

Onosma rigida - New Crop Summary & Recommendations

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Series: New Floricultural Crops: Formulation of Production Schedules for Wild, Non-domesticated Species

Part of the requirements for
Horticultural Science 5051: Plant Production II
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New Crop Presentation

Onosma rigida

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HORT 5051

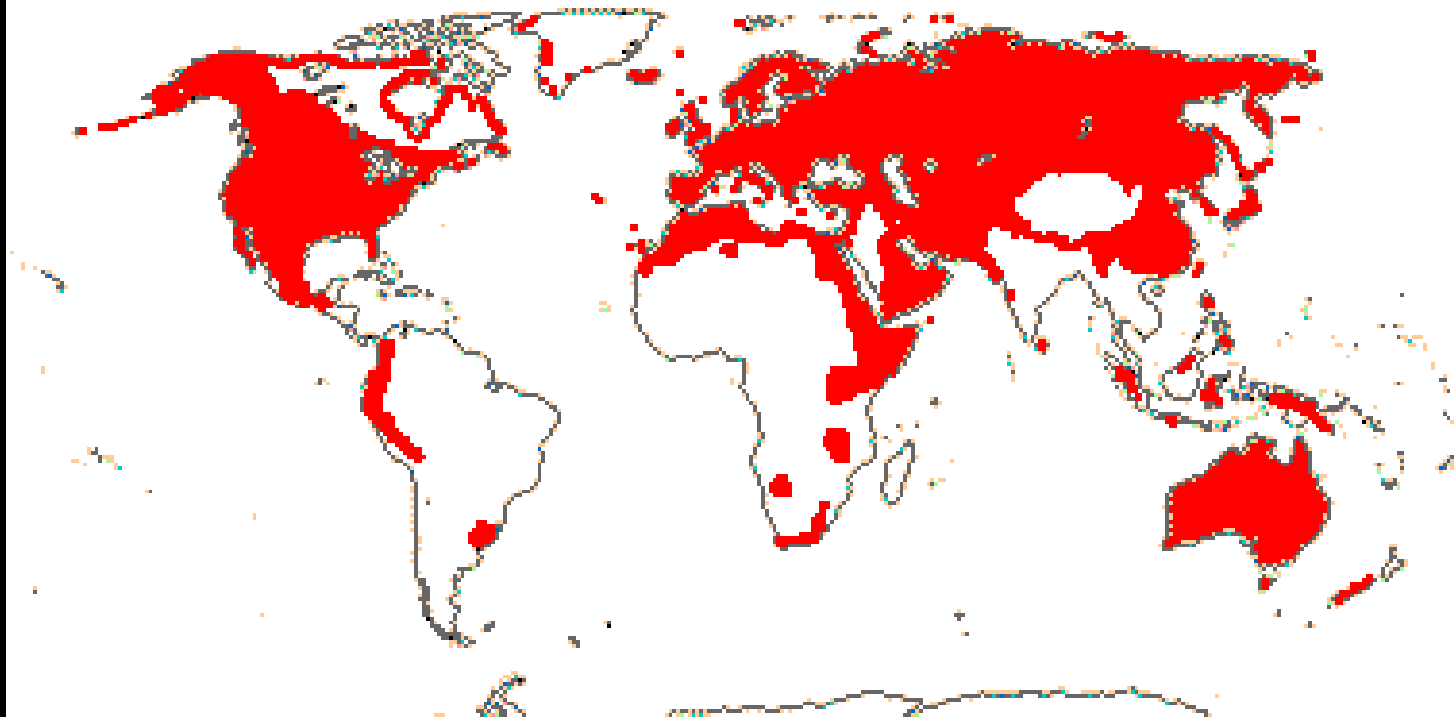
SP 2008

Taxonomy

- *Scientific Name: Onosma rigida*
- Greek “onos” = ass and “osme” = smell
- Two explanations: (1) the roots of some species smell like an ass (donkey) or
- (2) the plant itself is like by donkeys (Bennett)
- Synonyms: *Podnosm* Boissier; *Colsmannia* Lehm.; *Maharanga* A.DC. (Bennett)
- Common Name: Golden Drop (Bennett, Carr, Wild Ginger Farm)
- Family: Boraginaceae



