

## Horticulture Course II

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## STUDENT OUTLINE

### *Thymus* (Thyme)

- I. General Information
  - A. Plant Family: Lamiaceae (Lamiaceae/Mint Family)
  - B. Genus: *Thymus*. More than 350 species. See listing below of common types with their specific epithets.
  - C. Other related genera including many culinary herbs, flowers, and some trees/shrubs: *Agastache*, *Ajuga*, *Basilicum* (*Basil*), *Callicarpa* (Beauty Berry), *Clerodendrum*, *Lamium* (flowering nettles), *Lavandula* (Lavender), *Marrubium* (horehound), *Mentha* (Mint), *Monarda* (Bee Balm), *Nepeta* (Catmint, Catnip) *Origanum* (oregano), *Perovskia* (Russian Sage), *Plectranthus* (Coleus), *Rosmarinus* (Rosemary), *Salvia* (garden salvia, sages), *Stachys* (Lamb's Ear), *Tectona* (teak wood), and *Vitex*.
- II. Anatomy
  - A. Leaves: opposite; each pair at right-angles to the pair below and above. Leaf margins (edges): typically oval and entire.
  - B. **Evergreen**: plant remains green throughout the winter; however, extremely cold temperatures with little protection (snow cover) can cause desiccation (drying) of foliage
  - C. Flowers: terminal (ends of branches), fused sepals and some petals. Nectar source for some Lepidoptera (butterflies, moth) species. Also, many Hymenoptera (bees, wasps, ants); flower color white, red, purple, purple-blue, creamy yellow/white. **Thyme is usually exhibited as FOLIAGE ONLY** as the plant is used for aromatic leaves, not flowers.
  - D. Stems: square (four distinct corners on thyme). May be smooth or hairy.
  - E. **Nodes**: location where leaf meets stem, with the presence of a bud. **Internode**: distance between nodes. The shorter the internode, the slower the growth.
- III. Common *Thymus*: biggest problem is many are sold by common names instead of scientific names, so you could buy three different common named types, but in reality, end up with the same.
  - A. *T. capitatus*: conehead type, Spanish oregano
  - B. *T. citriodorus*: citrus thyme
  - C. *T. herba-barona*: caraway thyme
  - D. *T. pseudolanuginosus* (aka *T. praecox* subspp. *Britanicus*): woolly thyme
  - E. *T. pannonicus*: Hungarian thyme
  - F. *T. praecox*: creeping thyme (many subspecies and cultivars)
  - G. *T. pulegiodes*: lemon thyme
  - H. *T. serpyllum*: Breckland thyme, creeping thyme, elfin thyme
  - I. *T. vulgaris*: common thyme, German thyme.

CULTIVARS: many many and difficult to peg into species, though usually *T. praecox* (with several subspecies) or *T. vulgaris*. This becomes more problematic with NGC Top Exhibitor Awards (TEA). And many internet sites provide conflicting info. Refer to [www.Plantipedia.com](http://www.Plantipedia.com) for listing.
- IV. Cultural Conditions
  - A. Soil – The looser and more organic the better for growth. Clay soils limit root growth.
  - B. Containers: maybe the best way to go if soil is too heavy or winters too cold
    1. Hypertufas and TROUGHS – great alternatives to individual pots
    2. **Topdressing** (adding a material to make the soil surface look “fresher”/“cleaner”, more uniform) for container-grown: coarse sand (white, gray, black), poultry grit, pea gravel, wood chips, cocoa/vanilla bean hulls

- C. Moisture – keep on the dry side, though they may need watering during droughts
- D. Sunlight: most prefer full sun. Too much shade causes long internodes and legginess
- E. Pests: few insects/related like most Lamiaceae. Disease include root/stem rots and leaf spots

