

Mint

Easy and Rewarding

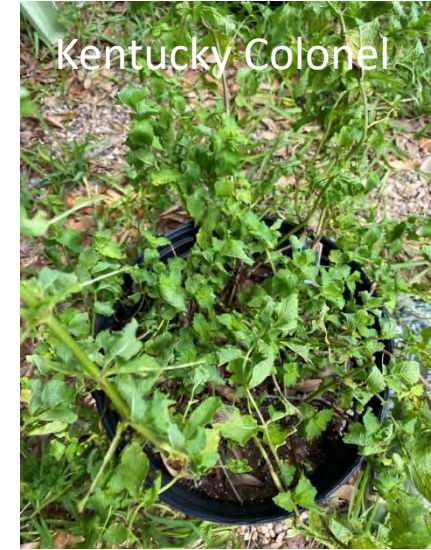
Pioneer Unit -- Horticulture Study Group



Pink Candypops



Chocolate



Kentucky Colonel



Mojito



Swiss Ricola



Red-Stemmed
Apple Mint



Strawberry



Orange



Moroccan

Mint Tea

- Pick a handful of your favorite mints (any combination but the strongly flavored peppermint, spearmint or double mint are great)
- Pour simmering water over the mints and steep for 5-10 minutes
- Strain (if you like) and serve either hot or cold



Complimentary Herbs

- ❖ Rose
- ❖ Lemon Verbena
- ❖ Basil
- ❖ Thyme
- ❖ Rosemary

Horticulture Study Group - 2023

Co-Leaders: Madeline Johnson and Phoebe Lake

Members

- Barbara Solis
- Betty Pior
- Courtney Kieke
- Debbie Pruitt
- Diana Sellers
- Henry Flowers
- Irene Spurrier
- Jana Rinehart
- Joanna Hagler
- Julia Johnson
- Karen Springer
- Kathe Forrest
- Linda Rowlett
- Martha Neva
- Patti Mills
- Royceanna Kendall
- Susan Bame
- Susan Yancey
- Tory Farley

Auditors

- Bonnie Lout
- Cammie Beierle
- Ginger Heath
- Mary Reeves
- Sally Reynolds
- Tom Solis
- Wendy Matthews

Topics Covered

- Folklore / History
- Botany
- Chemistry
- Culinary Uses
- Non-Culinary Uses
- Cultivation
- Harvesting and Storing
- Propagation
- Pests and Diseases
- The Study Results



Mints After June Harvest

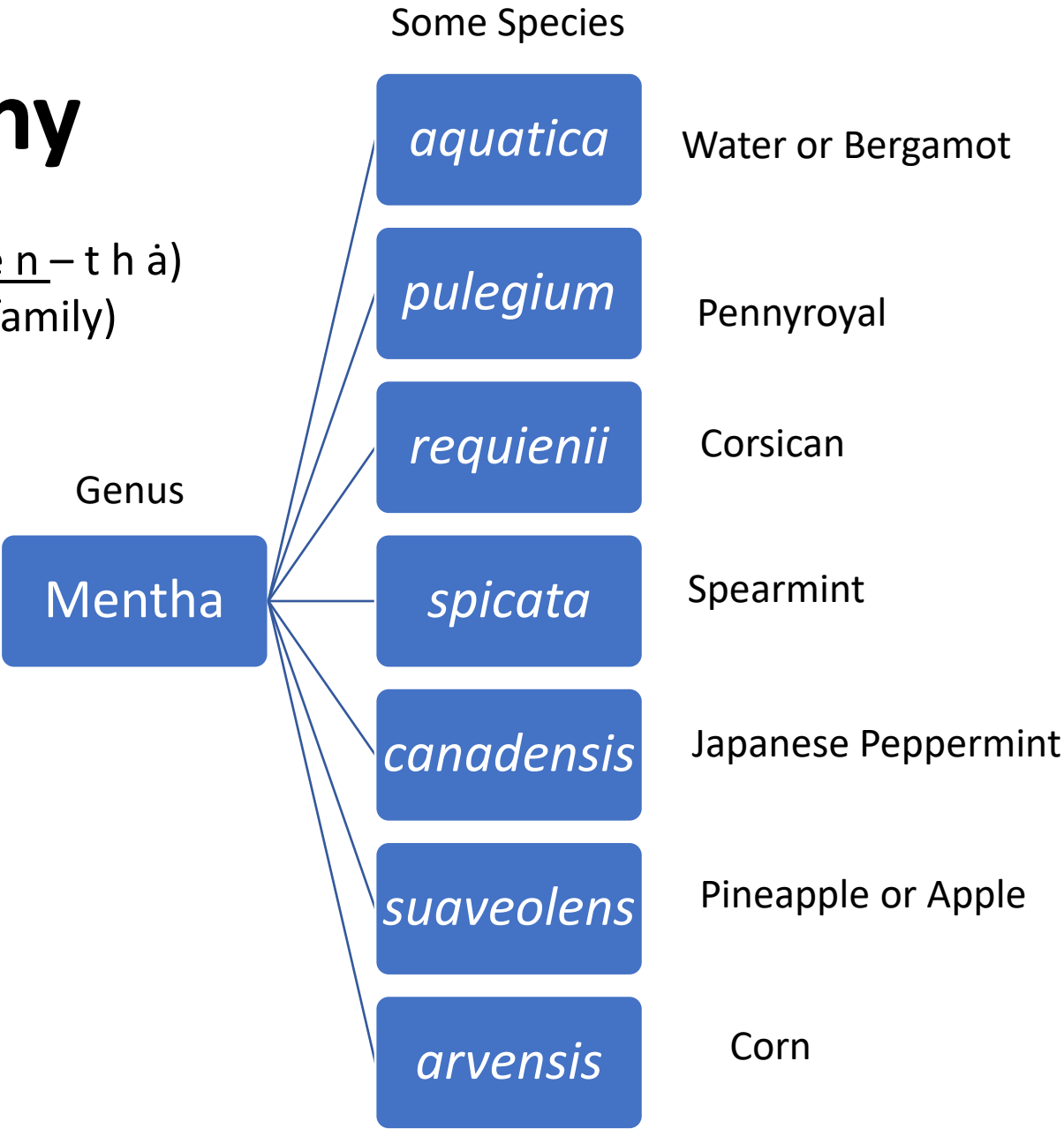
Folklore / History

- Minthes, the beloved river nymph of Pluto (or Hades)
- Pluto's wife, Persephone, in anger changed Minthes into the humble plant, Mentha (mint)
- Crushed mint leaves rubbed into tables to show hospitality in ancient Greece
- Mints arrived in Britain via the Romans
- Charlemagne decreed in 812 that many acres of mint should be planted in his Garden of 78 Herbs



