



perennials



Phlox 'Shortwood' (left) and Hemerocallis 'Lady Lucille' (right) are among the perennials currently being trialed at MSU.

I wonder if all growers and gardeners share the habit of wishing they were raising plants in another region of the country; one that was: a) warmer than their region, b) cooler than their region, c) had more rainfall than their region, d) had less rainfall than their region ... well, you get the picture.

This summer at Michigan State, my wishes for a cooler climate zone and more rain both came true, with a vengeance. It was the coolest and wettest summer in recent memory. Many plants, including the perennials in the trials, absolutely thrived on it. Others, with susceptibility to root pathogens, leaf spots, etc., languished. Some even died. I found myself wishing for just a little more heat and a little less rain.

This summer was also notable for an almost biblical scourge of Japanese beetles, which dined heartily on a few of the trial items. These beetles have been present in the past, but in far lower numbers, so we knew it was only a matter of time before we were going to feel the same kind of pressure that other parts of the country have experienced for years. This was that summer.

PERFORMANCE CRITERIA

At the risk of boring those of you who have read this report for the past three years, I'd like to review the purpose and rating system for the perennial trials at Michigan State. The trials were started in 1996 and modeled after the All America Selections trials for annuals also held at Michigan State. (In the summer of 2000, 1,000 different annuals were tested in the trial gardens.) The performance criteria for both trials are very similar; the criteria for perennials are listed in the sidebar on pg. 34.

Each item is tested for three years, with the rationale that a perennial needs time to establish itself before a truly fair measurement of its performance can be taken. Having said that, we measure all plants in their first year, with the exception of those that we grow from seed the same year. We let these seedlings establish themselves before beginning measurement the next growing season.

We try to grow the plants as a concerned homeowner would, with as little chemical intervention as possible. Also, even if an item naturally goes dormant or declines after flowering, I feel it is important that this

Michigan State University 2000 Perennial Trials

Producing a good perennial crop requires a substantial commitment of space, time and effort. The MSU perennial trials can help you select which of the new varieties excel, making the investment a little less risky.

By Ann Hancock

be made clear to the consumer. Though this cannot be judged as a "fault" in the plant, if the consumer doesn't know it's going to happen (i.e., not reported in the trial results because the evaluator understands it's a part of the life cycle and doesn't consider it important), they will judge the plant unfairly and never buy it again.

OUTSTANDING PERFORMERS FOR YEAR 2000

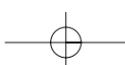
So with that background in place, let's move on to the review of this year's top performers. I've selected eight entries that scored higher than 4 on our rating system. (There were actually several more items that scored above 4, but were not included because the sample numbers were so low that I was not comfortable with a rating based on so few plants.)

Our system is set up on a scale of 1-5. A rating of 1 is not acceptable, 2 is below average, 3 is average, 4 is above average, and 5 is exceptional. This year, no plant received a score of 5, though two items approached it with scores of 4.6, which meant they were far above average. Sample size (n = "x") is noted next to the year's rating. I consider 16 to be an adequate sample size for rating purposes; due to consignment/production errors we have a number of items whose sample size is six plants. This does not remove them from consideration, but plants whose second or third year sample size numbers fall down to one or two have too few to rate, in my opinion.

Let's look at the outstanding performers for the year 2000. Scores are shown for past years if the plant is a second or third year entry.

Achillea 'Love Parade' (2000: 4.4, n=16)

This selection impressed me with its strong vigor. The planting was so dense that for weeks we did not realize that a mallard hen was sitting on a nest in the middle of the plot! The foliage was a handsome, deep, shiny green at the start of the season. The flower coverage at peak bloom was equally dense; the foliage was almost completely hidden. When the plant was deadheaded, it responded with a flush of smaller secondary blooms. Floral uniformity was excellent as well, and the flowers were very weatherproof; thunderstorms and wind did not affect them at all. The only factor that knocked this plant's score down was the decline in foliage quality after bloom. Leaf edges became





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discolored and eventually necrotic, and lower leaves on some of the plants died.

Campanula 'Chettle Charm'
(1998: 3.8; 1999: 4.6; 2000: 4.2, n=16)

'Chettle Charm' is in its last year of testing with us. In that time it has completely filled its

assigned plot and begun to encroach on its neighbors' space. Needless to say, it scored very high on vigor. Bloom this year was also fantastic. A forest of tall spikes, crowded with perfect white bells, created a breathtaking display. This year, I was able to observe the blue picotee around

the edge of each flower, a characteristic that did not seem as pronounced last year. The crowding it experienced led to some less-than-perfect leaf color ratings, as nutrient status and air circulation affected foliage quality. In addition, the plant continues flowering for an extended period of

time, creating a frustrating 'dead-head' situation. While the top of the spike is past peak bloom and full of dead and fading flowers, the bottom half or third is still blooming lustily. To neaten up, one really needs to take out the whole spike when the peak of bloom is past, but this definitely means missing out on a significant number of flowers.

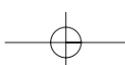


Erigeron 'Prosperity'
(1998: 4.1; 1999: 4.1; 2000: 4.3, n= 12)

I've really enjoyed having this plant in the trials. It is almost a non-stop bloomer, with very few disease or pest problems. (I really appreciate plants that are unpalatable to Japanese beetles.) The foliage remains a nice deep green throughout the season; some minor flecking occurs as the season progresses, probably due to lacebug feeding. Deadheading promotes even more vigorous blooming, but is not absolutely necessary. The flowers are a really attractive lilac color with gold centers, and, as I said, bloom is nonstop until severe frost cuts the plants down for the season. The plant was still blooming vigorously on October 10, 2000.