## V. PREPARING THE EXHIBIT

- A. Read the schedule – is the specimen cut or container-grown?
  - i. Cut – usually exhibited as several stems or a bundle a specific diameter. Recommended ¼-½” bundle, or at least five stems.
    - 1. With multiple stems, UNIFORMITY (identical form, color, maturity, size, etc.) is crucial.
    - 2. Cut specimens, if properly conditioned, can be exhibited without water, typically shown on a plate/mat. However, if exhibited IN WATER, no leaves should be below the water level.
  - ii. Container-grown – what are the maximum diameter and/or height? Are self-multiple or multiple-plantings allowed? Consider combination plantings such as troughs and planters with a scheduled emphasis on “Thyme.”
- B. Plants are notorious debris-catchers as they are close to the ground, and they are annoyingly difficult to clean. Use a pair of tweezers, manicure scissors and fine paint/makeup brushes.
- C. Include genus, specific epithet and cultivar (if known); never just genus for thyme. The basic *Thymus* genera leaves are green, so if there is **variegation** (two or more colors) to the leaves, then the specimen is probably a cultivar.

## VI. WRITING THE SCHEDULE

### Section A: ‘A Heavenly Aroma’ – Container-grown Herbs

Container-grown Foliage; container size not to exceed 8” diameter. Multiple or Self-multiple specimens permitted. Scientifically name with genus, specific epithet and variety/cultivar where applicable. Eligible for Grower’s Choice Award.

- Class 1: *Basilicum* (Basil)
- Class 2: *Lavandula* (Lavender)
- Class 3: *Origanum* (Oregano)
- Class 4: *Rosmarinus* (Rosemary)
- Class 5: *Thymus* (Thyme)
- Class 6: Any other worthy foliage herb

Section A: “Thyme on my Hands” – cut bundle of foliage-only *Thymus* (Thyme); at least ¼” to ½” in diameter of cut thyme stems; rubber banded together. Scientifically name with genus, specific epithet and variety/cultivar Exhibited on neutral paper plate provided by committee. Eligible for Award of Merit.

- Class 1: Green smooth leaves
- Class 2: Variegated smooth leaves
- Class 3: Green hairy leaves
- Class 4: Variegated hairy leaves.

## VII. NGC SECTIONAL AWARDS:

- A. Award of Merit – generally non-Arboreal cut specimens
- B. Grower’s Choice Award – container-grown non-Arboreal specimens i
- C. Elfin Award – Petite specimens
- D. Collector’s Showcase Award – collection and/or display of at least 5 specimens
- E. Club Competition Award – display of at least 7 specimens; must have at least 2 growers

## VIII. NGC DIVISION AWARD: **Award of Horticultural Excellence**

IX. Judging THYMUS Specimens

**JUDGING CONSIDERATIONS** (Cut or Container-Grown Specimens HB page 129) (NOTE: Below, the foliage specimens and flowering specimens are listed in separate sections under criterion.)

**THINK: How would you describe the specimen and the characteristics to someone on the phone?**

**IMPORTANT: A fault may affect more than one of the qualities, with deductions in each category.**

**A. CONFORMANCE** (5 pts) – Adherence to the class' requirements. (Also, the section's requirements.)

**Does the exhibit conform to the requirements listed in the schedule section/class description?**

THIS IS AN ALL-OR-NOTHING thing. You either give **all** 5 points or deduct all 5 points. Chances are if something is wrong here, it will also be wrong somewhere else. (Form, Maturity/Size)

You cannot use the word "conforms" as that is the criterion term.

- i. Favorable: requirements met; schedule is followed, # stems/etc. per schedule; XX stems as required; foliage only plant exhibited
- ii. Unfavorable: does not meet schedule specifications; incorrect number of stems per schedule; requirements are not met; specimen is flowering.

**B. PLANT IDENTIFICATION** (5 pts) – identified by binomial name or currently accepted scientific designation. Legible, with binomial (genus, specific epithet) and cultivar for many. **Unless you are ABSOLUTELY SURE that the cultivar is not correct, err in favor of exhibitor.**

**NOTE:** You cannot award a top NGC Award to an exhibit that doesn't have a correct scientific name (binomial, genus+cultivar), no matter how great it is. A lower scoring 95+ blue-ribbon correctly named winner may actually get a TEA over a higher scoring specimen that is incorrectly named.