Botany

Mentha (m ě n – t h à)
Lamiaceae (family)



What happened to Swiss
Ricola peppermint?
M. aquatica x *M. spicata*

Mentha x *piperita*

Mint Species



Water Mint



Corn (or Field) Mint



Japanese Peppermint



Pennyroyal Mint



Corsican Mint



Spearmint



Pineapple or Apple Mint
Variegated variety

But if any man can name
The full list of all the kinds and all the properties
Of mint, he must be one who knows how many fish
Swim in the Indian Ocean, how many sparks Vulcan
Sees fly in the air from his vast furnace in Etna.

Walahfrid Strabo, *Hortculus*, 850-900 c.e.

Why?

Mints Cross and Recross

Scents of the same species vary in different environments.

19 'pure' species but with over 2000 different names

General Description

- Square stems
- Opposite leaves
- Flowers are pale purple, pink, or white arranged in clusters
- Volatile oils are contained in dots on the leaves and stems



Pink Candypops™ Mint
Photo by Madeline Johnson (Aug'23)

Chemistry

- Refreshing and cool scent comes from **menthol** and **menthone** (oxidized menthol) – primary in peppermint
- Sweet but spicy comes from **carvone** – primary in spearmint
- Madalene Hill's Red-Stemmed Apple Mint contains both menthol and carvone (often referred to Doublemint)
- Not all mints are minty – pennyroyal smells like caraway (contains carvone)
- Other plants smell like mint but are not mints – mint marigold (*tagetes minuta*)



Mojito Mint
Photo by Jana Rinehart (Oct'23)

Culinary Tips



- Aroma is the best way to choose mint for cooking
- Leaves closer to the growing tip tend to have higher flavor / aroma
- Dried or fresh is acceptable (but if you can't smell it, then don't use it)
- Ratio of Fresh to Dry is 3+:1
- Add near the end of the cooking time
- Mints pair well with
 - Allspice, basil, cardamon, chili, cinnamon, coriander, cumin, fennel, lemongrass, onion, rosemary, sage, sesame, thyme

Culinary Uses

- Sweet
 - Cakes, Cookies, Shortbreads, Scones, Breads
- Savory
 - Used in different cuisines – it's use is global
 - Lamb, Chicken, Beef, Fish, Vegetables, Dairy, Sauces
- Teas
- Herbal Vinegars
- Flavor Sugar
- Mint Ice Cubes
- Tinctures / Extracts



Health Related Uses

- Mint Oil Properties
 - Antibacterial, anti-inflammatory, decongestant, antispasmodic
- Helps with acne, blemishes, itchy skin – it is soothing
- Menthol (key ingredient in peppermint) is found in many over-the-counter decongestants
- Mint tea can aid in digestion, bloating, and flatulence



Other Uses

- Beauty Products
 - Dental and Mouthwash
 - Deodorants
 - Soaps and Shampoos
 - Lip Balm and Salves
- Aromatherapy
- Crafts
 - Candles



Cultivation

- Moist** and tolerant of most soils
- 6+ hours of sun but can tolerate light shade
- Containers preferred because of THE PROBLEM

THE PROBLEM

- Spreading (some would say invasive)
- Spreading below ground (rhizomes) and above ground (stolons)
- Grows vigorously with good soil and moisture



Willow guarding against invasion of the mints.

Some Photos To Illustrate



Red Stemmed Applemint



Orange Mint

Photos taken May-June'23



Chocolate Mint Runners

Mint Propagation

- Division of the rhizomes in mature plants
- Cut branches from a mature plant keeping 4-5 leaves on the branch.
 - Place 2" with nodes (no leaves) in your soil medium
 - Place 2-3" with nodes in water
- Seed propagation is NOT recommended



Phoebe Demonstrating Propagation

Pests and Diseases

Generally, mints are pest free but sometimes....

- Fungi
 - Verticillium wilt
 - Puccinia rust
- Insects
 - Nematodes
 - Mint flea beetle
 - Loopers and cutworms
 - Aphids



Mint Flea Beetle



Verticillium Wilt on Peppermint

Harvesting

- Peak flavor is just before it blooms
- Morning is the best time of day
- Cut the stems just above a growth node

Drying and Storing

- Hang a bundle upside down
- Spread out on tray
- When completely dry, place in a sealed container in a dark place



June Harvest Before and After



Chocolate Mint – Photos by Henry Flowers



Swiss Ricola Peppermint – Photos by Jules Johnson

Harvest Amounts in Grams

Moroccan	Strawberry	Orange	Chocolate	Kentucky Colonel	Mojito	Swiss Ricola Peppermint	Red-Stemmed Applemint
72	21	48	73	65	13	85	99

The Study Objective

Compare the growth habits of 9 varieties

- Rate of growth
- Plant form (in terms of height and diameter)
- Tendency to flower
- Overall performance in our region



Photo by Kathe Forrest
Red-Stemmed Apple Mint Mar'23



Photo by Courtney Kieke
Pink Candypops™ Aug'23

Planting Instructions

- 5 Gallon Black Plastic Pots for All Growers and Varieties
- Potting Mix Supplied (PRO-MIX LP15)
- Pots were filled with the potting mix and soil dampened
- Irrigation (drop water or emitter tubing recommended)
- Maintain moisture through the entire growing season
- Organic fertilizer as needed
- Place all pots in a similar location providing some afternoon shade

Measurements



Monthly

- Plant measurements
 - Tallest portion of plant
 - Widest portion of plant

- Photos

Every Other Month

- Soil and light measurements
 - pH
 - Moisture
 - Light



We severely cutback and harvested all the mints except Pink Candypops™ in June '23.

