

‘Sea Foam Pink’ Caladium

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Caladiums (*Caladium* × *hortulanum* Birdsey, Araceae Juss.) are often grown in containers or planted in the landscape as accent and border plants (Deng, 2018; Evans et al., 1992). They are valued for their variable-shaped, bright foliage. The majority of commercial caladium plants sold at retail are produced by forcing tubers in containers. Florida field growers produce essentially all the caladium tubers used in the United States and some 40 countries in the world for the production of pot plants and direct planting in the landscapes. Commercial caladium cultivars are often grouped into eight categories based on their leaf type and impact color [fancy white, red, pink, and novelty, and lance (or strap) white, red, pink, and novelty] (Bell et al., 1998). One of the cultivars in the fancy novelty group is ‘Miss Muffet’. The leaves of this cultivar are characterized by a yellow (lemon or chartreuse) leaf background color, white main veins, and numerous burgundy spots. It ranked 40th among caladium cultivars grown by the Florida caladium industry in 1979 (Wilfret and Hurner, 1982). In the past 2 decades, this cultivar gained popularity. It ranked 19th in 2003 (Deng et al., 2008b), 16th in 2008, and 13th in 2013 (Z. Deng, unpublished data). The acreage in Florida planted for ‘Miss Muffet’ tuber production has been between 22 and 26 acres (Deng et al., 2008b; Z. Deng, unpublished data).

In caladium, the yellow leaf background color is controlled by a single dominant allele (*LEM*) and is tightly linked (≈ 3 to 4 cM) to

the nonspotting allele (*s*) (Cao et al., 2017). The yellow leaf background color allele is expected to be tightly linked to the non-blotching allele (*b*) (Deng and Harbaugh, 2009). These genetic linkages may have led to the scarcity of commercial cultivars with yellow leaf background color and leaf spots or blotches.

‘Sea Foam Pink’ is a new addition to the fancy novelty caladium cultivar group, particularly to the ‘Miss Muffet’ subgroup. Leaves of ‘Sea Foam Pink’ are characterized by a novel coloration pattern: light yellow background color and multiple pink blotches (Figs. 1–3).

Origin

‘Sea Foam Pink’ originated from a cross between ‘Carolyn Whorton’ and ‘Miss Muffet’ that was made in Bradenton, FL, in Summer 2005 to investigate the mode of inheritance for their leaf spots (in ‘Miss Muffet’) and blotches (in ‘Carolyn Whorton’) (Deng and Harbaugh, 2009; Deng et al., 2008a). Both ‘Carolyn Whorton’ and ‘Miss Muffet’ are nonpatented commercial cultivars. ‘Miss Muffet’ was developed by Frank M. Joyner (T. Bates, personal communication) in Tampa, FL, probably in the 1940s or early 1950s (Carnathan, 2012). The ancestry of ‘Carolyn Whorton’ and ‘Miss Muffet’ is unknown. ‘Sea Foam Pink’ was initially selected in late 2006 as Breeding Line 5408. First asexual propagation of ‘Sea Foam Pink’ occurred in Balm, FL, in Spring 2007; since then, it has been asexually propagated through tuber division for 10 generations. Plant, foliar and growth characteristics of ‘Sea Foam Pink’ have been stable and consistent during asexual propagation.

Description

Description of color for plant parts was based on comparison with the Royal Horticultural Society Color Chart [Royal Horticultural Society (RHS), 1986]. Plants used for color descriptions were grown from de-eyed, Jumbo-sized (or equivalent) tubers (two per container) in 20.3-cm containers in a shaded greenhouse with $\approx 30\%$ light exclusion. The containers were filled with the commercial potting mix Fafard 3B Mix/

Metro-Mix 830 Mix (Sun Gro Horticulture Inc., Agawam, MA) amended with the commercial controlled-release fertilizer Osmocote (15N–3.9P–10K, 5 to 6 months; Scotts Co., Marysville, OH) at the rate of 4.3 kg·m⁻³.