Geographic Distribution



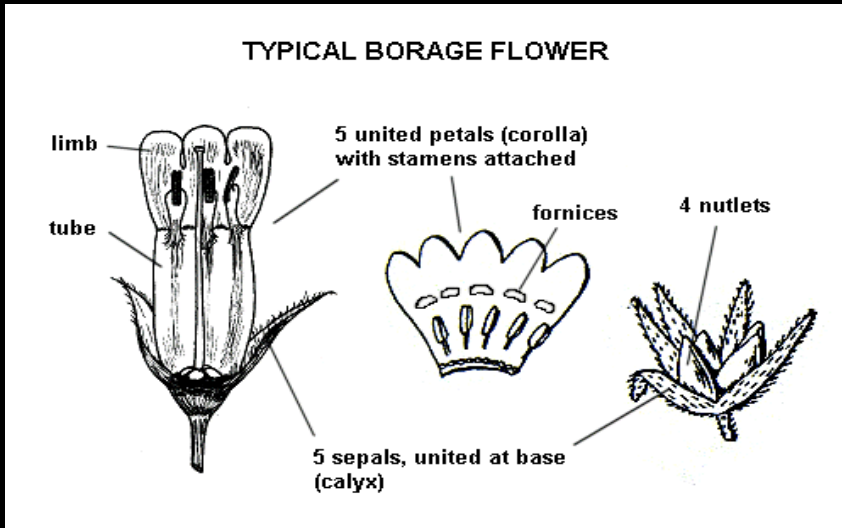
Boraginaceae Distribution

- Primarily Asia, Europe, and North America
- China, Turkey, Ukraine, United States
- Prefers Dry, Warm, Full Sun Conditions
- Will Self-seed

Native Habitat

- Ukraine and Russia
- Full Sun Conditions
- Sand or Limestone soils
- Does not like to get or be wet
- Not picky with pH
- Ideal for rock gardens, retaining wall crevices and other persistently dry, hot spots

Taxonomic Description



- Perennial
- Tufting Mound 10”h
- Leaves 2-5” long, narrow
- Blue/gray foliage



Taxonomic Description (cont)

- Yellow Terminal Blooms
- Spiraled Cyme
- 5 overlapping sepals
- 5 united petals
- Blooms spring-summer
- Nutlets



Propagation Methods

Seed

- Easily done, long process
- Sow at 18-22°C (64-71°F) for 2-4 weeks
- move to -4 - 4°C (24-39°F) for 4-6 weeks
- move to 5-12°C (41-53°F) for germination
(Likely some kind of dormancy)



Propagation Methods (cont)

Vegetative

- Soft/semi-ripe cuttings (non-flowering)
- 15 degrees C
- Loam: Grit: OM
- My Exp:
20 degrees C

Crop Ideotype



- Reduce Bristle-like texture

Onosma frutescens

Market Niche

- Target Sales Date(s): Late May through June
- Potential Holiday for this product: Memorial Day, Father's Day, First Day of Summer
- Unknown if forcing is possible
- Similar crops: *Achillea*, *Oenothera*, *Opuntia*, *Sedum*, *Yucca*

Market Niche (cont)

- Not recognizable to market
- Problem in production:
 - Doesn't like to get leaves wet
 - Needs to be able to dry out quickly
 - Production set up will have to be tailored to this crop
- Unknown when will be available
(dependent on blooming studies)

Anticipated Cultural Requirements

- Winter Hardiness: Zone 6
- Heat/Drought Tolerance: Extremely Good
- Temperature (Day/Night): Specifics not known, likely 75-85oF/65-75oF
- Light Needs: Full sun is required. Photoperiod response has yet to be determined.
- Nutrition: Little
- Soil: Sand or Limestone (Bennett) Fast draining, dry
- Plant Growth Regulators: Not Required
- Container size: 75-288 Plug trays (from seed), 1801 or 804 (from cuttings) 4" pots, #1 pots
- Disease Resistance/Susceptibility: May be susceptible to aphids and mealy bugs.
- Fungicides, Insecticides: Unknown

Production Schedule

- Germination can take 6-10 weeks
- Unknown time required to flower
 - guessing 8-10 once germinated
- Sell when in bloom in Late Spring and Summer
- More testing is required to fulfill crop schedule

Needs Assessment

- Reduce germination time
 - Speed up production
 - Increase rate of genetic research
- Other unknown – more testing required

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