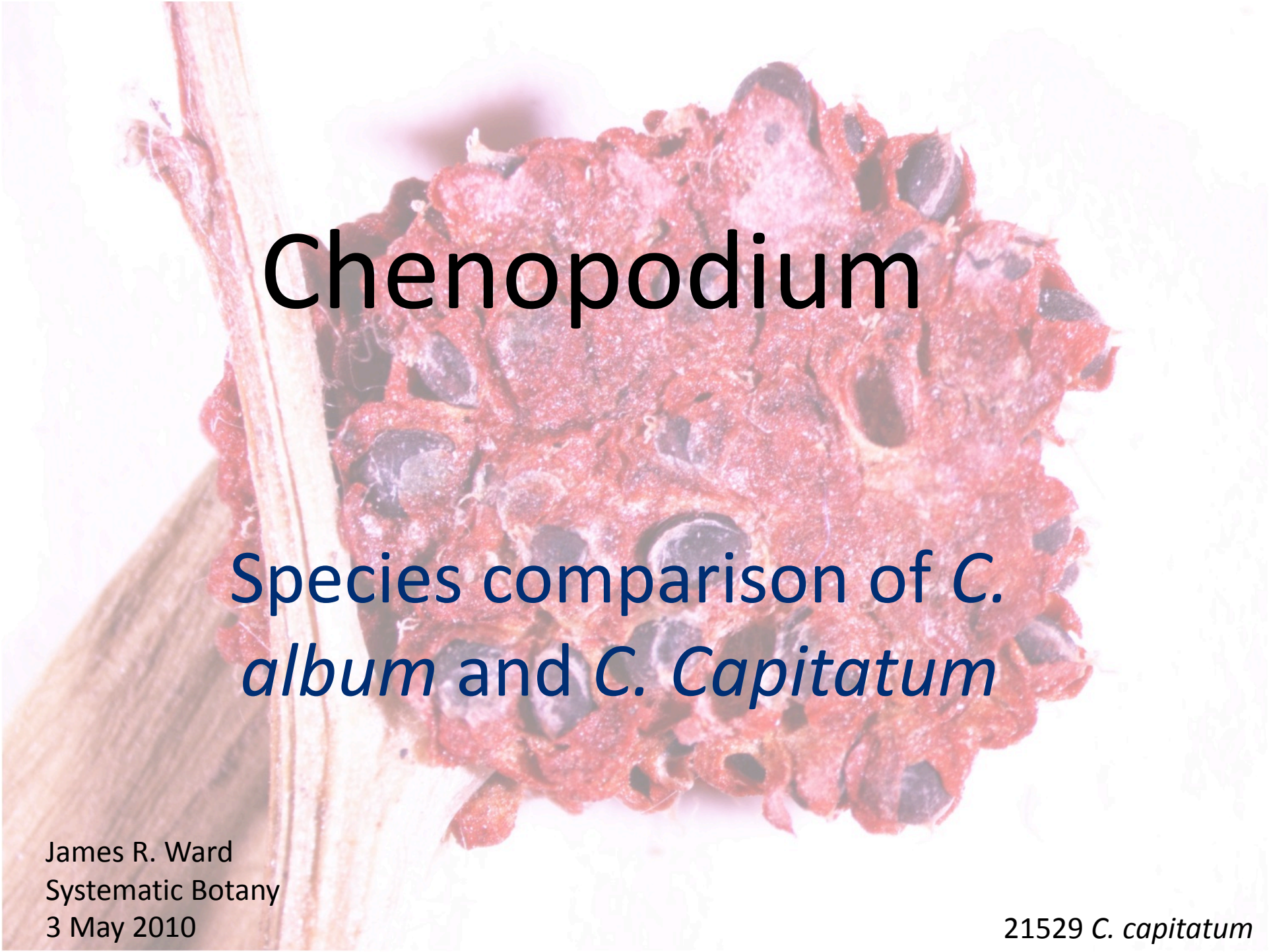




Chenopodium

Species comparison of *C. album* and *C. Capitatum*

James R. Ward
Systematic Botany
3 May 2010

21529 *C. capitatum*

- Plante
 - Plant kingdom
- Angiosperm
 - Flowering plant
- Eudicot
 - Dicotyledeon