Plants of ‘Sea Foam Pink’ are ≈ 43 cm tall and 63 cm wide and have upright, outwardly arching leaves. Mature leaves have an average size of 31 cm (length) × 20 cm (width). Leaves are peltate, sagittate-cordate, with yellow-green (RHS 144A and 144B) to green (RHS 143C) palmate-pinnate venation. The upper surface is yellow-green (RHS 144B), with a narrow margin bordering the entire leaf; the basal leaf valley and the basal notch at the end of the valley are red-purple (RHS 60A). Primary veins are yellow-green (RHS 144B). Red-purple (RHS 59C and 59D) blotches, of variable sizes, are located between primary veins. Occasionally some small dark green (RHS 137A or 139A) blotches and small white (RHS 155D) spots may appear on the leaf surface. The abaxial surface is grayed-green (RHS 191A), with grayed-green (RHS 194D and 195D) mid and primary veins. Grayed-purple blotches (RHS 186B) are scattered between primary veins. Mature petioles are 4 to 8 mm in diameter and red (RHS 49A) near the top, and 8 to 14 mm in diameter and brown (RHS 200A) near the base. Grayed-red (RHS 182A) streaks run throughout the petioles. Tuber surfaces are brown (RHS 200A and 200B), with the cortical area in yellow (RHS 6B or 6C).

Tuber Yield Potential

‘Sea Foam Pink’ was evaluated for tuber production and plant performance in Balm, FL, in 2015 and 2017. The soil was EauGallie fine sand with $\approx 1\%$ organic matter and a pH between 6.2 and 7.4. Caladium plants were grown in the field using a white plastic-mulched raised-bed system. In the 2015 season, ground beds (81 cm wide, 20 cm high) were fumigated on 23 Feb. with Pic-Clor 60 (39.0% 1,3-dichloropropene, 59.6% chloropicrin) at 448 kg·ha⁻¹. Caladium seed tubers were treated in hot water (50 °C) for 30 min. Seed tuber pieces ($\approx 2.5 \times 2.5 \times 2.5$ cm)



Fig. 1. A typical plant of ‘Sea Foam Pink’ (≈ 55 -day-old) caladium forced from four No. 1-sized (3.8 to 6.4 cm diameter) tubers in a 20.3-cm container. Tubers were planted on 4 May 2018, the plant was grown in a greenhouse with $\approx 30\%$ light exclusion, and the photo was taken on 26 June 2018.

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were dusted with a biological fungicide RootShield Plus WP (BioWorks, Victor, NY) and planted manually on 14 Apr. with ≈ 25.4 cm between-row spacing and ≈ 15.2 cm in-row spacing. Irrigation was through a seepage system (Geraldson et al., 1965), which maintained a relatively consistent water table below the covered beds. About 7 g of Osmocote (15N–2.6P–10K, 5 to 6 months) was applied to each plant on 30 April and again on 28 July. New crop tubers were dug and washed on 7–8 Dec. and air-dried for ≈ 30 d inside a greenhouse. Dried tubers from each experimental field plot were



Fig. 2. A typical plant of ‘Miss Muffet’ (left) and ‘Sea Foam Pink’ (right) caladium forced from four No.1-sized (3.8 to 6.4 cm diameter) tubers in a 20.3-cm container. Tubers were planted on 4 May 2018, the plant was grown in a greenhouse with $\approx 30\%$ light exclusion, and the photo was taken on 26 June 2018.



Fig. 3. Typical leaves of ‘Sea Foam Pink’ caladium plants grown in the open field in full sun in Lake Placid, FL, in mid-Sept. 2015.

weighed, graded, and counted in 11 Jan. 2016, as described by Deng and Harbaugh (2006). Tuber grading was by the maximum diameter: Super Mammoth (greater than 11.4 cm), Mammoth (8.9 to 11.4 cm), Jumbo (6.4 to 8.9 cm), No.1 (3.8 to 6.4 cm), and No. 2 (2.5 to 3.8 cm). Tuber grades and counts were converted into a production index to show the relative economic value of the harvested tubers per field plot: Production index = $8n$ (Super Mammoth) + $6n$ (Mammoth) + $4n$ (Jumbo) + $2n$ (No.1) + $1n$ (No.2), where n = number of tubers in the grade. The relative values assigned to the five tuber grades in calculating production index were based on the relative market prices provided by Florida caladium tuber producers.

