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THE SUITABILITY OF TEA CLONES FOR THE DIFFERENT REGIONS

(This Circular cancels Circulars No. C 1 to C 13)

Continuous efforts by TRI to evolve clones have led to the release of several clones of the TRI 2000, 3000 and 4000 series. Of these TRI clones, more than 90 per cent are derived from a single plant designated as ASM 4/10. In addition to the above clones, under the guidance of the TRI, tea estates have also selected several clones and these are known as estate clones.

At present over 55 per cent of Sri Lanka's tea extent is under clones. The majority of the clones are TRI 2023, 2024, 2025, 2026 and 2027. This has led to a narrowing of the genetic base thereby making them vulnerable to pests, diseases, drought and other hazards.

Wherever possible, the following should be adopted in selecting planting material:

- (i) Select at least 5 - 6 clones depending on their suitability for the particular location and extent, provided that not more than 10 per cent of the estate is under a single clone.
- (ii) Clonal suitability can be tested by small-scale planting (at least 200 bushes).

The recommended clones given in Table 1 and their characteristics in Tables 2a and 2b will help in the selection of clones for planting.

Note: *Though not listed in this Circular, clones performing well in a particular locality could be considered for planting in that locality.*

Table 1 – Recommended clones for planting in different climatic regions

Region	Recommended clones				No. of clones
	TRI 4000 Series	TRI 3000 Series	TRI 2000 Series & others	Estate clones	
Up-Country	4006** 4034 4052 4053 4067 4071 4078 4079 4085	3013 3015** 3016** 3018 3019 3020*** 3072*** 3073***	2023** 2025 2043* 62/5 777	CY 9 DN DT 1 K 145 N 2 NAY 3 PK 2+	29
<i>Sub total</i>	9	8	5	7	
Mid-Country wet zone	4006** 4042 4046 4047 4053 4071	3013 3014 3015** 3017** 3018 3019 3020*** 3025	2023 2024 2025 2026 2027 2043* 62/5 62/9	CH 13 CY 9 DG 7 DG 39 DN K 145 N 2	29
<i>Sub total</i>	6	8	8	7	
Mid-Country semi-dry zone (Uva)	4042 4046 4052 4053 4071 4078	3013 3015** 3017** 3018 3019 3022 3035	2022 2023** 2024 2025 2026 2027 2043* 62/5 62/9	DG 7 DG 39 DN K 145 KEN 16/3 NAY 3	28
<i>Sub total</i>	6	7	9	6	
Low-Country	4004 4006** 4014 4024 4042 4043 4047 4049 4052 4053 4054 4055 4059 4061	3014 3022 3025 3047 3051 3052 3055 3069	2022 2025 2026 2027 2043* 62/5 62/6 62/9	DG 7 DG 39 H 1/58 KP 204 S 106	35
<i>Sub total</i>	14	8	8	5	

Suitability criteria listed below are based on morphological characters and /or observations only

- * For production of silvery tip teas
- ** Suitable for high fertility regime
- *** Suitable for closer planting
- Suitable for infilling
- + Suitable for very high elevation (Nuwara Eliya)