Hemerocallis 'Miss Tinkerbelle'
(1999: 2.9; 2000: 4.1, n=6)

The universe of daylilies is a huge one, and it takes a lot to make one cultivar stand out above the rest. 'Miss Tinkerbelle' scored the highest of the ten daylilies being evaluated with a score of 4.1. It probably would have scored higher with better foliage quality, which was the factor holding it back. Leaf color was unimpressive with a season's score of 3.2 overall. However, other ratings such as vigor, bloom and stalk strength, floral uniformity and bloom





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Hemerocallis 'Miss Tinkerbelle'

strength all pulled the score up to 4.1. Miss Tinkerbelle is a pleasant, warm peach color with a darker reddish throat ring marking. There were a fair number of flowers borne at once, making for a good bloom display, and it was in bloom for an extended period of time as well.

Heuchera 'Harmonic Convergence' (1999: 3.9; 2000: 4.3, n=6)

I love all the new Heucheras with different leaf colors, and this is another handsome one. The leaves are an attractive marbled silver color, which set the flowers off well. It scored particularly high on bloom and stalk strength, which was notable for our very rainy summer. The flowers were also very uniform, though bloom period was not terribly long. It did rebloom lightly later in the summer after deadheading.



Heuchera 'Harmonic Convergence'

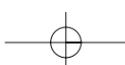
Sedum 'Summer Glory' (2000: 4.2, n=16)

Sedums are not appreciated as much as they should be. Tough as

nails, they will thrive in all but the most miserable garden situations, transforming an otherwise barren area into a patch of bloom where little else could survive, let alone prosper. Sedum 'Summer Glory' has really prospered in our trials. The vigor is outstanding; it is performing like a groundcover and

has almost filled in the plot after scarcely 18 months in the ground. This is making it somewhat difficult to rate for aspects which require quantifying, such as number of plants in bloom on a particular day, but this cannot be counted as a flaw. Indeed, the vigor of this plant was its strongest rating

in the trial, a 4.9. The sample seems to be a seed strain, as I noted some differences in both leaf shape as well as flower color. But this was not a problem either, though it did lower the uniformity score for flowers, the only factor that prevented this plant from scoring in the high 4s. ▶





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Tanacetum 'Jackpot'

Tanacetum 'Jackpot' (2000: 4.6, n=16)

I am delighted someone is working on developing cultivars of *Tanacetum niveum*, snow daisy. It is not as well-known as it deserves to be. *Tanacetum* can be one of the most interesting plants in the perennial border. First you have a plant with striking dissected silver foliage. This is followed by an amazing profusion of little white daisies, borne in such numbers that they completely obscure the foliage. This is a 'Jackpot' indeed. After bloom, some of our plants declined, and some even died. (This I could attribute to our very rainy summer.) However, in a garden situation, this would probably be offset by the staggering number of self-sown seedlings that this plant produces. I'll be busy weeding next spring.

Geranium 'Rozanne' (2000: 4.6, n=6)

This plant had a rather slow start this spring but quietly gathered strength all season long. By the end of the season, it was putting on a magnificent display. The foliage was a nice deep green with faint marbling that held up well all season. The vigor of the plant was also very impressive. It has filled its test plot completely and gone on to inquire about the real estate on either side. Flowering started early in May and continued nonstop into November. Earlier in the season, the flowers were a reddish purple. As the weather got colder, a pronounced white eye became apparent that I found quite interesting. What is even more impressive is that this display is from a first year plant, not very common in perennials. This is an absolutely outstanding geranium, and I will be interested to see what its hardiness turns out to be. There was a nice fall color to the foliage, too, which was an added bonus.

The Perennial Trials are open to the public from dawn to dusk daily during the summer. Visiting the trials is a way for growers to see some new varieties and judge performances for themselves. We hope that readers who find themselves in Michigan in the summer will come to the trials and visit the rest of the Horticultural Demonstration

Gardens while they are here. We welcome your observations. We host an annual Grower's Day for all interested; this year Grower's Day will be held August 7, 2001. Information on registration may be obtained from Sandy Allen at (517) 355-8362 or allens@pilot.msu.edu. 

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Perennials in the MSU 2000 Trials were sponsored by:

- Achillea 'Love Parade' — Jelitto
- Campanula 'Chettle Charm' — Blooms of Bressingham North America (BOBNA)
- Erigeron 'Prosperity' — BOBNA
- Hemerocallis 'Miss Tinkerbelle' — BOBNA
- Heuchera 'Harmonic Convergence' — BOBNA
- Sedum 'Summer Glory' — Jelitto



Geranium 'Rozanne'

Rate the Varieties You Grow

If you have been growing the same perennials for as long as you can remember, it might be time for a switch. But then again, it might not be — not if the varieties you grow are good, consistent performers. Applying the MSU perennial trial criteria to your varieties will let you know if the time has come to start shopping for new plants!

LEAF COLOR AND QUALITY

- Are the leaves a nice healthy green?
- Does the leaf quality hold up throughout the summer?

PLANT VIGOR

- Does the plant grow, or does it just sit there all summer?

BLOOM/STALK STRENGTH

- Are flowers held straight?
- Are flowers held/presented above the foliage?
- How do the flowers fare after a heavy thunderstorm with typical winds?

BLOOM DISPLAY

- Does the plant provide a good, strong floral display, with generous bloom, or only partial flower cover?

FLORAL UNIFORMITY

- Are flowers consistent from plant to plant, or is there noticeable variation among plants, i.e., are some flowers doubled and others single, or, are different colors exhibited in the planting? (Note: Some items come to us as seed strains and are then evaluated as such: no penalty is attached to such disparities. I'm sure all of us can think of more than one plant, which, after becoming popular in the trade, started popping up with significant differences from the original selection.)