For the 2017 evaluation, beds were fumigated on 24 Feb. with Pic-Clor 60 at $448 \text{ kg}\cdot\text{ha}^{-1}$. Caladium seed pieces were planted on 25 May at ≈ 15 -cm spacing between rows and in rows. Caladium plants each were fertilized with ≈ 15 g of Osmocote (15N–2.6P–10K, 5 to 6 months) on 26 June. Tubers were dug and washed in early Jan. 2018, dried in the greenhouse for ≈ 45 d, and weighed, graded, and counted on 9 Mar. 2018, using the same protocol that was used in 2015.

In both seasons, field plots were arranged in a randomized complete block design with three replicates. The plot size was 1.2 m^2 and was planted with 30 caladium propagules (tuber pieces). The commercial cultivar ‘Miss Muffet’, the paternal parent of and the commercial cultivar most similar to ‘Sea Foam Pink’, was included in the field as a check to assess the tuber yield and plant performance of ‘Sea Foam Pink’. In the 2015 season, ‘Gingerland’ was also included in the trial. Analysis of variance was conducted using the JMP Pro 12 program, followed by means comparisons using the Tukey-Kramer HSD test (SAS Institute, Inc., Cary, NC, 2016).

The number, weight, and production index of marketable tubers (Grade #2 to Super Mammoth) produced by ‘Sea Foam Pink’ in 2015 was 35.0, 3.67 kg, and 110.7, respectively, which were not significantly different from those of ‘Miss Muffet’ (Table 1). ‘Sea Foam Pink’ produced heavier (and larger) tubers than ‘Gingerland’ (3.67 kg vs. 1.71 kg), resulting in a greater production index

(110.7 vs. 76.0). In the 2017 season, caladium seed tubers were planted ≈ 6 weeks later than they were in the 2015 season, and plants had a shorter (≈ 6 weeks) growing season. Hurricane ‘Irma’, which occurred in mid-Sept. 2017, caused considerable damage to plants and leaves. Tuber weight in the 2017 season for both ‘Sea Foam Pink’ and ‘Miss Muffet’ was $\approx 50\%$ lower than the tuber weight in the 2015 season. ‘Sea Foam Pink’ and ‘Miss Muffet’ did not show significant differences in tuber weight, marketable number, and production index in the 2017 season (Table 1). As for tuber grade distribution, ‘Sea Foam Pink’ produced a lower percentage of Mammoth grade tubers and a higher percentage of #2 Grade than ‘Miss Muffet’ in the 2017 season. The two cultivars did not show significant differences in tuber grade distribution in the 2015 season (Table 1).

Container Trials

The suitability of ‘Sea Foam Pink’ for container plant production was evaluated by forcing tubers in 11.4-cm containers (diameter) in Spring 2018 following the protocol of Harbaugh and Tjia (1985). Number 1-sized tubers were planted on 2 May in the commercial potting mix Fafard 3B Mix/Metro-Mix 830 Mix (Sun Gro Horticulture) amended with Osmocote fertilizer (15N–3.9P–10K, 5 to 6 months) at $4.3 \text{ kg}\cdot\text{m}^{-3}$; plants were grown in a greenhouse with $\approx 30\%$ light exclusion. Temperatures in the greenhouse ranged from $25 \text{ }^\circ\text{C}$ (night) to $33 \text{ }^\circ\text{C}$ (day). Potted plants were arranged on metal benches, with a pot-to-pot spacing of 0.4 m, in the greenhouse in a randomized complete block design with six replicates. Plant height, plant width, number of leaves, and foliar characteristics were recorded in early July 2018, ≈ 8 weeks after planting. Quality of the potted caladium plants was rated on a scale of 1 to 5, with 1 = very poor, unattractive, totally unacceptable as potted plants with few leaves, and 5 = very attractive, full plants with a symmetrical shape, an appropriate height, and many bright, colorful leaves. Two commercial cultivars (‘Miss Muffet’ and ‘Gingerland’) were included as

Table 1. Tuber weight, marketable number, production index, and grade distribution of ‘Sea Foam Pink’, ‘Miss Muffet’, and ‘Gingerland’ (checks) caladiums in experimental field plots in 2015 and 2017. Values presented are means of three plots with 30 propagules planted in a plot of 1.2 m^2 .

