

Viola Renifolia var. *Brainerdii* vs. *Viola Epipsila* subsp. *repens*



Billy Connor
BIOL 331
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http://botu07.bio.uu.nl/spgm-1.4.4/gal/1_Others/_thb_viola.renifolia_6768.jpg



VIOLACEAE

- Leaves
 - Simple, cordate shape
 - Alternate or basal
- Flowers
 - Perfect, zygomorphic
 - 5-merous (sepals, petals, stamens)
 - Nectar spur
 - Early seasonal showiness
 - **Cleistogamous** flowers later in season
- Fruit
 - Superior ovary of 3 fused carpels
 - Fruit is 3-valved boat with many seeds



<http://www.bartleby.com/images/A4images/A4cordat.jpg>



<http://botany.cs.tamu.edu/FLORA/dcs420/mi15/mi15060.jpg>

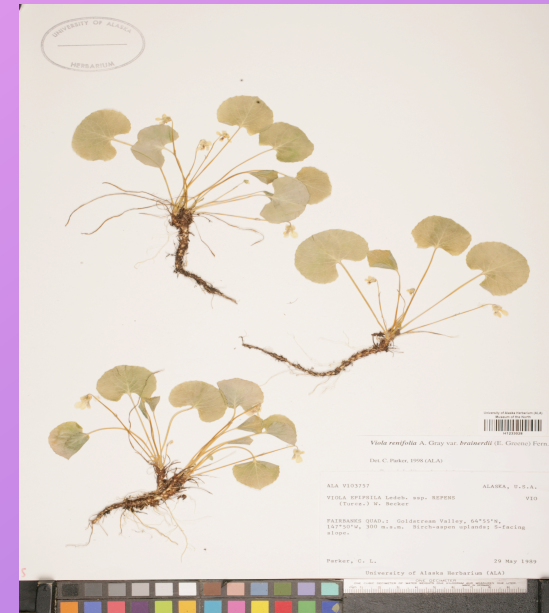


http://www.kew.org/science/tropamerica/neotropikey/families/images/Violaceae/rinorea_pubiflora_1.jpg

- **SIMPLE AND CORDATE**
- **BASAL LEAVES**
- **FLOWERS ON SOLITARY PEDICELS**
- **5-MEROUS**



- **PERFECT, ZYGOMORPHIC FLOWER**
- **NECTAR SPUR**



VIOLA

1 Flowers yellow

1` Flowers white, lilac, violet, purple, or blue

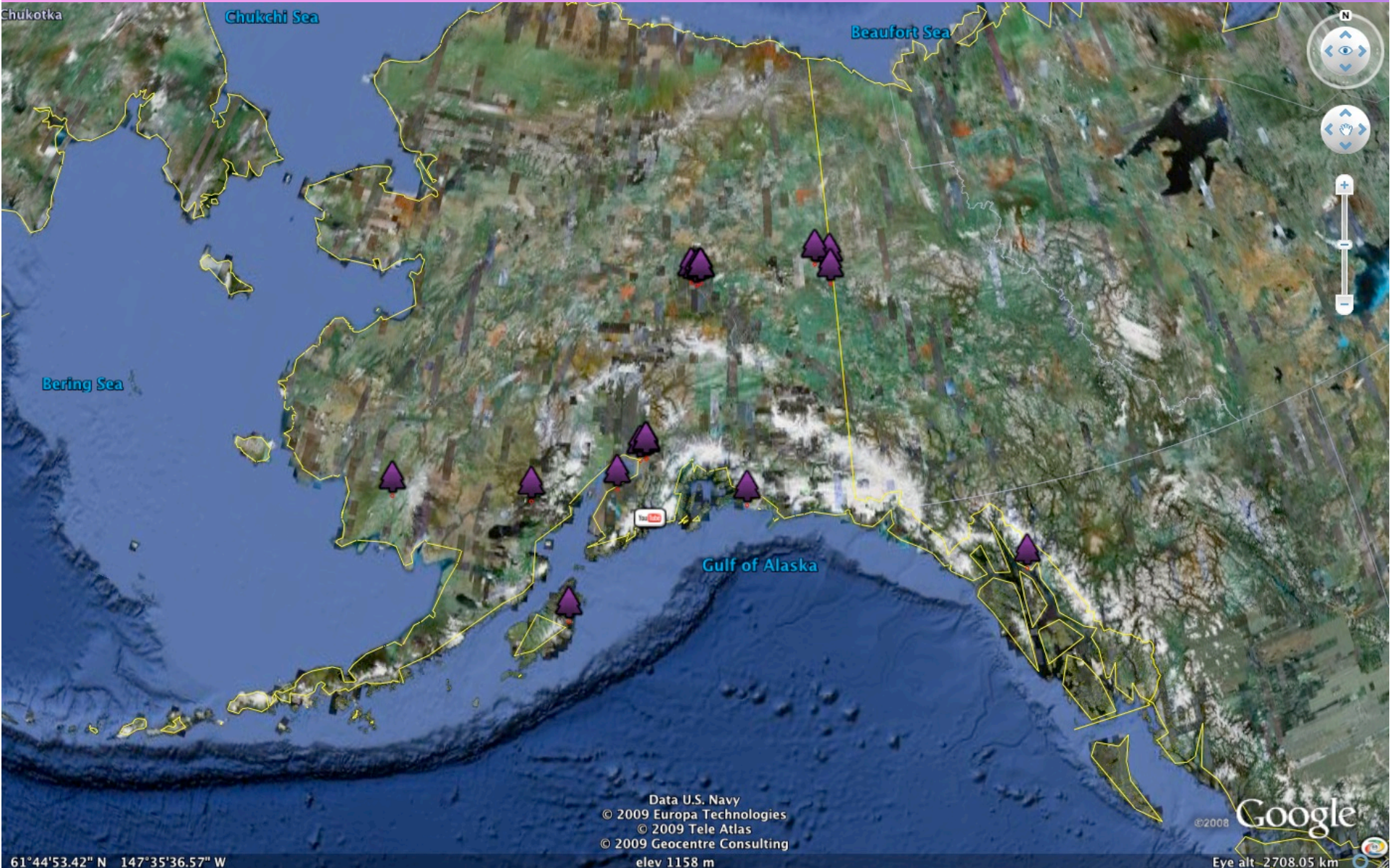
→ Leaves pubescent above . . . *V. Selkirkii*