Varieties Studied



Primarily Culinary

- ❖ Chocolate Mint
- ❖ Kentucky Colonel Spearmint
- ❖ Moroccan Mint
- ❖ Mojito Mint
- ❖ Orange Mint
- ❖ Red-Stemmed Apple Mint
- ❖ Ricola Peppermint
- ❖ Strawberry Mint

Primarily Ornamental

- ❖ Pink Candypops™

Chocolate Mint



(March)



(May)

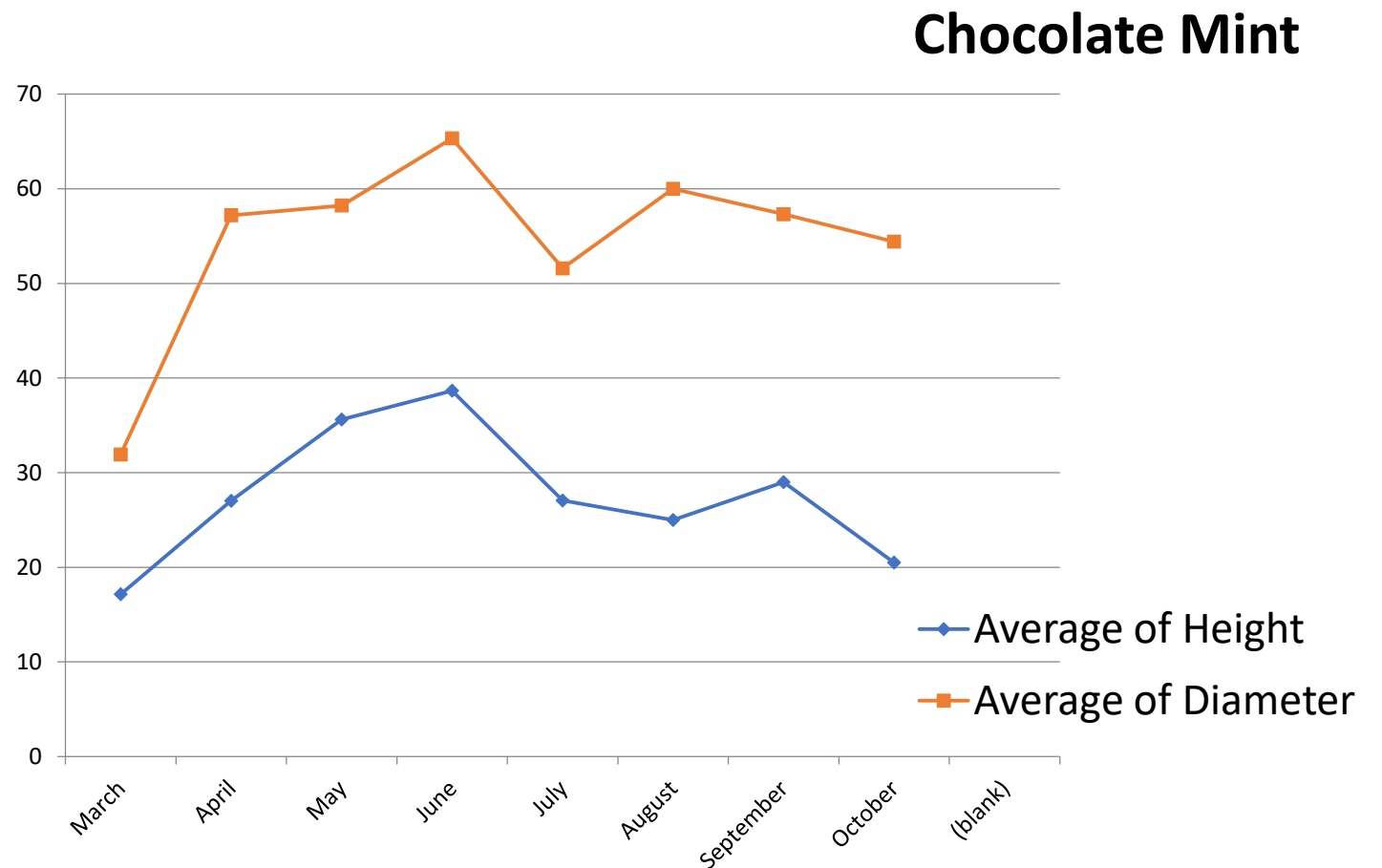


(September)

Photos by Irene Spurrier

Overall Condition			
Month	Excellent	Good	Poor
March	16	3	
April	14	4	1
May	10	7	
June	7	10	1
July	9	6	2
August	6	6	2
September	7	3	3
October	6	3	3