Cultivars	Tuber			Tuber grade distribution (%)				
	Wt (kg)	Marketable (no.)	Production index ²	Super-mammoth	Mammoth	Jumbo	No. 1	No. 2
				2015				
Sea Foam Pink	3.67 a ^y	35.0	110.7 a		5.0	55.2 a	26.7 b	13.1 b
Miss Muffet	3.41 a	33.3	110.3 a		14.6	43.8 ab	28.6 b	13.0 b
Gingerland	1.71 b	35.7	76.0 b		0.0	19.5 b	54.3 a	26.2 a
P value	0.011	0.678	0.007		0.105	0.030	0.006	0.030
				2017				
Sea Foam Pink	1.75	31.3	71.3	0.0	4.0 b	18.9	49.9	27.2 a
Miss Muffet	1.94	35.3	116.3	1.0	13.1 a	40.1	35.3	10.5 b
P value	0.717	0.478	0.129	0.423	0.046	0.178	0.220	0.001

²The production index is an indicator of the economic value of tubers harvested per plot and is calculated as: N (No. 2s) + $2N$ (No. 1s) + $4N$ (Jumbos) + $6N$ (Mammoth) + $8N$ (Super Mammoth), where N = number of tubers in each grade. Tubers graded by maximum diameter; No. 2 (2.5 to 3.8 cm), No. 1 (3.8 to 6.4 cm), Jumbo (6.4 to 8.9 cm), Mammoth (8.9 to 11.4 cm), and Super Mammoth (>11.4 cm). Tuber grade distribution data were transformed using the arcsine function in Excel {asin [sqrt (tuber grade distribution in percentage / 100)]}.

^yMean values with the same letters within columns by year are not significantly different by the Tukey-Kramer honest significant difference test at $P < 0.05$.

Table 2. Plant height (cm) and width (cm), leaf number, length (cm) and width (cm), number of blooms (inflorescences), and plant quality of 'Sea Foam Pink', 'Miss Muffet', and 'Gingerland' (checks) caladiums grown in small containers. No. 1 tubers were planted in 11.4-cm containers (one tuber per container) and grown in a shaded glasshouse in Balm, FL, in 2018. Values represent the means of six plants produced from intact or de-eyed No. 1 (3.8 to 6.4 cm in diameter) tubers planted individually per container.

Cultivar	Plant ht (cm)		Plant width (cm)		Leaves (no.)		Leaf length (cm)		Leaf width (cm)		Blooms (no.)		Quality rating ^z	
	Intact	De-eye	Intact	De-eye	Intact	De-eye	Intact	De-eye	Intact	De-eye	Intact	De-eye	Intact	De-eye
Sea Foam Pink	37.7	34.3 a ^y	46.9	42.2 a	9.5	10.3	25.5 a	23.0 a	15.2 a	14.8 a	0.2	0.0	3.5	3.7
Miss Muffet	28.8	27.3 b	37.3	34.0 b	14.5	13.8	18.0 b	16.6 b	11.8 b	10.6 b	0.5	0.2	4.2	4.0
Gingerland	28.7	32.0 ab	39.5	44.8 a	9.2	9.3	20.5 b	18.8 b	12.4 b	11.8 b	0.0	0.7	3.3	3.3
<i>P</i> value	0.119	0.025	0.171	0.010	0.341	0.107	0.003	0.003	0.013	0.009			0.421	0.513

^zQuality of the potted caladium plants was rated on a scale of 1 to 5, with 1 = very poor, unattractive, totally unacceptable as potted plants with few leaves, and 5 = very attractive, full plants with a symmetrical shape, an appropriate height, and many bright, colorful leaves.

^yMeans comparisons within column by the Tukey-Kramer honest significant difference test at $P < 0.05$.

Table 3. Plant performance and leaf color display ratings of 'Sea Foam Pink', 'Miss Muffet', and 'Gingerland' (checks) caladiums grown from 2.5-cm tuber propagules in ground beds in full sun in Balm, FL, in 2015 and 2017. Plant performance and leaf color rating values are means of three plots based on whole plot evaluation in each evaluation.

