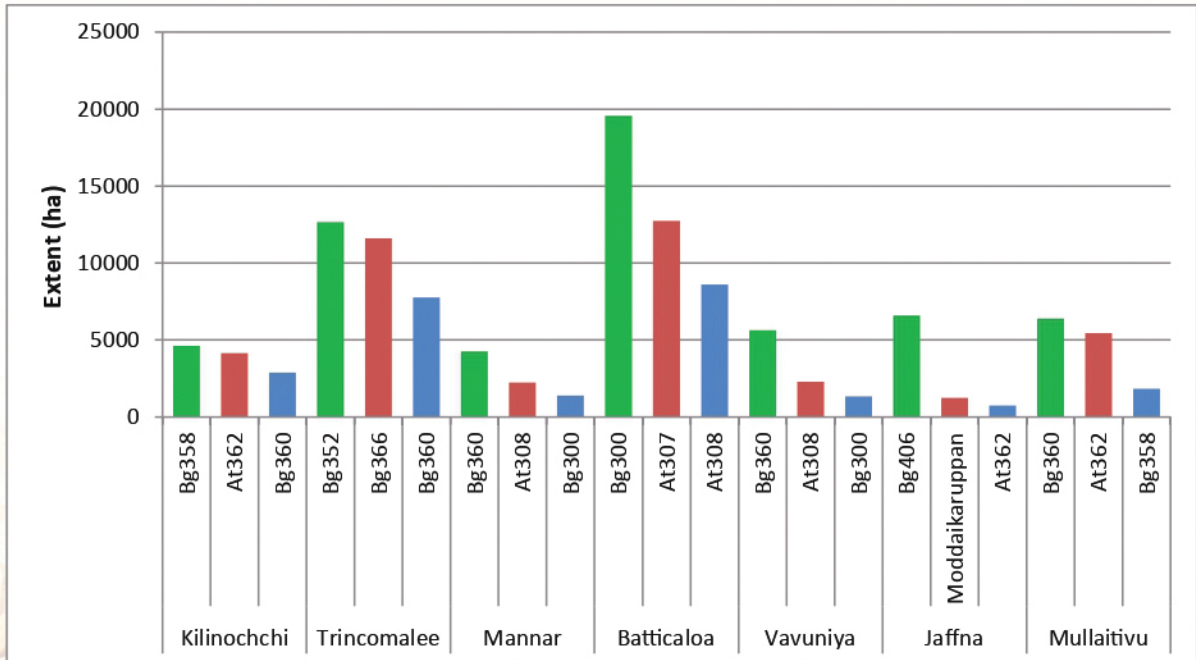


Figure 5 b: Spread of three major rice varieties including Mahaweli areas in Dry Zone- 2017