- i. Favorable: legible; easy to read, complete scientific name, genus/specific epithet/cultivar provided, complete and accurate, properly labeled, botanically named, named botanically, named with current scientific designation.
- ii. Unfavorable: incomplete name; illegible; incorrect name, inaccurate, incomplete, cultivar is missing.

**C. PEAK OF PERFECTION** (75 points total) – Show worthiness of the specimen: Form, Color, Maturity/Size, Condition/Blemishes

**FORM** (20 pts): overall **3-D shape of the specimen/s as well as individual parts.**

CUT FOLIAGE PLANTS:

Leaves should exhibit **bilateral-symmetry**, which means you could only divide the leaf down the middle (midrib) and have two identical halves. Leaves should have a uniform thickness throughout. **Rips, tears, damage, etc. influences Form. (also Condition/Blemish and Grooming)**

STEM: A bundle of stems should be fairly straight. A single stem will be curved/arching.

Leaves should be spaced uniformly along the stems (equal "internodes"), though the internodes get closer nearer the tip, especially in the spring and early summer as new growth occurs. Leaves on stems should also be at right angles to the previous set. It may be difficult in a bundle, but a close examination can determine if all leaves are present or if some are missing. The apical tip (end) of the stem should be present, similar to an arboreal. Flower buds at the end of the stem should be removed.

## CONTAINER-GROWN SPECIMENS

Plants should also exhibit **radial symmetry which is a circular growth arranged around a center**. Can you draw an imaginary circle around the stem/leaf perimeters, and find a balanced arrangement of the leaves? NOTHING should be one-sided.

**NOTE: FLOWERS:** If flowers are noticeably present in a Foliage Specimen class, the flowering is a major fault, and at least 8-10 points deducted here, as well as points in Maturity and Grooming.

- i. Favorable leaves: Thick, bilaterally symmetrical, balanced left-right, right-angles, well-placed/spaced (container—grown), crisp, firm, healthy, uniform/equal on both halves of midrib.
- ii. Unfavorable leaves: Damaged, asymmetrical, unbalanced, uneven, blemished, diseased, dull, deformed, sparse (container-grown), noticeable voids, one-sided
  
- i. Favorable Stems: thick, upright, erect, uniformly spaced internodes, identical, apical tip present
- ii. Unfavorable Stems: limp, curved, misshaped, floppy, lacks uniformity due to XXX, irregular internodes. Missing apical tip to stem. Plant is “stemmy” with few leaves.
  
- i. Favorable Plant: Radially symmetrical, balanced, even, symmetrical stem placement, bundle uniform in all Form aspects; slightly domed, rounded plant
- ii. Unfavorable Plant: Lopsided, missing leaves, unbalanced, asymmetrical, sparse, missing leaves, center distorted, lacks uniform leaves, leaning, tilting. Bundle is irregular in all FORM aspects such as length, tips, leaf placement.

**COLOR** (20 pts) – **visual perception of hues, tints, tones and shades of all plant parts**. Should be fresh, bright, none or little fading, uniform. Look closely at edges of leaves for signs of fading. It will appear as a washing or disintegration of color, creating a watery/muddied appearance. There should be no sunburning, which looks like a browning/yellowing of the leaves.

Leaves should be glossy to slightly waxy, though some may have a soft matte finish with no gloss. Some leaves will be hairy, which gives a gray/silver hint to the underlying green color.

Stem color should be like leaf color except on yellow forms (stems will be greenish-brown), though the stem will develop woody brown tissue close to the soil as the plant ages.

**NOTE: Must state actual color/s with descriptive adjectives. Two comments required.**

- i. Favorable: clean, bright, vivid, pure, rich, showing, brilliant, intense, uniform, bold, delicate (for pastel pinks and white), even, vibrant, uniform, blended
- ii. Unfavorable: muddy, not uniform, dirty, faded, uneven, dull, weak, murky, aged, irregular, spotted, dingy, unclear, not clear, browning

**MATURITY/SIZE** (20 pts) – **ideal stage of development for the specific plant exhibited**. Degree of being prime. TWO DIFFERENT THINGS. Two comments needed.