Flowering Began: June
***fewer than half had flowers**



Kentucky Colonel Spearmint



March



May

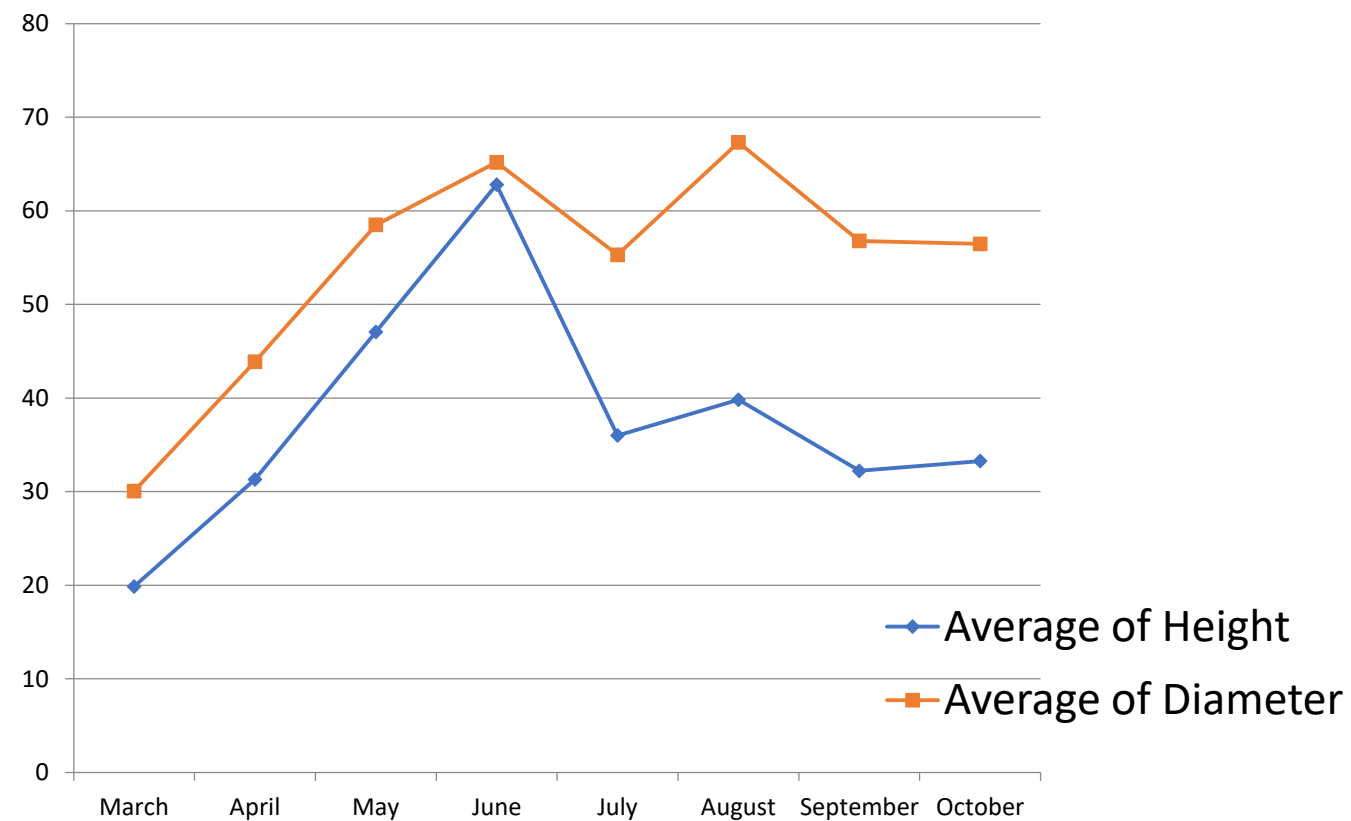


September

Photos by Betty Pior

Kentucky Colonel Spearmint

Overall Condition			
Month	Excellent	Good	Poor
March	15	3	
April	10	9	
May	8	10	
June	2	14	3
July	8	9	
August	5	8	3
September	3	5	5
October	3	7	2



Flowering Began: June

Mojito Mint



March



May

Photos by Phoebe Lake

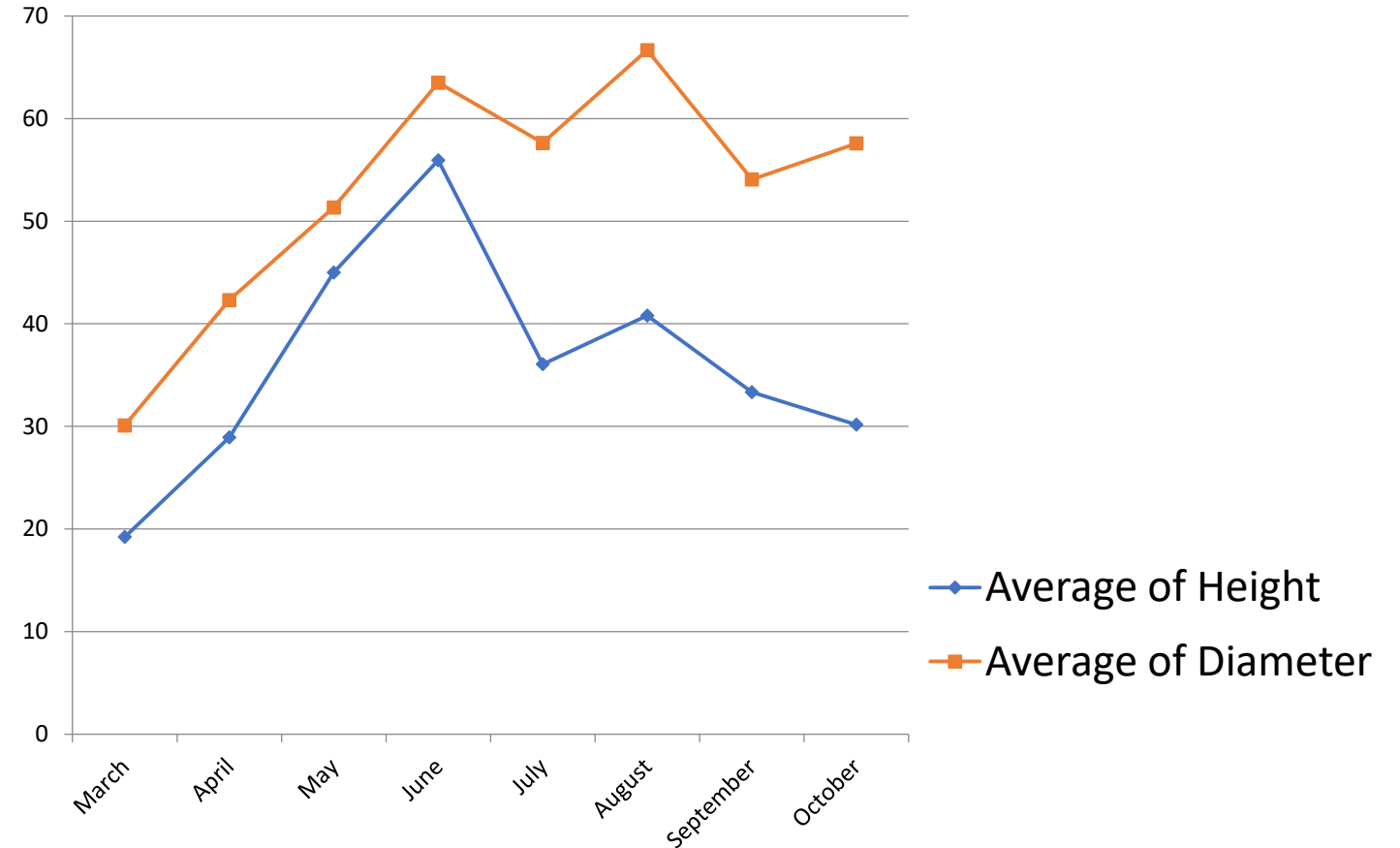


September

Mojito Mint

Overall condition			
Month	Excellent	Good	Poor
March	14	4	
April	8	11	
May	8	9	1
June	2	15	2
July	8	8	
August	6	7	2
September	4	5	6
October	2	5	5