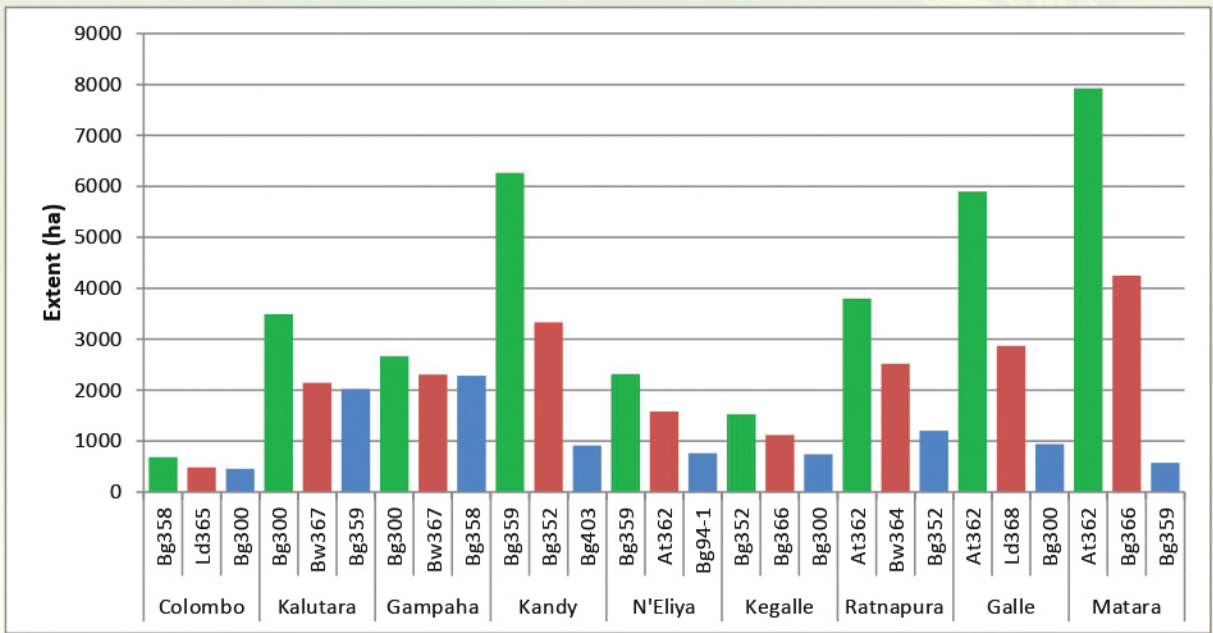


Figure 6: Spread of three major rice varieties in Wet Zone - 2017

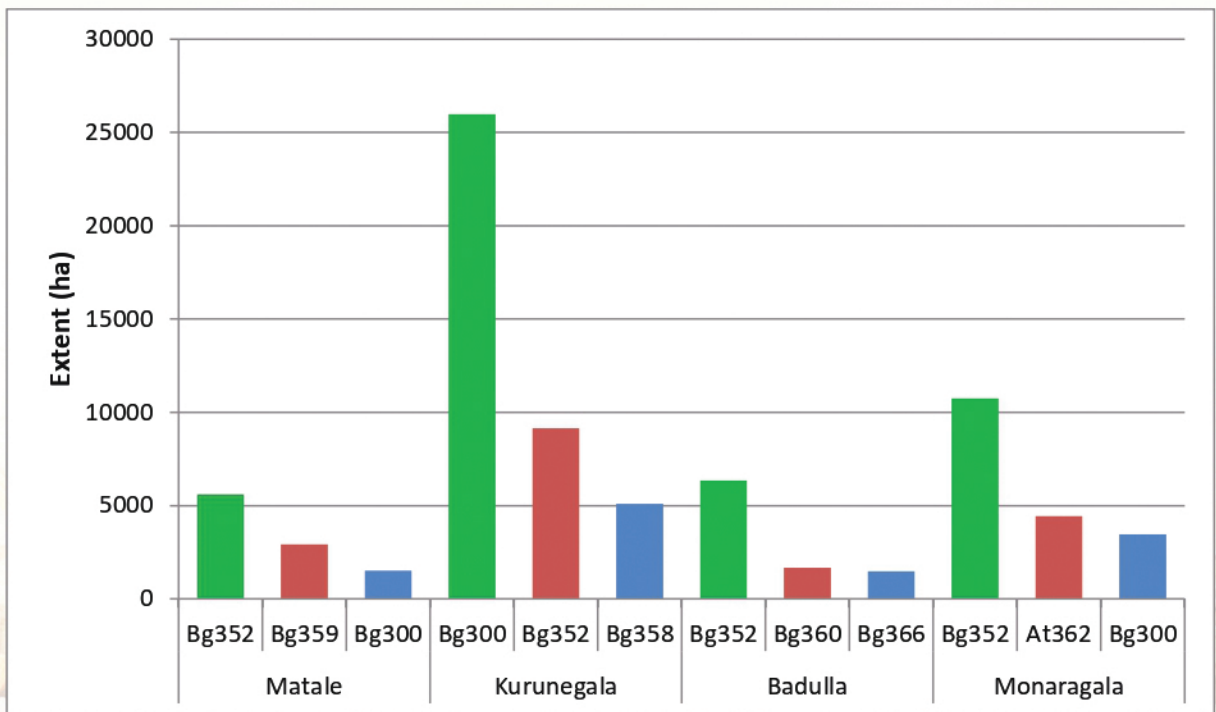


Figure 7: Spread of three major rice varieties in Intermediate Zone – 2017

