

The Successful Future of Boxwood

Bennett Saunders
Saunders Brothers, Inc.
NewGen Boxwood

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Beginning
in 1948

Four
Generations













The Successful Future of Boxwood

- **Better Boxwood cultivars**
- Best Management Practices (or proper care)

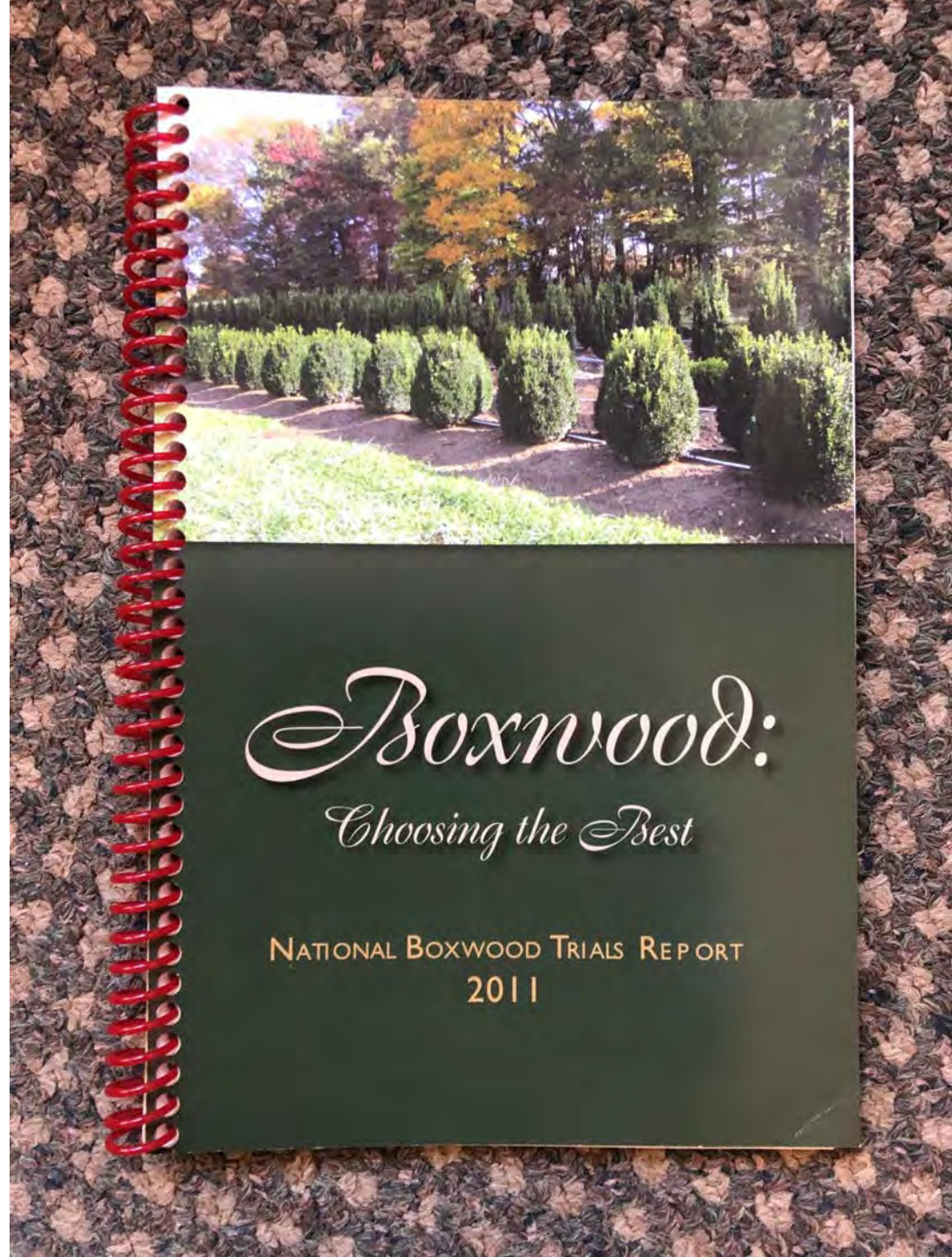
Boxwood Decline



1990's-
National
Boxwood Trials



Published
Boxwood Trials
1990's- 2000's



New
cultivars
=
Old pests





Beginning in
2008-
Search for
Cultivars with
Leafminer
resistance



Know Cultivar Susceptibility

Cultivar	Zone	Updated Box Blight Tolerance	Leafminer Resistance
<i>Buxus sempervirens</i> 'Buddy'	6-8	-	++
<i>Buxus</i> x 'Glencoe' Chicagoland Green™	5-8	+ -	--
<i>Buxus sempervirens</i> 'Dee Runk'	6-8	+*	+
<i>Buxus sempervirens</i> 'Elegantissima'	6-8	--	+
<i>Buxus sempervirens</i> 'Fastigiata'	6-8	+*	+
<i>Buxus microphylla sinica</i> 'Franklin's Gem'	5-8	++	++
<i>Buxus microphylla</i> 'Golden Dream'	6-8	++	++
<i>Buxus microphylla</i> 'Grace Hendrick Phillips'	6-8	-	++
<i>Buxus microphylla</i> v. <i>japonica</i> 'Green Beauty'	6-8	++	-
<i>Buxus</i> x 'Green Gem'	5-8	+ -	--
<i>Buxus</i> x 'Green Mound'	5-8	+ -	-
<i>Buxus</i> x 'Green Mountain'	5-8	+ -	-
<i>Buxus microphylla</i> 'Green Pillow'	5-8	-	++
<i>Buxus</i> x 'Green Velvet'	5-8	+ -	--
<i>Buxus harlandii</i>	7-9	++	++
<i>Buxus sinica</i> v. <i>insularis</i> 'Nana'	6-8	++	++
<i>Buxus sempervirens</i> Jensen	6-8	--	+
<i>Buxus microphylla</i> v. <i>japonica</i> 'Jim Stauffer'	5-8	++	+
<i>Buxus microphylla</i> 'John Baldwin'	6-8	++	-