Flowering Began: June
***fewer than half had flowers**



Moroccan Mint



March



May



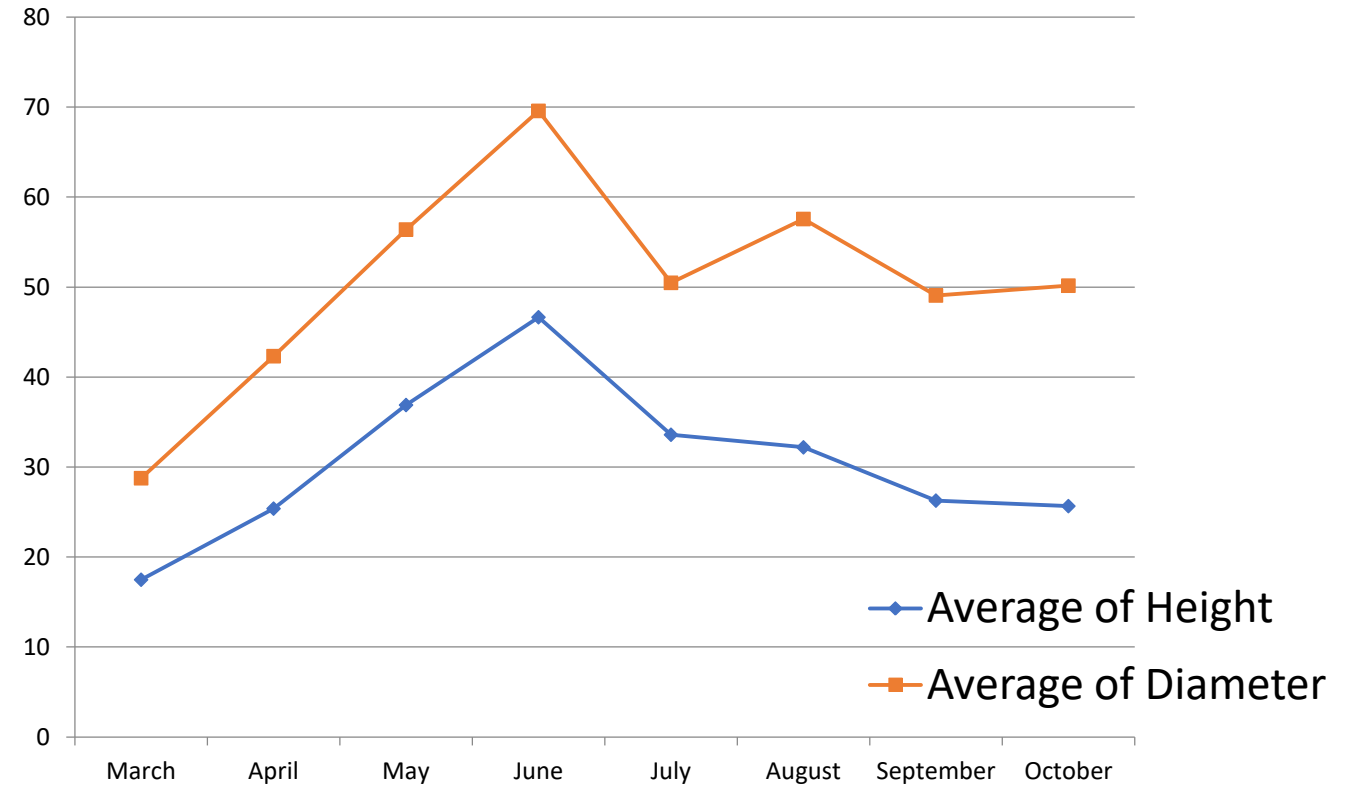
September

Photos by Courtney Kieke

Overall condition			
Month	Excellent	Good	Poor
March	16	3	
April	9	10	1
May	11	7	
June	4	13	2
July	7	9	1
August	5	7	4
September	3	6	6
October	2	7	4

Flowering Began: June

Moroccan Mint



Orange Mint



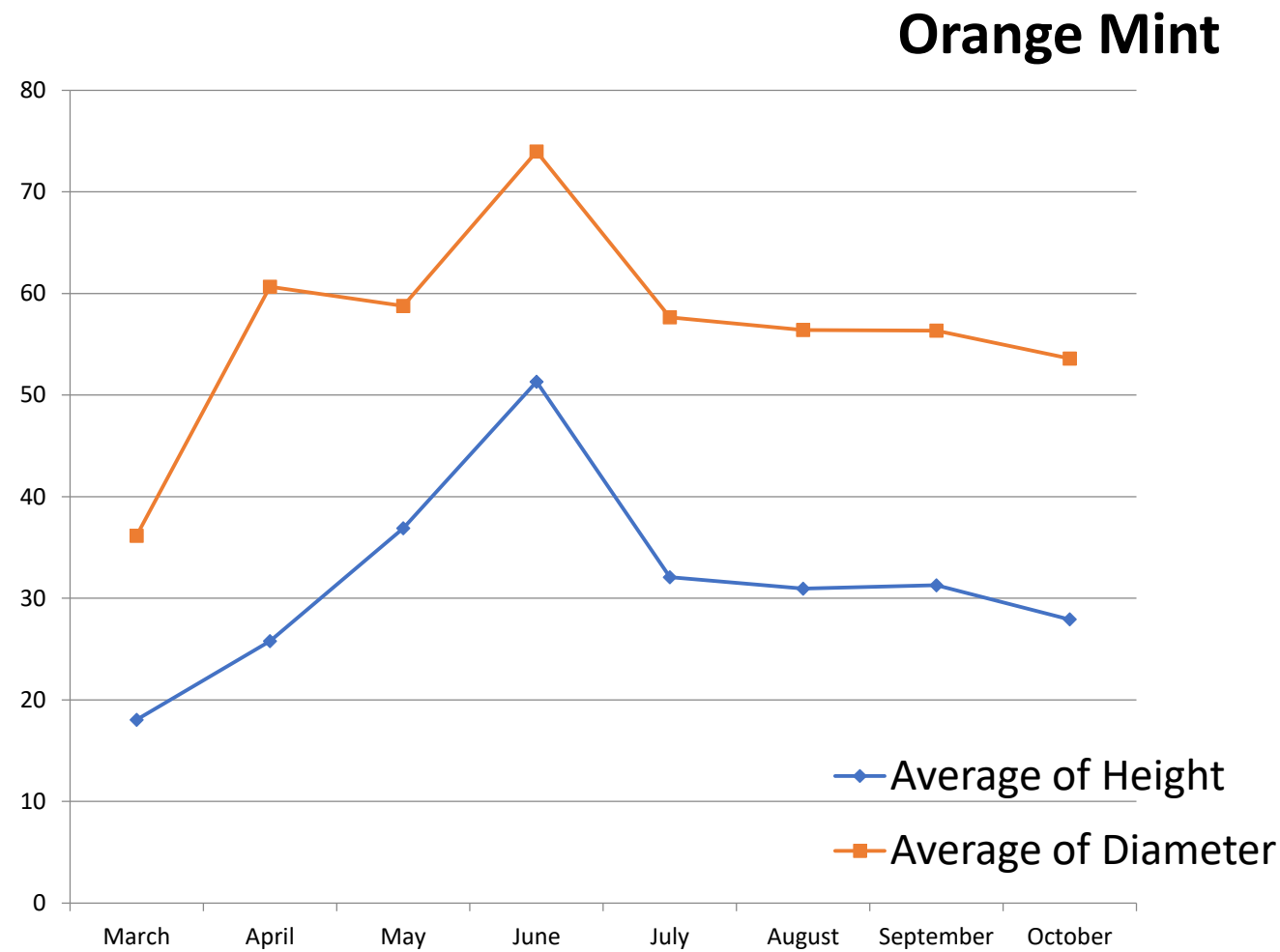
Photo by Susan Bame (April)