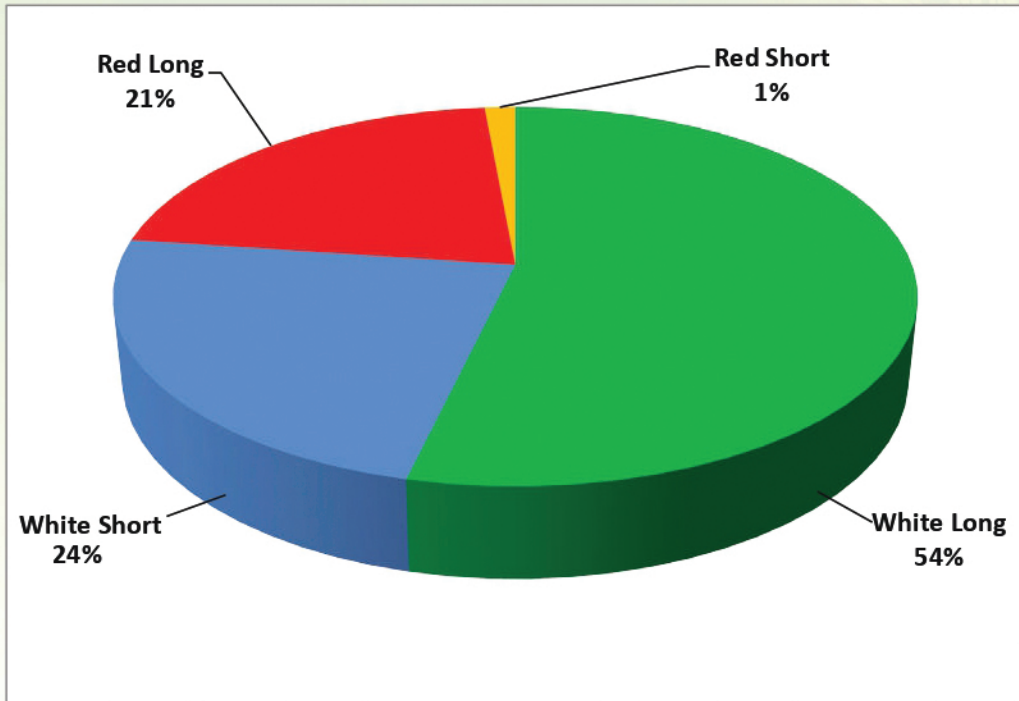


Figure 8: Varietal spread according to grain types - 2017

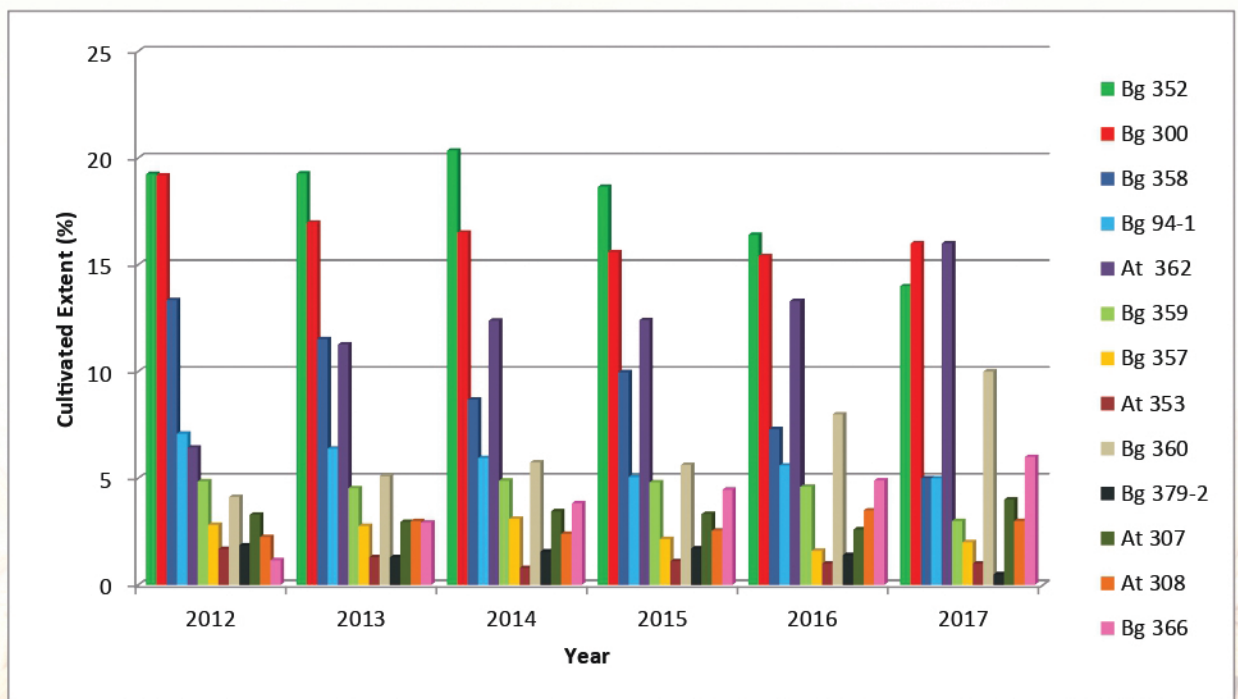


Figure 9: Spread of popular rice varieties in Sri Lanka (2012 - 2017)