Table 2a - Characteristics of recommended clones

Clones	Yield		Quality		Rooting		Drought Tolerance	
	High	Mode*	High	Mode*	High	Mode*	High	Mode*
TRI 4000 Series	4004, 4006 4014, 4024 4034, 4042 4043, 4046 4047, 4052 4053, 4054 4055, 4061 4071, 4078 4079, 4085	4049 4059 4067	4067 4079	4053 4078	4006, 4014 4024, 4042 4043, 4046 4047, 4049 4052, 4053 4054, 4059 4078, 4085	4055 4061 4067 4071 4079	4004, 4006 4014, 4042 4043, 4046 4047, 4049 4052, 4053 4054, 4055 4059, 4061 4067, 4071 4078, 4079 4085	4034
<i>Sub total</i>	<i>18</i>	<i>3</i>	<i>2</i>	<i>2</i>	<i>14</i>	<i>5</i>	<i>19</i>	<i>1</i>
TRI 3000 Series	3013, 3014 3015, 3016 3017, 3018 3019, 3020 3022, 3025 3051, 3052 3055, 3069	3035 3047 3072 3073	---	3014 3017 3018 3019 3022 3047 3052 3069	3013, 3014 3015, 3016 3017, 3018 3019, 3020 3022, 3025 3035, 3047 3051, 3052 3055, 3069 3072, 3073	---	3013, 3014 3019, 3020 3022, 3025 3035, 3047 3051, 3052 3055, 3072 3073	3015 3016 3017 3018 3069
<i>Sub total</i>	<i>14</i>	<i>4</i>	<i>---</i>	<i>8</i>	<i>18</i>	<i>---</i>	<i>13</i>	<i>5</i>
TRI 2000 Series & others	2022, 2023 2024, 2025 2026, 2027 2043, 62/6 62/9	777 62/5	62/9 777	2024 2025 2027 62/5 62/6	2022, 2023 2024, 2025 2026, 2043 62/5, 62/6 62/9	777	2022 2025 2027 777	2026 2043 62/5 62/6 62/9
<i>Sub total</i>	<i>9</i>	<i>2</i>	<i>2</i>	<i>5</i>	<i>9</i>	<i>1</i>	<i>4</i>	<i>5</i>
Estate Clones	DT 1 DG 7 DG 39 KEN 16/3 H 1/58 PK 2 KP 204	DN N 2 NAY3 CY 9 K 145 CH 13 S 106	DT 1 DG7 N 2 S106 PK 2	DG 39 NAY 3 K 145	DT 1 DN DG 7 DG 39 N 2 NAY 3 CY 9 CH 13 KEN 16/3 H 1/58 KP 204	K 145 PK 2	DT 1 DN DG 7 DG 39 N 2 CY 9 H 1/58 S 106 KP 204	NAY 3 CH 13 PK 2
<i>Sub total</i>	<i>7</i>	<i>7</i>	<i>5</i>	<i>3</i>	<i>11</i>	<i>2</i>	<i>9</i>	<i>3</i>
<i>Total</i>	<i>48</i>	<i>16</i>	<i>9</i>	<i>18</i>	<i>52</i>	<i>8</i>	<i>45</i>	<i>14</i>

Mode* - Moderate

Table 2b - Characteristics of recommended clones

Clones	Tolerance Ratings											
	Nematodes				Stem canker		Shot-hole borer		Low-country live wood termite		Blister blight	
	<i>Pratylenchus Loosi</i>		<i>Radopholus Similis</i>		High	Mode*	High	Mode*	High	Mode*	High	Mode*
	High	Mode*	High	Mode*								
TRI 4000 Series	4004 4052 4053 4055	4006 4014 4024 4078 4079	4006 4047 4054 4071 4079	4024 4052 4055 4078	4004 4047 4049 4052 4053 4054 4059 4061	4006 4034 4055 4067	4004 4024 4034 4042 4059 4043 4046 4067 4047 4054 4085	4006 4014 4055 4061 4067 4078	4004 4042 4047 4049 4052 4078 4085	4053 4054 4059 4061 4071	4052 4067	4053 4071 4078 4079 4085
<i>Sub total</i>	4	5	5	4	8	4	9	7	7	5	2	5
TRI 3000 Series	3014 3016 3017 3019 3020 3069 3072	3013 3018 3022 3047 3055	---	---	3013 3069	3025 3051 3055	3014 3055	3017 3018 3025 3047 3069 3072 3073	3025 3047 3055 3069	3014 3018 3052	3072 3073	3016 3017 3018 3019 3022 3025 3035 3047 3052
<i>Sub total</i>	7	5	--	--	2	3	2	7	4	3	2	9
TRI 2000 Series & others	62/5 62/9	2025	2023 2024 2027	62/5	2022 2025 2027 62/5 62/6 777	62/9	2023 62/6 777	2027 2043	62/6 62/9	2022 2025 2027 62/5	2043	2025 2026 2027
<i>Sub total</i>	2	1	3	1	6	1	3	2	2	4	1	3
Estate Clones	DT 1 DN N 2 K 145 PK 2	DG 7 NAY 3 CY 9 KEN16/3	---	DN DG 7 N 2 CY 9 CH 13	DG 7 DG 39 H 1/58 S 106 PK 2 KP 204	DN N 2 CY 9 K 145	DN DG 39 N 2 NAY 3 H 1/58	CY 9 K 145 CH 13 KP 204	KEN16/3 KP 204	DG 7 DG 39 H 1/58 S 106	DT 1 N 2 NAY 3 KEN16/3 PK 2	DG 7 DG 39 CY 9 K 145 CH 13 H 1/58
<i>Sub total</i>	5	4	--	5	6	4	5	4	2	4	5	6
<i>Total</i>	18	15	8	10	22	12	19	20	15	16	10	23

Mode* - Moderate

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