Photos by Martha Neva (May and September)

Overall condition			
Month	Excellent	Good	Poor
March	16	3	
April	15	4	
May	10	6	
June	11	8	
July	12	4	1
August	8	2	5
September	6	4	5
October	3	5	4

Flowering Began: June
 *fewer than half had flowers



Red-Stemmed Apple Mint



March

Photos by Diana Sellers



May

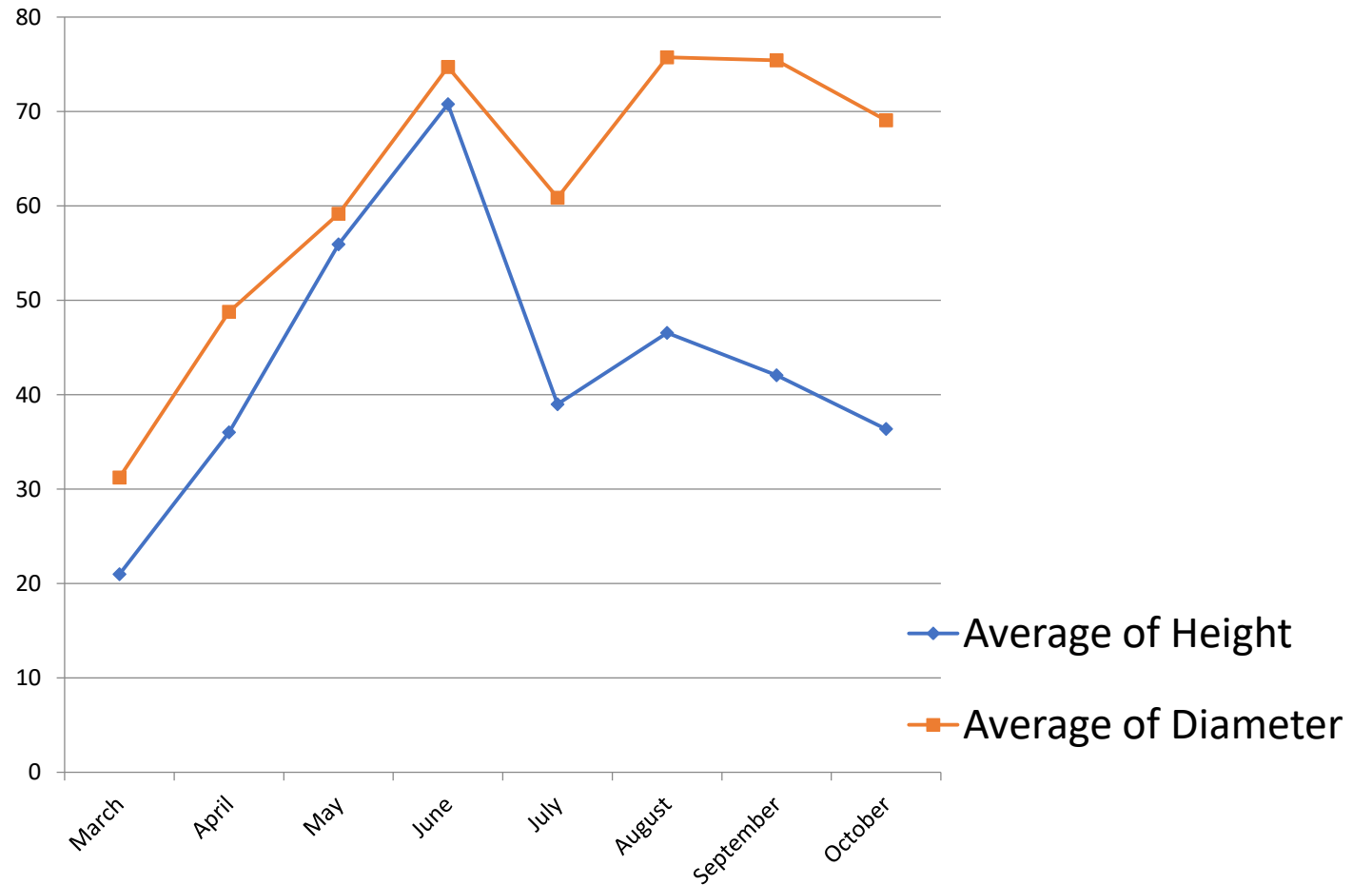


Photo by Susan Bame
September

Red-Stemmed Apple Mint

Overall Condition			
Month	Excellent	Good	Poor
March	15	4	
April	10	8	
May	5	11	1
June	5	9	3
July	8	7	1
August	4	9	3
September	3	7	4
October	5	5	4