(Note: Popular Rice Varieties in last Six years relative to 2012)

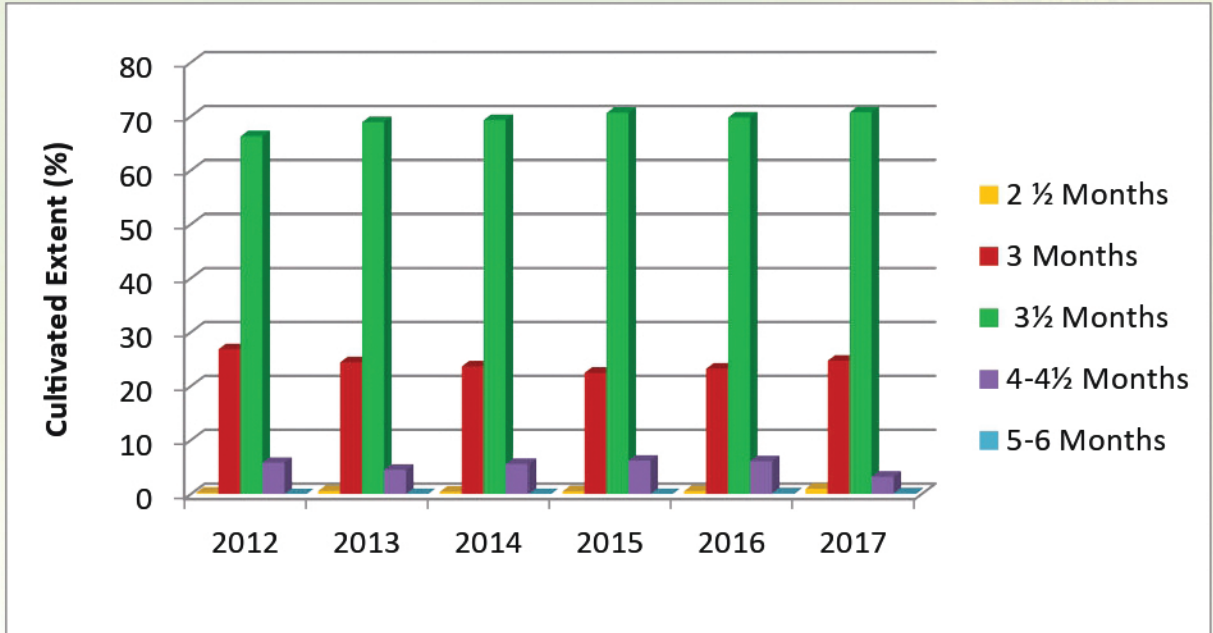


Figure 10: Distribution of rice varieties by age groups (2012 – 2017)