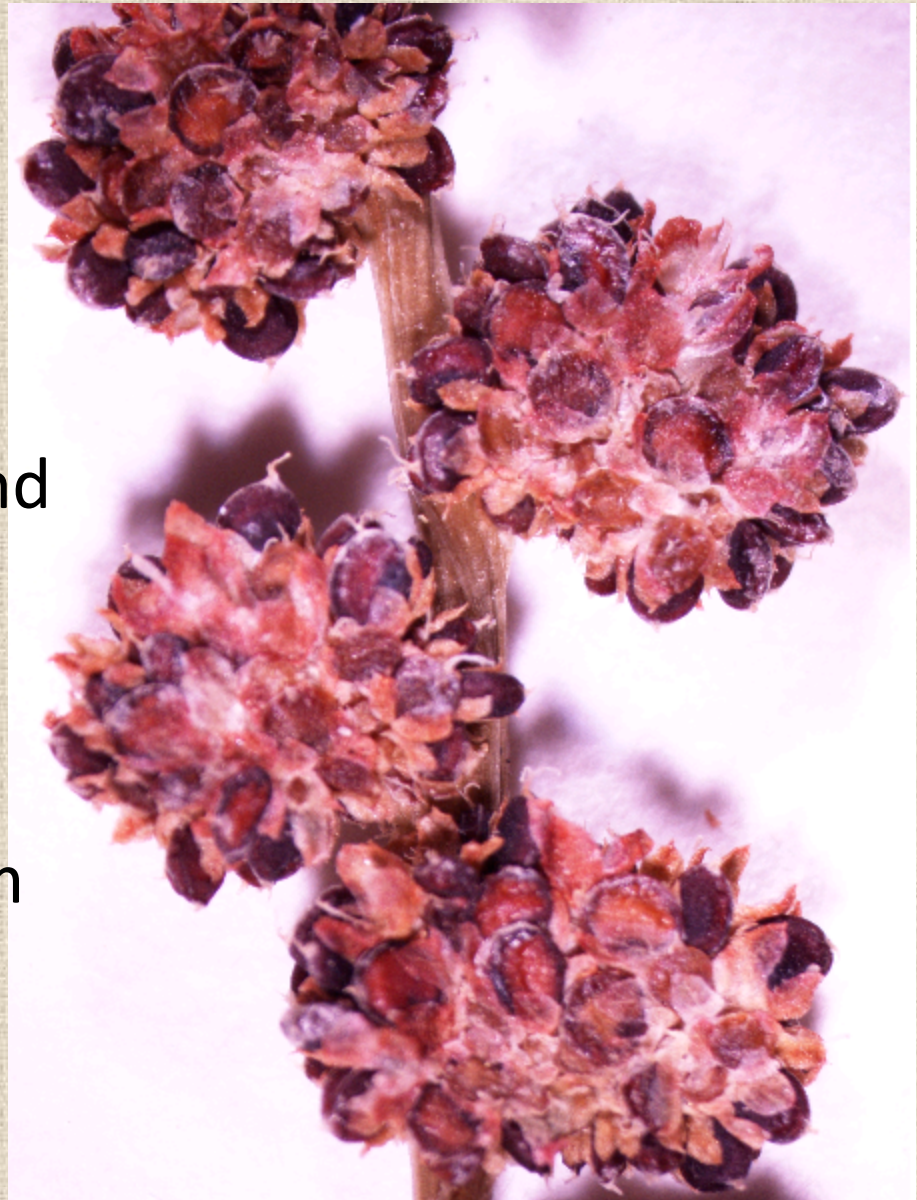
08498 *C. album*

- Core Eudicot
 - Predictably organized flowers
 - Fused carpels, differentiated petals and sepals, etc
- Caryophyllales
 - Includes chenopodaceae, caryophyllaceae, portulacaceae