Flowering Began: June



Ricola Swiss Peppermint



March



May

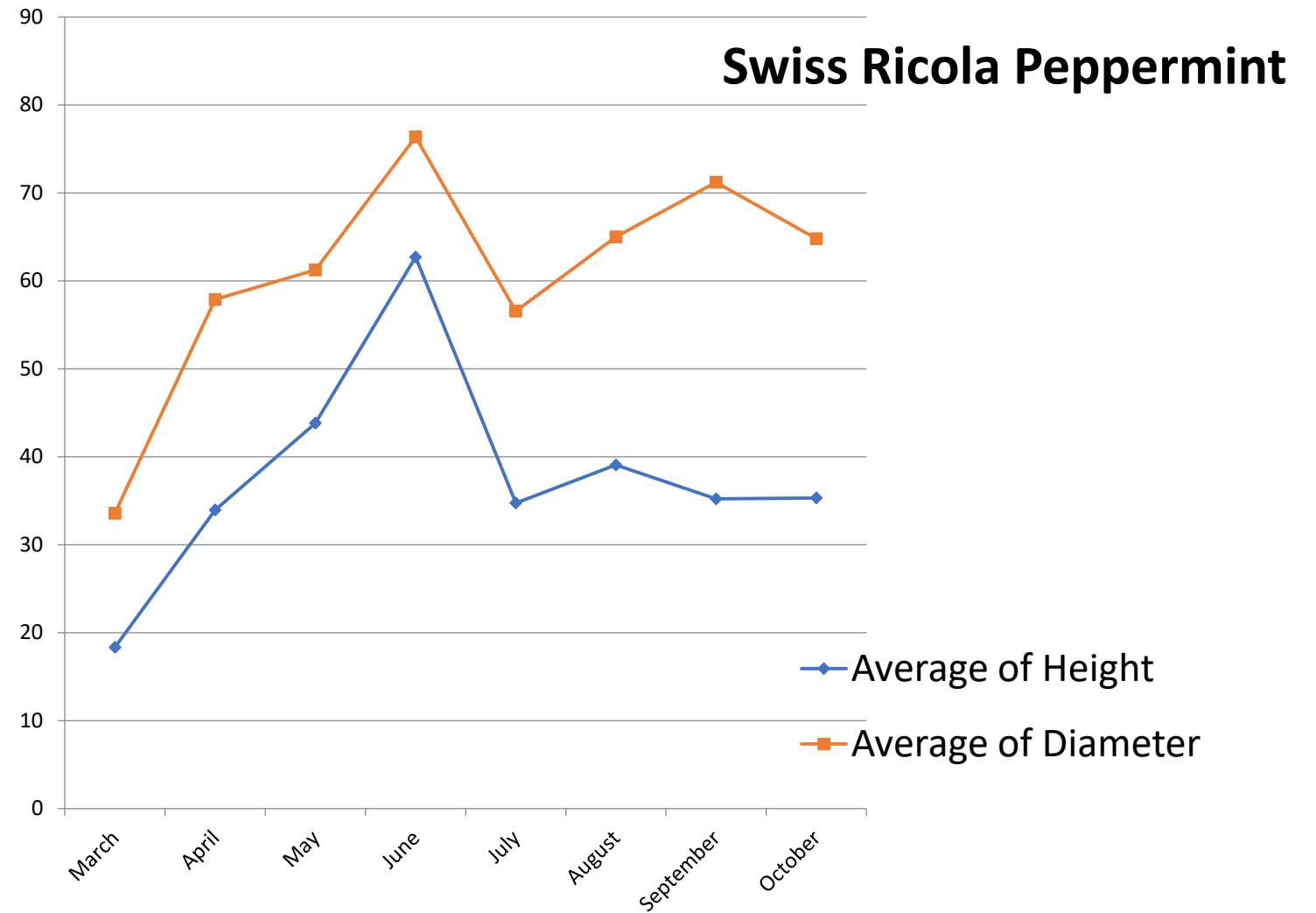
Photo by Susan Yancey (April)



September

Overall Condition			
Month	Excellent	Good	Poor
March	16	3	
April	15	5	
May	10	7	
June	4	14	1
July	9	7	
August	10	4	2
September	6	5	3
October	4	6	4