Cultivars	Plant performance rating ^z					Leaf color rating ^y				
	Aug. 2015	Sept. 2015	Oct. 2015	Aug. 2017	Oct. 2017	Aug. 2015	Sept. 2015	Oct. 2015	Aug. 2017	Oct. 2017
Sea Foam Pink	2.3	2.5 a ^x	3.5 a	2.5	4.0	3.5	3.2	3.5	3.2 a	3.2
Miss Muffet	2.3	2.6 a	2.3 b	2.3	3.5	4.0	3.0	3.3	2.0 b	3.0
Gingerland	2.2	1.7 b	1.8 b	— ^w	—	3.7	3.7	2.5	—	—
<i>P</i> value	0.836	0.003	0.004	0.423	0.225	0.549	0.269	0.069	0.020	0.423

^zPlants were rated on a scale of 1 to 5, with 1 being very poor, 3 fair and acceptable, and 5 being excellent in plant vigor and fullness.

^yLeaves were rated on a scale of 1 to 5, with 1 being very poor, 3 fair and acceptable, and 5 being excellent in leaf color display.

^wMean separation within columns by the Tukey-Kramer honest significant difference test at $P < 0.05$.

^vPlants were not evaluated and data were not available.

checks in the container trial. ANOVA and mean comparisons were conducted as described above.

Plants of 'Sea Foam Pink' from intact tubers appeared to be taller (≈ 9 cm) and wider (9 to 10 cm) and produced fewer leaves (≈ 5) than those of 'Miss Muffet' (Table 2). Leaves of 'Sea Foam Pink' were significantly longer (7–8 cm) and wider (3–4 cm) than leaves of 'Miss Muffet'. Compared with 'Gingerland', 'Sea Foam Pink' also appeared to be larger (≈ 9 cm taller and 7 cm wider) and produced larger leaves (5 cm longer and 4–5 cm wider). 'Sea Foam Pink' plants forced from intact tubers received a quality rating of 3.5, not significantly different from the quality rating given to 'Miss Muffet' or 'Gingerland' plants (Table 2).

'Sea Foam Pink' plants forced from de-eyed tubers had an average height of 34.3 cm and an average width of 42.2 cm and were significantly taller and wider than 'Miss Muffet'. 'Sea Foam Pink' leaves were again longer (6–7 cm) and wider (4–5 cm) than 'Miss Muffet' leaves. 'Sea Foam Pink' plants forced from de-eyed tubers received an average rating of 3.7, which is not significantly different from the ratings received by 'Miss Muffet' or 'Gingerland' plants.

Plant Performance in Open Fields

'Sea Foam Pink' was evaluated in 2015 and 2017 in the same field plots used for evaluating tuber production for plant growth, leaf color display, and sunburn tolerance. Growing conditions are described in the preceding section. A scale of 1 to 5 was used for rating plant growth, with 1 being very poor (few leaves and lack of vigor) and 5 being

Table 4. Sunburn tolerance rating of 'Sea Foam Pink' caladium and commercial cultivars 'Miss Muffet' and 'Gingerland' grown from 2.5-cm tuber propagules in ground beds in full sun in Balm, FL, in 2015 and 2017. Values presented are means of three plots based on whole plot evaluation in each evaluation.

Cultivars	Sunburn tolerance rating ^z				
	Aug. 2015	Sept. 2015	Oct. 2015	Aug. 2017	Oct. 2017
Sea Foam Pink	4.0	3.8	4.2	3.3	3.7
Miss Muffet	4.0	4.0	4.0	3.7	3.3
Gingerland	3.8	3.8	4.0	— ^y	—
<i>P</i> value	0.444	0.444	0.790	0.423	0.423

^zSunburn tolerance was rated on a scale of 1 to 5, with 1 being very poor, 3 fair and acceptable, and 5 being excellent without showing any signs of leaf burns and/or color bleaching.