<i>Buxus sempervirens</i> 'Justin Brouwers'	6-8	--	--
<i>Buxus microphylla</i> 'Little Missy'	5-8	++	+
<i>Buxus microphylla</i> v. <i>japonica</i> 'Morris Dwarf'	6-8	--	++
<i>Buxus microphylla</i> v. <i>japonica</i> 'Morris Midget'	6-8	--	+
<i>Buxus</i> NewGen Freedom™	5-8	++	++
<i>Buxus</i> NewGen Independence™	5B-8	++	+
<i>Buxus harlandii</i> 'Richard'	7-9	++	++
<i>Buxus sempervirens</i> (American)	5-8	+ -	+
<i>Buxus sempervirens</i> 'Suffruticosa' (English)	6-8	--	++
<i>Buxus sempervirens</i> 'Vardar Valley'	5-8	-	++
<i>Buxus microphylla</i> v. <i>japonica</i> 'Winter Gem'	5-8	++	++
<i>Buxus microphylla</i> v. <i>japonica</i> 'Wintergreen'	5-8	++	+

*Better Tolerance because of upright plant architecture

Boxwood Blight* Tolerance Key

Most Tolerant	++
Somewhat Tolerant	+
Variable Tolerance/Susceptibility	+ -
Somewhat Susceptible	-
Most Susceptible	--

Boxwood Leafminer** Resistance Key

Very Resistant	++
Somewhat Resistant	+
Neither Resistant nor Susceptible	+ -
Somewhat Susceptible	-
Very Susceptible	--

*Boxwood blight tolerance data based on multiple tests and observations from Saunders Brothers 2012-2018.

**Boxwood leafminer resistance data based on multiple tests from Saunders Brothers 2008-2018.

2011
The Game
Changer-
Boxwood Blight



What is Boxwood Blight?

- Fungus: *Cylindrocladium buxicola*
- Sticky, heavy spores
- Movement: water, plant to plant, debris, human/equipment
- Optimal conditions: warm and wet, 60-77 deg F
- Sensitive to heat/cold
- Pathogen can live in ground, perhaps for 5 years or more
- Spreads with water splashing