74873 *C. capitatum*

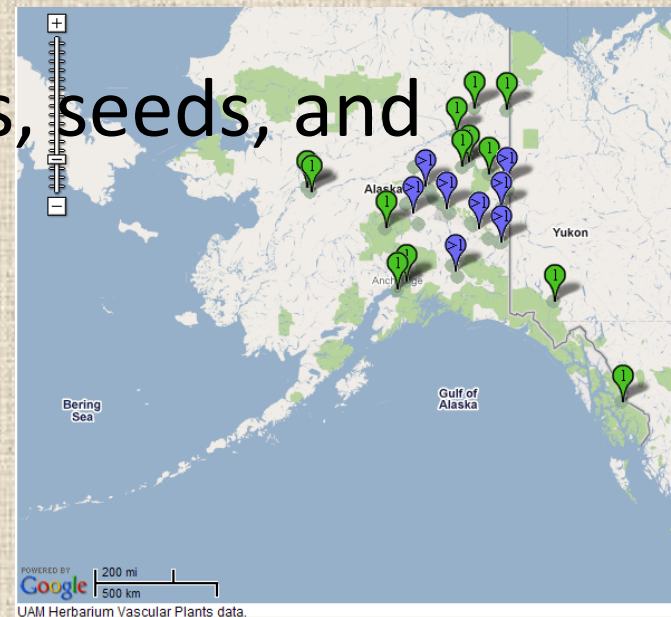
- ~~Chenopodiaceae~~
Amaranthaceae!
 - Morphological and molecular evidence
 - C4 photosynthesis and sodic/xeric tolerance
 - Subfamily
Chenopodioideae
 - Genus: *Chenopodium*



30040 *C. capitatum*

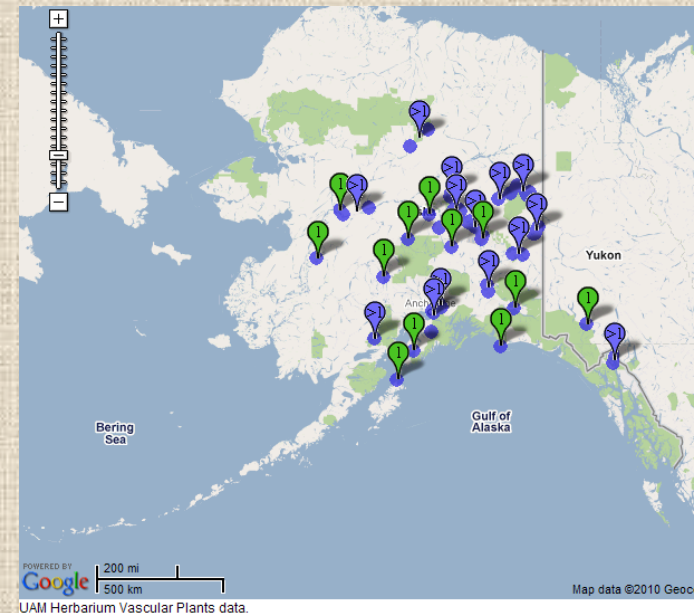
C. capitatum

- Common names: Strawberry-blite, Strawberry-spinach
- Widely distributed in Alaska and throughout the world
- Edible young leaves, shoots, seeds, and perianth
 - Beware of Oxalic Acid!



C. album

- Common names: Lamb's Quarters, Pigweed, Goosefoot
- Edible young leaves, shoots, seeds
 - Oxalic Acid!



Differences

C. capitatum

- Glabrous
- Green or Reddish
- Perianth fleshy, bright red and juicy at maturity

C. album

- Mealy, at least on underside of leaves
- Grey or glaucous
- Perianth mealy, enclosing the fruit