^yPlants were not evaluated and data were unavailable.

excellent (full plants, numerous leaves). A scale of 1 to 5 was also used for rating leaf color display, with 1 being very poor (dull or bleached, lack of color display) and 5 being excellent (bright, very attractive). Sunburn tolerance was evaluated on a scale of 1 to 5, with 1 being very susceptible to sunburn (leaves having numerous sun-damaged areas or holes) and 5 being resistant to sunburn (no visible sun-damaged areas). Evaluations of plant growth, leaf color, and sunburn tolerance were done on 13 Aug., 4 Sept., and 15 Oct. 2015, and 25 Aug. and 13 Oct. 2017.

'Sea Foam Pink' did not show significant differences from 'Miss Muffet' in most of the evaluations (four out of five in 2015 and 2017), except that 'Sea Foam Pink' received a higher plant growth rating (Oct. 2015) or a higher leaf color display rating (Aug. 2017) in one of the five evaluations (Table 3). The sunburn tolerance rating of 'Sea Foam Pink' in 2015 and 2017 evaluations ranged from 3.3 to 4.2, not significantly different from the ratings received by 'Miss Muffet' (Table 4). These ratings indicate a moderate to good level of sunburn tolerance in 'Sea Foam Pink'.

Plant Performance in Garden Trials

Two garden trials, one in full sun and one under shade, were conducted in Summer 2018 to compare plant performance of 'Sea Foam Pink' with 'Miss Muffet'. Garden beds were mulched with black landscape cover. Two drip tapes were laid below the landscape cover to provide irrigation. For each cultivar, four Jumbo-sized intact tubers (6.4 to 8.9 cm in diameter) were planted into the beds on 12 June 2018, with a spacing of ≈ 1 m. Fifteen grams of the controlled release fertilizer Osmocote (15N–3.9P–10K, 5 to 6 months) were applied to each plant on 23 July. 'Miss Muffet' was included in the trials as a check. Data were taken on plant height, width, leaf number, leaf length and width on 23 July (≈ 6 weeks postplanting) and again on 21 Aug. (≈ 10 weeks postplanting and 4 weeks after fertilization). Plants were rated on a scale of 1 to 5 for plant growth and leaf color display, as described earlier.

'Sea Foam Pink' plants in the shaded garden bed were up to 9.5 cm taller than 'Miss Muffet' plants (Table 5). Leaves of 'Sea Foam Pink' were up to 5.3 cm longer and up to 5.1 cm wider than leaves of 'Miss

Table 5. Plant size, growth rating, and leaf size and color display rating of ‘Sea Foam Pink’ and ‘Miss Muffet’ caladiums in sun and shade trials in Balm, FL, in 2018. Data were taken 6 and 10 weeks after Jumbo-sized tubers were planted in the ground beds in full sun or inside a screenhouse (≈30% light exclusion). Values presented are mean values of four plants.

Cultivars	Plant						Leaf							
	Ht		Width		Rating ^a		Color rating ^b		Number		Length		Width	
	6 wk	10 wk	6 wk	10 wk	6 wk	10 wk	6 wk	10 wk	6 wk	10 wk	6 wk	10 wk	6 wk	10 wk
	<i>Shade</i>													
Sea Foam Pink	40.8	44.3 a*	64.9	70.3	4.0	4.5	3.5	3.8	39.0	57.0	26.3	25.7	18.5 a	17.3 a
Miss Muffet	33.1	34.8 b	59.3	64.7	3.0	3.8	3.3	4.5	37.0	43.0	21.0	22.0	13.4 b	14.3 b
<i>P</i> value	0.059	0.022	0.097	0.056	0.252	0.215	0.391	0.215	0.616	0.094	0.056	0.173	0.002	0.041
	<i>Full Sun</i>													
Sea Foam Pink	28.8 a	29.1	37.9	45.1	2.8	3.8	3.0	3.0 b	22.8	37.0 b	18.5 a	18.4	13.5 a	12.5
Miss Muffet	16.6 b	23.1	32.0	45.8	3.5	4.3	3.5	5.0 a	28.5	52.5 a	14.2 b	16.0	9.6 b	11.5
<i>P</i> value	0.005	0.100	0.087	0.851	0.215	0.182	0.495	0.000	0.157	0.034	0.020	0.230	0.047	0.424

^aPlants were rated on a scale of 1 to 5, with 1 being very poor, 3 fair and acceptable, and 5 being excellent in plant vigor and fullness.