→ Leaves glabrous

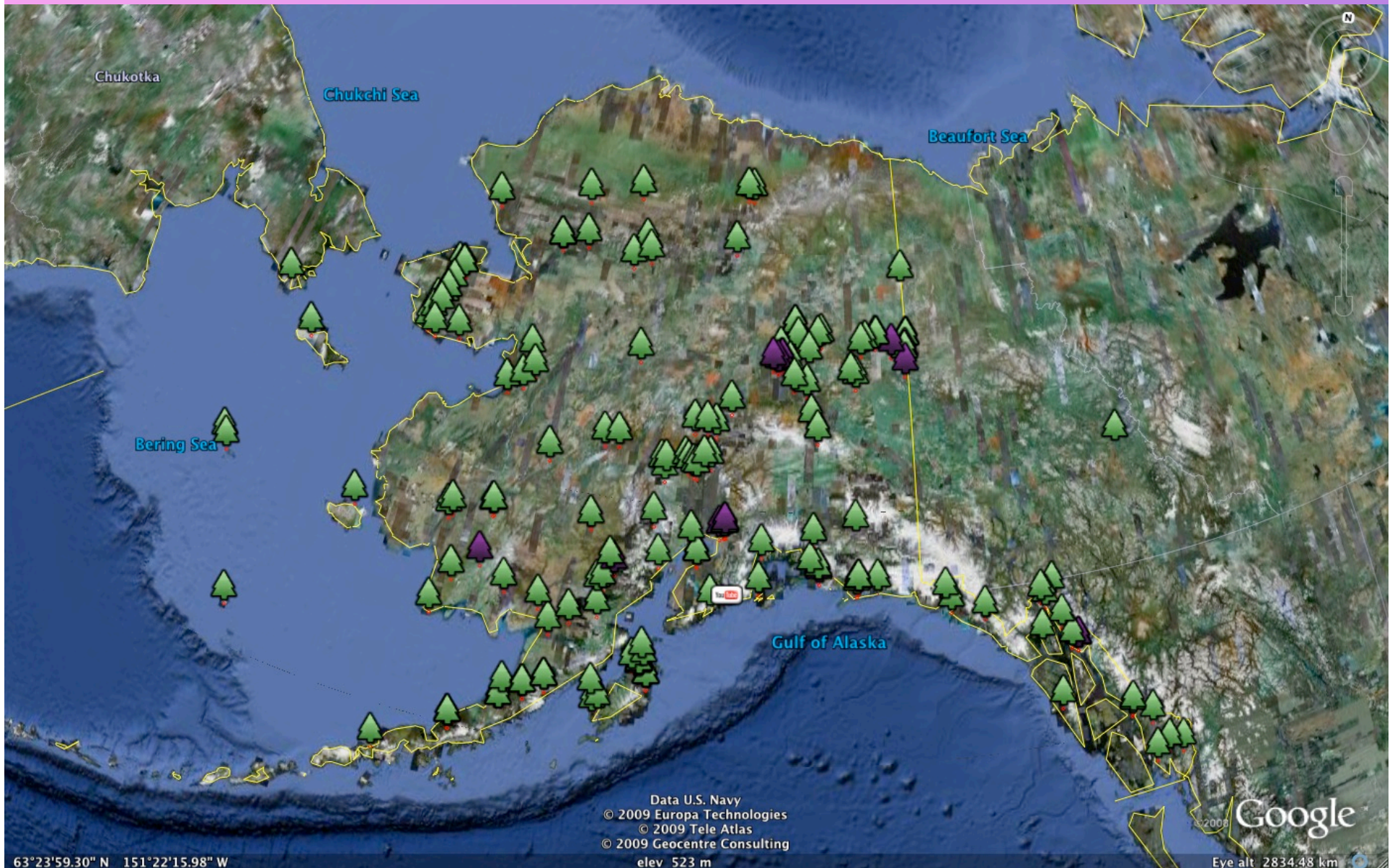
- FLOWERS LARGER, LILAC, WITH DARKER STRIPES; STOLONS PRESENT . . . *V. epipsila*
- FLOWERS WHITE W/ PURPLE STRIPES; LACKING STOLONS . . . *V. renifolia*



