

Table 4. Disease pest ratings^U for *Petunia x hybrida* Hort. Vilm.-Andr. (petunia or garden petunia) grown in Bradenton, FL, grouped within classes according to cultivar plant type, and flower type and color. Seeds were sown 7 Feb. and 14 Feb., and plugs transplanted to ground beds 20 March.

Cultivar	Arthropod - Flower				Disease - Flower				Overall Flower Pest Rating ^V	Overall Fol./Flow. Pest Rating ^W	Dead Plants ^X	Adjusted Overall Performance ^Y
	20/27 Apr.	20 May	7 June	Avg.	20/27 Apr.	20 May	7 June	Avg.				
<i>Floribunda – double, pink class</i>												
Pink Double Madness	7.0 ^Z	6.3	6.3	6.5	7.0	6.0	6.3	6.4	6.4	6.2	0.0	5.2
Satin Pink Double Madness	7.0	6.3	6.5	6.6	6.8	6.0	6.3	6.3	6.3	6.4	0.3	5.2
Sheer Double Madness Improved	7.0 ^{NS}	6.5 ^{NS}	5.3 ^{NS}	6.3 ^{NS}	6.5 ^{NS}	5.8 ^{NS}	6.5 ^{NS}	6.2 ^{NS}	6.2 ^{NS}	6.2 ^{NS}	0.3	5.0 ^{NS}

Best of class: Pink Double Madness – Ball Seed.

Floribunda – single; purple, dark red violet /white class

Celebrity Burgundy Frost	7.0	6.3	6.0	6.4	6.3	6.8	3.3	5.5	6.0	6.2	2.0	4.8
--------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Celebrity Burgundy Frost, Bodger Seeds, uncontested.

Floribunda – single; rose class

^U Flower pest ratings for arthropods and disease on a 1 to 7 scale: 7- all flowers were free from arthropod feeding scars; 4- average flower condition, minimal pest damage to tissue, but flower was still acceptable; 1 - flowers severely infested and damage unacceptable, making flowers undesirable.

^V Overall flower pest rating = (average arthropod flower+ disease flower ratings)/2.

^W Overall foliage/flower pest rating = [overall foliage (Fo.) pest rating (Table 3) + overall flower (Fl.) pest rating (Table 4)]/2.

^X This is the average number of dead plants/plot for each cultivar (dp). The value is used to calculate the adjusted overall performance.

^Y $OP = (Q + P)/2$, where Q = overall foliage/flower ratings (Table 2) and P = overall pest ratings (Table 4). $OP_{adj} = (Q + P_{adj})/2$, where $P_{adj} = P - (dp \times dpf)$; and where dp = number of dead plants/plot and dpf = dead plant factor. The value dpf = number plants per plot/highest rating possible. Petunia dpf was 5 plants/7, or 0.71. Cultivars ≥ 6.0 were considered outstanding, 5.5 to 5.9 as very good performers, ≤ 5.4 to 5.0 as good, and 4.0– 4.9 as fair. There were no poor performers. The highest value (whether or not it is significantly higher than another) is selected as best of class. Best of class may have an overall performance that is fair to poor for a class by our standards, indicating that the class does not do well, based on cultivars trialed, and the selected cultivar is currently the best performer. Best of class is used as the standard by which all future entries will be compared, until a better performer replaces it.

^Z Mean separation within classes by LSD, $P < 0.05$.

Celebrity Rose	6.8	6.0	5.8	6.2	6.0	5.3	4.5	5.3	5.7	6.1	0.8	5.3
----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Table 4. Continued.

Cultivar	Arthropod - Flower				Disease - Flower				Overall Flower Pest Rating	Overall Fol./Flow. Pest Rating	Dead Plants	Adjusted Overall Performance
	20/27 Apr.	20 May	7 June	Avg.	20/27 Apr.	20 May	7 June	Avg.				

Best of class: Celebrity Rose – Bodger Seeds.

Grandiflora – single; mixes class

Wild Rose Mix	6.8	4.5	6.3	5.8	6.8	5.3	5.3	5.8	5.8	6.2	0.0	5.5
---------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Wild Rose Mix – PanAmerican Seed, uncontested.