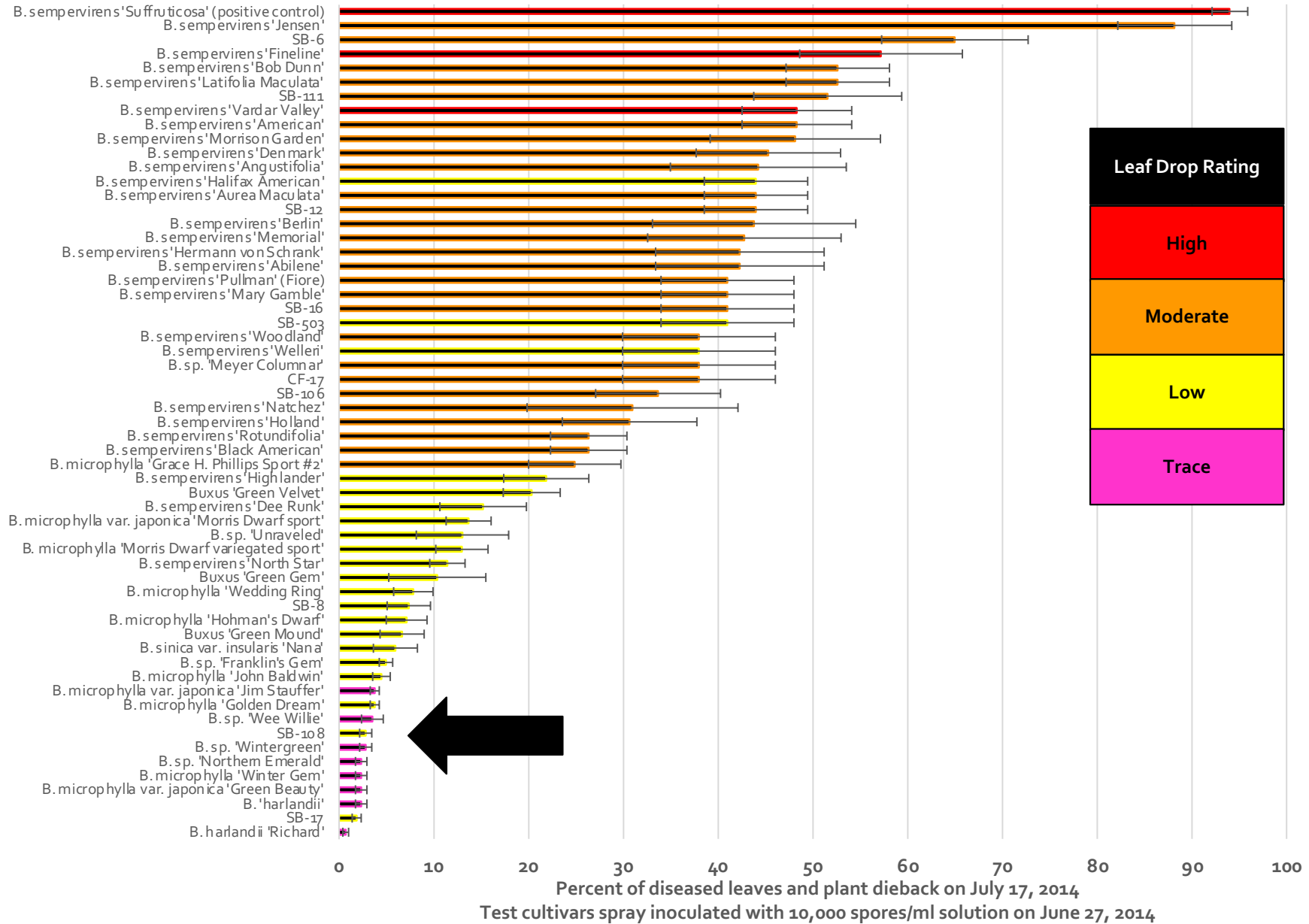
Box Blight
Tolerance-
2012-2014
Searching for
Solutions with
N. C. State





Susceptibility of Commercial Boxwood Cultivars to Boxwood Blight

Summer 2014 - 21 dpi



2015-Present
Private
Research



Primary
Considerations
for NewGen®
Family

- Good Blight Resistance with Proper Care
- Good Boxwood Leafminer Resistance
- WOW Factor
- Grower and Garden Friendliness



NEW
GENTM
BOXWOOD

The Boxwood Revolution

NewGen
Freedom®



NewGen Freedom[®]



- 3.5' T x 3.5' W (15 years) 5' T x 5' W (25 years)
- Fast grower: 3-6" per year
- Sun, Part sun, Shade
- Zone 5-8
- Medium green foliage, large glossy leaves

NewGen
Independence®



NewGen Independence®



- Great for formal gardens
- Classic boxwood look
- Handles snow load well
- Excellent substitute for 'Suffruticosa' or 'English'
- 'Green Beauty' growing habit, with better Leafminer resistance

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- **Best Management Practices
(or proper care)**

How to Reduce the Chance/ Severity of Blight



Reduce the Chance/ Severity of Blight

1. Carefully
remove
blighted plants



Reduce the Chance/ Severity of Blight

2. Avoid/
Replace
'English
Boxwood'



Reduce the Chance/ Severity of Blight

3. Use
reputable
boxwood
suppliers/
contractors



Reduce the Chance/ Severity of Blight

4. Encourage
Air Flow- the
“Pearl
Necklace” look



Reduce the Chance/ Severity of Blight

5. Mulch



Reduce the Chance/ Severity of Blight

6. Consider
spraying if
resources are
available



Reduce the Chance/ Severity of Blight

7. Avoid tight
pruning.



Reduce the Chance/ Severity of Blight

7. Sanitation



Reduce the Chance/ Severity of Blight

8. Replant
with more
tolerant
cultivars



More Info?

www.newgenboxwood.com

Breeding for Better Boxwood



Controlled pollination



Boxwood Seed



The
Boxwood of
tomorrow?



NewGen®

Breeding for
Zones 3-5

Better Cold
hardiness



Replacement
for Boxwood?



Ilex



There is no
replacement
for boxwood!





















Save the Date - June 2, 2022

BOXWOOD BOOTCAMP

at Saunders Brothers Inc. in Piney River, VA

Join us for a deep dive into all things boxwood, with an emphasis on cultural practices for success! Day-long program is designed for landscape and garden retail professionals as well as serious boxwood enthusiasts.

- Behind-the-scenes tour of field and container production of top-quality boxwood
- Educational stations featuring cultivar selection, planting and maintenance tips, pruning, pest and disease diagnosis and management
- Lunch and closing social + dinner BBQ, Beer, Bluegrass, and Boxwood

Registration opens Feb 1, \$250 per person.
Attendance is limited for the best experience.



Net proceeds help
fund the American
Boxwood Society!

THANKS!