Are leaves fully expanded and large for the type? Are all leaves present? Are stems starting to develop woody tissue (maturity) or is everything still herbaceous (immature)?

- i. Favorable Maturity: fully-developed, mature, well-developed, prime (can't use “peak” as that's part of the quality criteria), lush, robust growth, new growth evident, well-clothed, covered with foliage.
- ii. Unfavorable Maturity: immature, young, not fully opened, not fully developed, poorly formed, malformed, leaves not uniformly open; plant is flowering; plant is obviously in buds

- i. Favorable Size: leaf uniformly opened and XXX large; “XXXX” leaf and plant size (stated), “X” inches across, “relative size comparison” (fist size, hardball, teacup) NOTE: Give approximate size of mature leaf, as well as overall size of the plant.
- ii. Unfavorable Size: undersized by XXXX inches, leaves small at XXX size.

**CONDITION/BLEMISHES** (15 pts) – **physical appearance of the plant at the time of judging; includes substance and imperfections in the foliage.** (NOTE: 2 comments needed)

Condition is Substance which refers to firmness of tissue only, which is essentially if the leaves have sufficient moisture, a result of correct conditioning and peak of perfection.

Blemishes: Look for insects or diseases. Look for mechanical injury to leaf and stem such as bruising, tears, nicks, etc. There should be no evidence of spray or water residue on leaf or stem.

- i. Favorable Condition: Turgid, erect, crisp, fully-hydrated, water-filled, undamaged, fresh, peak
  - ii. Unfavorable Condition: Wilted, limp, withered, droopy, shriveled, browning, thinning of petal tissue, drying
- i. Favorable blemishes: proper removal of damage, flower vigorous, dynamic; insect-free; disease-free, undamaged, unmarred, intact
  - ii. Unfavorable blemishes: torn or ripped leaf, scarred tissue, water spotting, evidence of disease, evidence of insects. Dried margins, leaf spots, rotting, dried and/or dead lower leaves.

**D. GROOMING/STAGING** (15 pts total) **MOSTLY UNDER EXHIBITOR’S CONTROL SO DON’T BE AFRAID TO PENALIZE**

**GROOMING** (10 pts) – **Action taken by the exhibitor to improve the appearance of the specimen.**

Leaves with no spots, dirt, debris. Again, exhibitor has most control, so don’t be hesitant to remove points. Essentially, plants should be CLEAN, damage-free.

- i. Favorable: Well-presented, uncrowded but dense, orderly, tidy, clean, debris-free, spotless, unsoiled, fresh, neatly and almost unnoticeable trimmed leaves.
- ii. Unfavorable: dirty, scars, spent leaves (container-grown), debris-evident, spray residue, soiled, grimy, filthy, water spotted on leaves, dull sheen. Tips brown. Poor trimming of leaf/flower. Flowers/buds are present.

**STAGING** (5 points): **presentation of the specimen.** If the *staging* does not conform to schedule requirements, deduct all 5 points here.

For container grown plants, centered in the pot. Potting medium should be fresh-looking. Containers should be clean and unobtrusive. **Double-potting (one pot inside another but unseen)** is permitted unless schedule says otherwise.

**CUT SPECIMENS:** Is the banding of the bundle unobtrusive? A rubber band was recommended in the Section schedule (page 2 above), but ribbons can be used if the schedule permits or requires. Specimens should be identical length.

- i. Favorable: Staged to best advantage, centered in container, container unassuming, container/pot clean and unobtrusive, displayed to best advantage; container-grown specimen fills pot but not too large; bundle of herbs attractively displayed, herbs dominate and not overshadowed by staging
- ii. Unfavorable: Dirty, improperly wedged, off-center, leaning, not in proportion to container (too large, too small), container dirty, container overwhelming; cut stems uneven, irregular length of cut specimens; quantity required does not meet schedule requirements for staging; bundling material dominates herbs.