Grandiflora – single; purple, dark red violet class

Madness Magenta	7.0	6.0	5.0	6.0	6.3	5.5	5.0	5.6	5.8	6.1 b	0.5	5.3
Ultra Violet	7.0 ^{NS}	6.8 ^{NS}	5.8 ^{NS}	6.5 ^{NS}	6.8 ^{NS}	5.3 ^{NS}	5.8 ^{NS}	5.9 ^{NS}	6.2 ^{NS}	6.4 a	0.8 ^{NS}	5.4 ^{NS}

Best of class: Ultra Violet – Goldsmith Seeds.

Grandiflora – single; white/ye//ow class

Aladdin Yellow	7.0	3.5	4.8	5.1	7.0	5.0	7.0	6.3	5.7	5.9	1.0	5.1
----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Aladdin Yellow, Bodger Seeds, uncontested.

Milliflora – single; purple, light blue violet class

Fantasy Light Lavender	6.5	7.0	7.0	6.9	4.8	4.8	4.3	4.6	5.7	6.2	0.0	5.7
------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Fantasy Light Lavender – Goldsmith Seeds, uncontested.

Milliflora – single; rose class

Fantasy Rose	6.8	7.0	7.0	6.9	6.0	4.0	3.5	4.5	5.7	6.2	0.0	5.3
--------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Fantasy Rose – Goldsmith Seeds, uncontested.

Table 4. Continued.

Cultivar	Arthropod - Flower				Disease - Flower				Overall Flower Pest Rating	Overall Fol./Flow. Pest Rating	Dead Plants	Adjusted Overall Performance
	20/27 Apr.	20 May	7 June	Avg.	20/27 Apr.	20 May	7 June	Avg.				
<i>Multiflora – single; pink class</i>												
Symphony Pink	7.0	6.0	7.0	6.7	6.8	6.0	6.3	6.3	6.5	6.5	0.5	5.6
Best of class: Symphony Pink, American Takii, uncontested.												
<i>Multiflora – single; purple, dark blue violet class</i>												
Symphony Purple	6.3	6.5	6.0	6.3 b	6.3	4.0	5.5	5.2 b	5.7 b	5.9 b	0.8	5.3
Symphony Violet	6.0 ^{NS}	6.5 ^{NS}	7.0 ^{NS}	6.8 a	6.5	6.8	5.8	6.3 a	6.4 a	6.4 a	0.0 ^{NS}	5.5 ^{NS}
Best of class: Symphony Violet, American Takii.												
<i>Multiflora – single; red class</i>												
Symphony Scarlet	6.3	7.0	6.5	6.6	6.5	6.0	6.5	6.3	6.5	6.4	0.8	5.1
Best of class: Symphony Scarlet, American Takii, uncontested.												
<i>Multiflora – single; rose class class</i>												
Symphony Deep Rose	6.3	6.5	6.0	6.2	6.0	5.3	5.0	5.4	5.8	6.0	0.0	5.4
Symphony Rose	6.3 ^{NS}	5.5 ^{NS}	6.0 ^{NS}	5.9 ^{NS}	6.5 ^{NS}	4.5 ^{NS}	5.8 ^{NS}	5.6 ^{NS}	5.8 ^{NS}	6.1 ^{NS}	0.0 ^{NS}	5.7 ^{NS}
Best of class: Symphony Rose, American Takii.												
<i>Multiflora – single; salmon class</i>												
Symphony Salmon	6.8	6.8	7.0	6.8	6.0	5.8	5.8	5.9	6.3	6.4	0.0	5.6
Best of class: Symphony Salmon – American Takii, uncontested.												
<i>Multiflora – single; white class</i>												

Symphony White Table 4. Continued.	7.0	6.5	7.0	6.8	5.8	4.0	5.8	5.2	6.0	6.2	0.5	5.5
---------------------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Cultivar	Arthropod - Flower				Disease - Flower				Overall Flower Pest Rating	Overall Fol./Flow. Pest Rating	Dead Plants	Adjusted Overall Performance
	20/27 Apr.	20 May	7 June	Avg.	20/27 Apr.	20 May	7 June	Avg.				

Best of class: Symphony White – American Takii, uncontested.

Spreading – blue class

Ramblin' Deep Blue	7.0	6.0	6.3	6.5	7.0	6.8	6.8	6.8	6.6	6.0	1.3	4.8
--------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Ramblin' Deep Blue – Goldsmith Seeds, uncontested.