Flowering Began: June



Strawberry Mint



March Photo by Kathe Forrest



May Photo by Julie Johnson

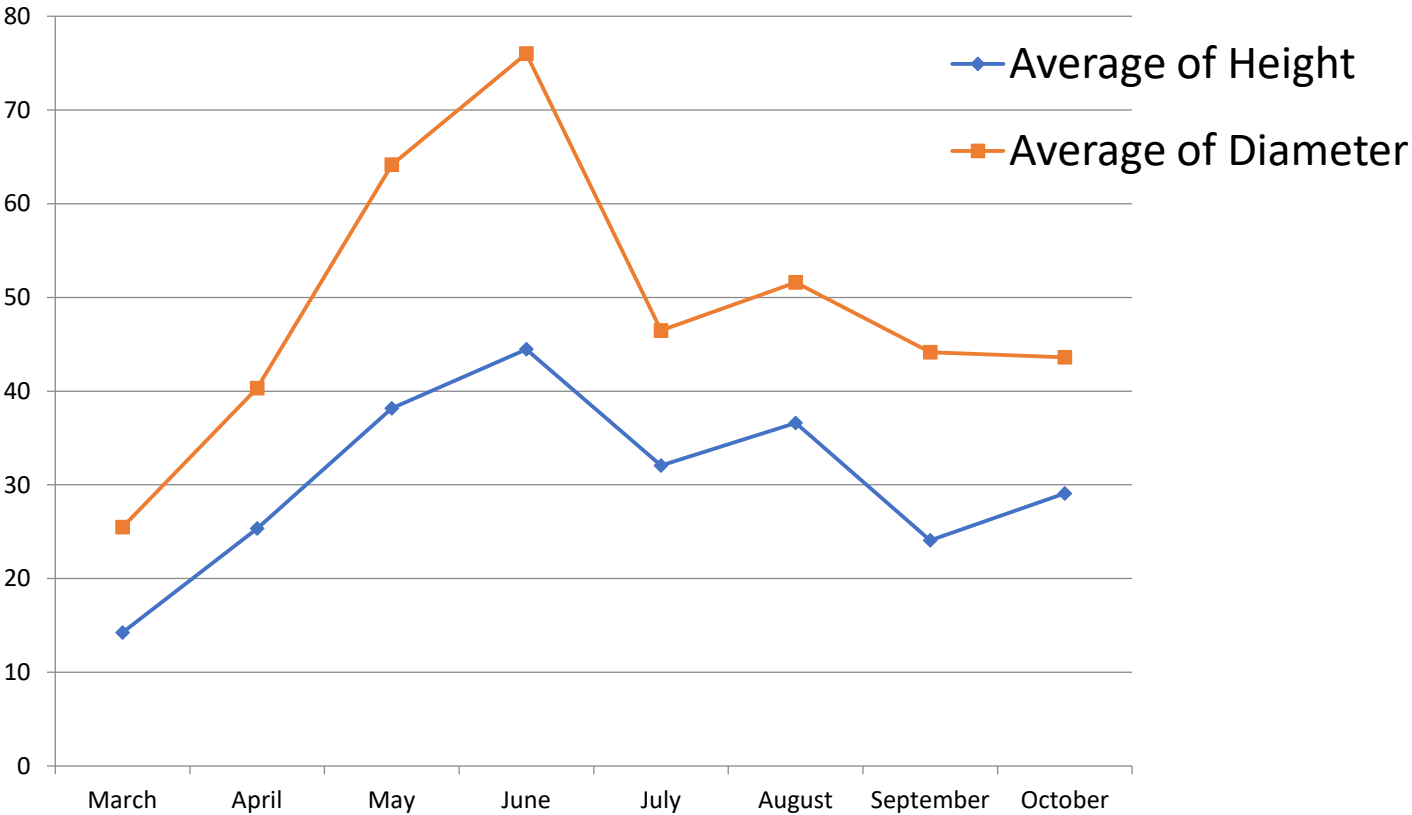


September Photo by Madeline Johnson

Strawberry Mint

Overall Condition			
Month	Excellent	Good	Poor
March	16	4	
April	7	11	1
May	6	8	4
June	3	11	4
July	3	7	7
August	2	8	5
September	1	6	5
October	2	5	6

Flowering Began: June



Pink Candypops™ Mint



April Photo by Kathe Forrest



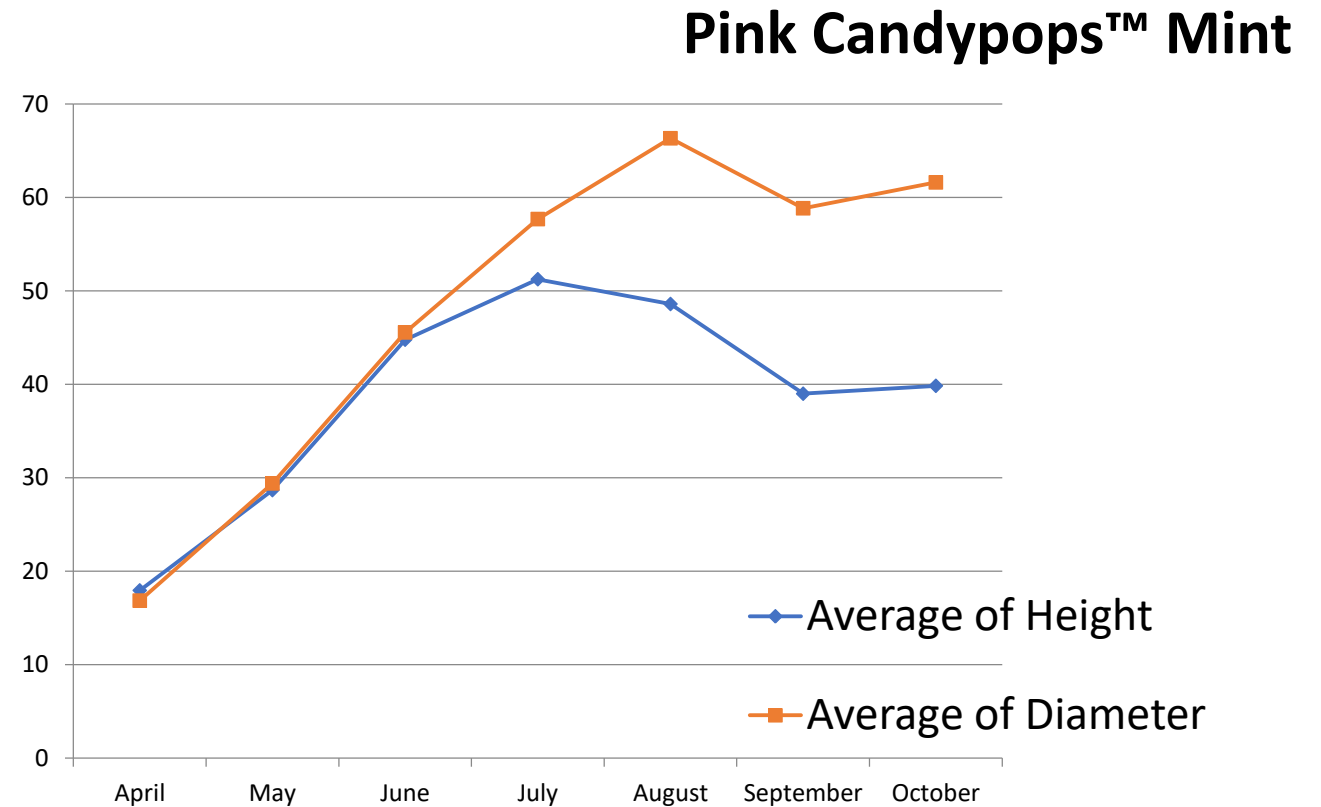
May Photo by Julie Johnson



September Photo by Madeline Johnson

Overall Condition			
Month	Excellent	Good	Poor
April	8	4	
May	9	7	
June	9	6	1
July	7	8	1
August	6	8	1
September	5	5	3
October	5	4	4

Flowering Began: July



Special Conditions:

1. Started in April as Plugs
2. Never Cutback

Quick Comparison - October

Variety	Ave Height (cm)	Ave Diameter (cm)	# Reporting Excellent
Chocolate	21	54	6 of 12
Kentucky Colonel	33	56	3 of 12
Mojito	30	58	2 of 12
Moroccan	26	50	2 of 13
Orange Mint	28	54	3 of 12
Pink Candypops™	40	62	5 of 13
Red-Stemmed Applemint	36	69	5 of 14
Ricola Swiss Peppermint	35	65	4 of 14
Strawberry	29	44	2 of 13

Lessons Learned – Growing in Extreme Heat

- It's all about a constant supply of water
- Flowering and growth diminishes at 100° F
- Protect those fragile roots – keep them moist!

HSG Member Sharing