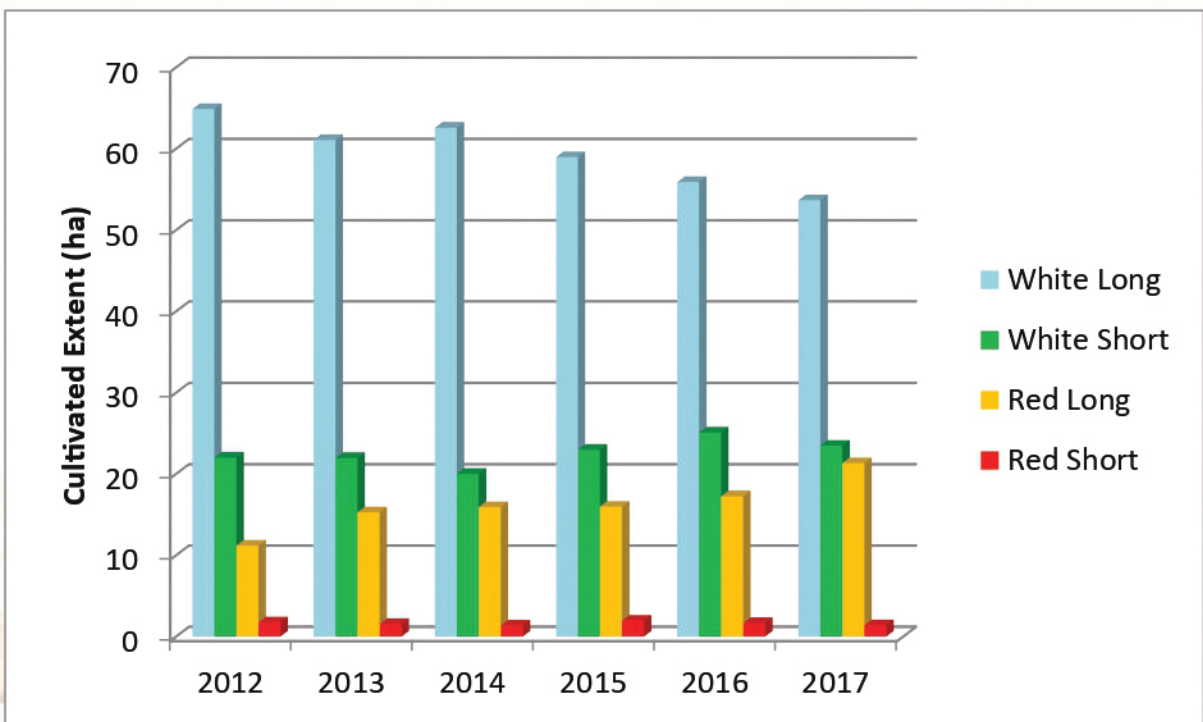


Figure 11: Distribution of rice varieties by grain type and colour (2012 – 2017)

Table 4: New rice varieties released by RRDI after 2005

Year of release	Variety	Maturity group (months)	Grain Size and Colour	Area of Recommendation
2005	Bg 250	2½	White-IB	Droughts escape and flood prone areas.
2005	At 307	3	White-IB	General cultivation
2005	Bg 406	4 - 4½	Red -IB	Northern region
2005	Bg 407H	4 - 4½	White-IB	High potential areas (1 st hybrid variety)
2005	Bg 454	4 - 4½	White-IB	General cultivation with assured supply of water
2006	Bw 364	3½	White-IB	Wet zone- tolerant to iron toxicity
2008	Ld 365	3½	Red-SR	Wet zone
2008	At 308	3	White-SR	General cultivation
2009	Bg 366	3½	White-IB	General cultivation
2010	Ld 408	4 - 4½	Red -IB	General cultivation
2011	Bw 367	3½	White-SR	General cultivation-tolerant to iron toxicity
2011	Ld 368	3½	Red-SR	Wet zone
2012	Bg 369	3½	White-LM	Salinity prone areas
2013	Bg 370	3½	White-SR	General cultivation
2013	Ld 371	3½	White-SR	Wet zone
2013	Bw 372	3½	Red -IB	Wet zone-tolerant to iron toxicity
2013	At 309	3	White-LS	General cultivation-for rice based products
2014	At 373	3½	White-SR	General cultivation – <i>Ambalantota Suwanda Samba</i>
2014	Bg 251	2½	White-IB	Drought prone areas
2014	Bg 310	3	White-IB	General cultivation-salinity tolerant
2014	Bg 455	4½	Red -IB	Flood prone areas
2015	At 311	3	Red- LS	General cultivation - <i>Neeroga</i>
2016	Bg 252	2½	Red- SR	Drought prone areas
2016	Ld 253	2½	White-LS	General cultivation
2016	Bg 374	3½	White-IB	General cultivation

Long grain (Nadu) : LM (long Medium) , LS (Long Slender), IB (Intermediate Bold)
 Short grain (Samba) : SR (Short Round)

Message from Director RRDI....

Rice Research and Development Institute is the national center for the development and primary dissemination of rice technologies to improve quality of rice, the productivity and profitability of rice farming. In order to achieve the stated objective, a need of a sound database on rice variety distribution is of paramount importance.

RRDI has been in the process of estimating rice variety distribution in Sri Lanka for many decades in collaboration with Provincial and Inter-provincial Department of Agriculture and Mahaweli Authority of Sri Lanka.

This newsletter on rice variety distribution is widely used by scientists, students, academia and policy planners. I essentially appreciate the effort made by Socio Economics Division of Rice Research and Development Institute in producing this newsletter which has national importance.

Dr.D.M.J.B. Senanayake

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