Spreading – pink class

Avalanche Pink	6.5	7.0 a	6.3	6.6 a	6.5 a	5.8	7.0	6.4 b	6.5 a	6.3	1.3	5.2 b
Ramblin' Shades 'O Pink	6.3	5.8 b	5.8	5.9 b	5.3 b	5.8	6.5	5.9 c	5.9 b	6.2	0.0	5.8 a
Wave Pink experimental 99WP5	7.0 ^{NS}	6.8 a	6.5 ^{NS}	6.8 a	7.0 a	6.0 ^{NS}	7.0 ^{NS}	6.7 a	6.7 a	6.7 ^{NS}	0.0 ^{NS}	5.7 a

Best of class: Ramblin' Shades 'O Pink – Goldsmith Seeds.

Spreading – dark, blue violet class

Avalanche Lavender	7.0	6.3	6.3	6.5	6.3	5.5	6.0	5.9	6.2	6.3	0.3	5.8
Wave Lavender	7.0 ^{NS}	5.8 ^{NS}	6.0 ^{NS}	6.2 ^{NS}	6.3 ^{NS}	5.8 ^{NS}	6.0 ^{NS}	6.0 ^{NS}	6.1 ^{NS}	6.4 ^{NS}	0.0 ^{NS}	5.8 ^{NS}

Best of class: Avalanche Lavender – Bodger Seeds.

Spreading – light, blue violet class

Avalanche Lilac	6.8	5.8	7.0	6.5	7.0	7.0	7.0	7.0	6.7	6.5	0.0	5.9
-----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Avalanche Lilac – Bodger Seeds, uncontested.

Spreading – red class

Avalanche Cherry	7.0	5.5	6.3	6.3	6.0	5.3	5.5	5.6	5.9	6.2	0.5	5.4
------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Avalanche Red	6.8 ^{NS}	6.0 ^{NS}	6.3 ^{NS}	6.3 ^{NS}	6.8 ^{NS}	6.3 ^{NS}	5.0 ^{NS}	6.0 ^{NS}	6.2 ^{NS}	6.2 ^{NS}	0.0 ^{NS}	5.2 ^{NS}
---------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------	-------------------

Table 4. Continued.

Cultivar	Arthropod - Flower				Disease - Flower				Overall Flower Pest Rating	Overall Fol./Flow. Pest Rating	Dead Plants	Adjusted Overall Performance
	20/27 Apr.	20 May	7 June	Avg.	20/27 Apr.	20 May	7 June	Avg.				

Best of class: Avalanche Cherry – Bodger Seeds.

Spreading – salmon class

Avalanche Salmon Shades	7.0	5.8	6.5	6.4	6.5	7.0 a	7.0	6.9 a	6.6 a	6.3	0.0	5.9
Ramblin' Peach Glo	6.8 ^{NS}	6.3 ^{NS}	5.3 ^{NS}	6.1 ^{NS}	6.3 ^{NS}	6.0 b	6.5 ^{NS}	6.2 b	6.2 b	6.2 ^{NS}	0.0 ^{NS}	5.6 ^{NS}

Best of class: Avalanche Salmon Shades – Bodger Seeds.

Spreading – white class

Avalanche White	7.0	6.3	7.0	6.8	4.5	6.0	4.5	5.0	5.9	5.9	1.5	5.1
-----------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Avalanche White – Bodger Seeds, uncontested.

Tall Spreading – light purple, blue violet class

Tidal Wave Silver	7.0	6.3	6.5	6.6	6.3	6.0	6.5	6.2	6.4	6.5	0.0	6.0
-------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Tidal Wave Silver – PanAmerican Seed, uncontested.

Tall Spreading – dark purple, red violet class

Kahuna Violet	6.3	6.5	6.3	6.3	6.0	6.0	6.3	6.1	6.2	6.3	0.0	6.0 a
Ramblin' Burgundy Chrome	6.8 ^{NS}	6.3 ^{NS}	6.0 ^{NS}	6.3 ^{NS}	6.3 ^{NS}	6.0 ^{NS}	4.5 ^{NS}	5.6 ^{NS}	5.9 ^{NS}	6.0 ^{NS}	0.0 ^{NS}	5.5 b

Best of class: Kahuna Violet – Syngenta Seeds.

Tall Spreading – white class

Kahuna White	7.0	6.3	6.8	6.7	6.0	6.3	7.0	6.4	6.6	6.6	0.0	6.4
--------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best of class: Kahuna White, Syngenta Seeds, uncontested.