^bLeaves were rated on a scale of 1 to 5, with 1 being very poor, 3 fair and acceptable, and 5 being excellent in leaf color display.

*Mean separation within columns under shade or in sun by the Tukey-Kramer honest significant difference test at $P < 0.05$.

Muffet’ (Table 5). ‘Sea Foam Pink’ and ‘Miss Muffet’ were not significantly different in plant width, growth rating, leaf color rating, or leaf number (Table 5).

In the full sun garden trial, ‘Sea Foam Pink’ plants were up to 12.2 cm taller than ‘Miss Muffet’; leaves of ‘Sea Foam Pink’ were up to 4.3 cm longer and up to 3.9 cm wider than ‘Miss Muffet’ (Table 5). ‘Sea Foam Pink’ produced fewer leaves (22.8 and 37.0 vs. 28.5 and 52.5), and its leaves received a lower color rating (3.0 vs. 3.5 to 5.0) than ‘Miss Muffet’ (Table 5).

In general, caladium plants grow more quickly, become larger, display brighter colors, and produce larger leaves in shady gardens than in sunny gardens. This is true with ‘Sea Foam Pink’. Its plants in the shady garden beds were 41% to 52% taller and 55% to 71% wider and produced 54% to 71% more leaves. Its leaves were ≈40% longer and wider than those in the full sun trial (Table 5). ‘Sea Foam Pink’ plants in the shade trial also received higher plant growth and leaf color display ratings than those in the sun trial.

Possible Susceptibility to Pythium Root Rot and Fusarium Tuber Rot

Pythium root rot and Fusarium tuber rot are major pre- and post-harvest diseases during commercial production of caladium tubers. They are caused by *Pythium myriotylum* and *Fusarium solani*, respectively. The majority of caladium cultivars in commercial production are susceptible to these diseases (Deng et al., 2005a, 2005b; Goktepe et al., 2007). ‘Sea Foam Pink’ was tested for susceptibility to Pythium root rot and Fusarium tuber rot in 2014. Preliminary results (data not shown) showed that this cultivar was susceptible to both diseases. This was expected as both parents of ‘Sea Foam Pink’ (‘Carolyn Whorton’ and ‘Miss Muffet’) were susceptible or highly susceptible to Fusarium tuber rot and Pythium root rot (Deng et al., 2005a, 2005b; Goktepe et al., 2007).

Recommendation

‘Sea Foam Pink’ is characterized by a unique combination of leaf characteristics, yellow leaf background color and pink blotches, making it a unique new addition

to the fancy novelty caladium cultivar group. Its tuber yield potential and grade distribution are expected to be similar to those of ‘Miss Muffet’. Considering its possible susceptibility to Pythium root rot and Fusarium tuber rot, disease management will be important for growing of ‘Sea Foam Pink’ in caladium fields for production of caladium tubers. Standard postharvest treatments are recommended for newly harvested tubers (Harbaugh and Tjia, 1985), and preplant hot-water treatment of seed tubers (Rhodes, 1964) is also strongly encouraged.

‘Sea Foam Pink’ can produce quality pot plants with or without de-eyeing. Grown side by side, container plants of ‘Sea Foam Pink’ are taller and wider than those of ‘Miss Muffet’; leaves of ‘Sea Foam Pink’ are longer and wider than ‘Miss Muffet’ leaves. For these reasons, larger pot-to-pot spacing may be needed for production of high-quality ‘Sea Foam Pink’ plants in containers. ‘Sea Foam Pink’ can perform well in full sun but does much better under partial shade under garden conditions.

Availability

‘Sea Foam Pink’ was released under the name ‘UF-R1409’. Commercial production of this cultivar is required to have a licensing agreement with the Florida Foundation Seed Producers, Inc., P.O. Box 309, Greenwood, FL 32443. Information on tuber availability and licensing agreements can be obtained from the Florida Foundation Seed Producers, Inc. (<http://www.ffsp.net/>).

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