DISTRIBUTION



DISTRIBUTION



FLOWER SIZE COMPARISON

V. epipsila



V. renifolia



MORPHOLOGICAL COMPARISON

V. epipsila



V. renifolia

IMPORTANT DIFFERENCE

V. epipsila

- Creeping rootstock
- Leafy stolons present

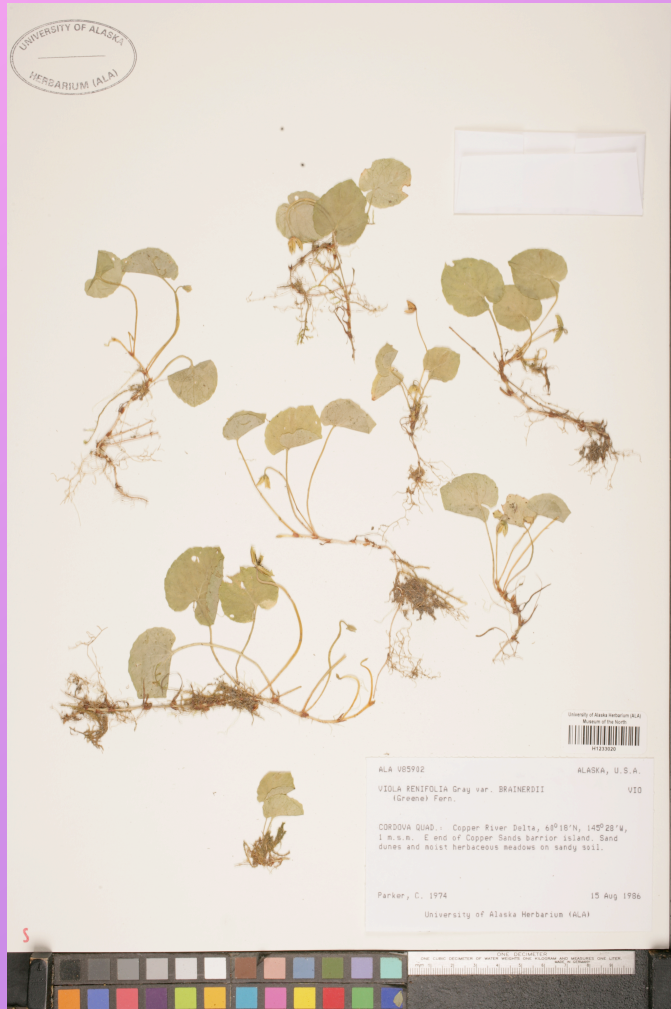


V. Renifolia

- Ascending rootstock
- Lacking stolons

MISIDENTIFICATION

ALA V85902



ALA V103757



ALA V120257



ONE OF THESE THINGS IS NOT LIKE THE OTHER

MISIDENTIFICATION

ALA V85902



ALA V103757



ALA V120257



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PERSONAL SUGGESTION



FLOWER SIZE RELATIVE TO LEAF SIZE

ACKNOWLEDGMENTS

- Hultén, Eric. Flora of Alaska and Neighboring Territories. Stanford University Press, California. 1968.
- Thank you to Mel for help choosing my topic
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