C. capitatum



21529 *C. capitatum*

C. album



84632 *C. album*

C. capitatum

Leaves triangular to
triangular-hastate



74737 *C. capitatum*

C. album

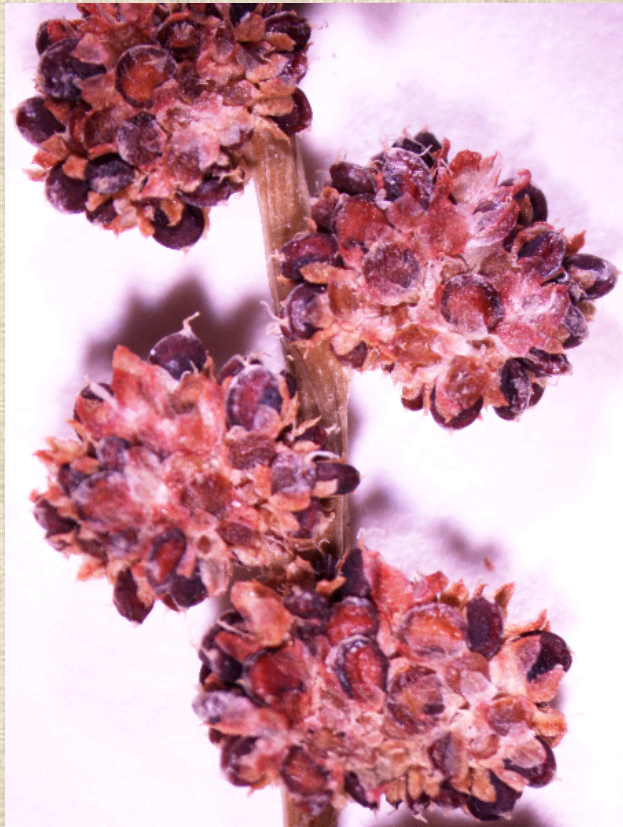
Leaves ovate-lanceolate to
rhombic-lanceolate, toothed



309673 *C. album*

C. capitatum

Interrupted spike
inflorescence



30040 *C. capitatum*

C. album

Densely crowded spike
inflorescence



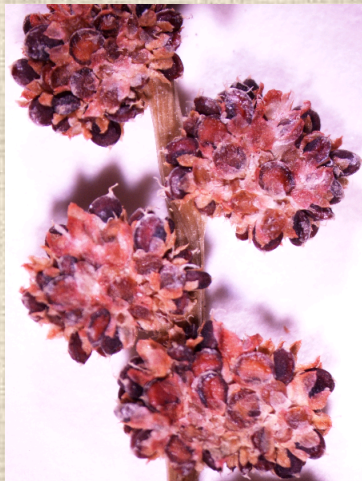
C. album

C. capitatum

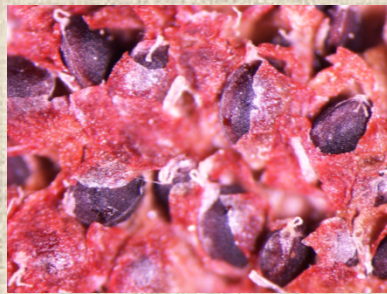
Clearly red



21529 *C. capitatum*



30040 *C. capitatum*



C. capitatum

C. album

Not typically red, but
sometimes



119286 *C. album*



C. album



91751 *C. album*

C. capitatum

Few to absent visible oxalate crystals



82848 *C. capitatum*

C. album

Abundant oxalate crystals



91751 *C. album*

Arctos Links

- ALAAC 21529 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:61996>
- ALAAC 30040 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:67396>
- ALAAC V74873 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:86994>
- ALAAC 82848 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:81593>
- ALAAC 91751 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:86455>
- ALAAC 119286 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:16436>
- ALAAC V120461 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:13436>
- ALAAC V120556 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:13531>
- ALAAC V74737 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:110349>
- ALAAC 21529 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:61996>
- ALAAC 61996 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:61996>
- ALAAC 84632 : Examined 5/3/2010 <http://arctos.database.museum/guid/UAM:Herb:110640>

Literature Cited

- Research for this project included information from Jacob Peter Anderson's *Flora of Alaska*, Eric Hulten's *Flora of Alaska and Neighboring Territories*, and William Cody's *Flora of the Yukon Territory*
- *C. album* and *C. capitatum* distribution maps created from KML files provided by ARCTOS, using Google Earth software
- Photos taken by James R. Ward