

Bromus identification

Region V (Southern) Referee Report



2008

AOSA/SCST Annual Meeting

St. Paul, MN

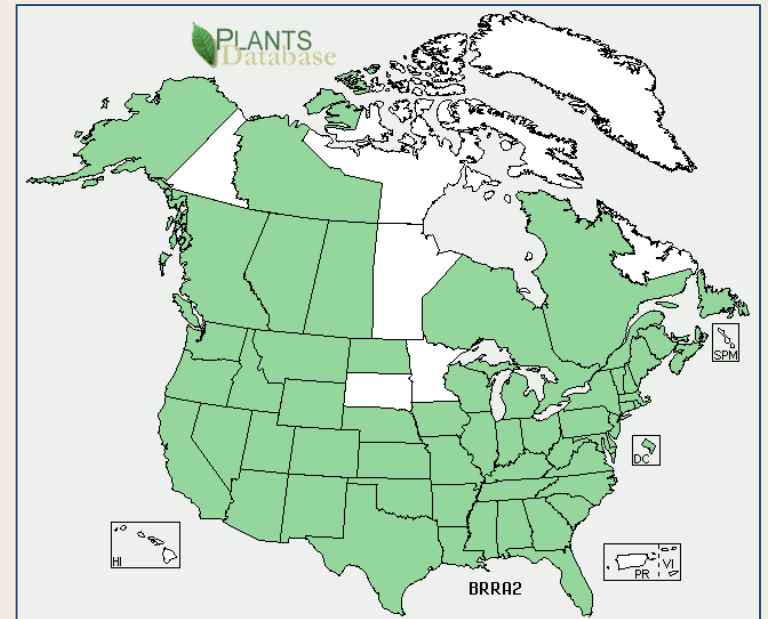
Region V (Southern) Referee Report Background

Bromus identification is
challenging

Buzz Session Comments

Previous Referees

1972, 1974, 1976,
1977, 1978, 1979,
1987, 1988, 2006,
2007, 2008



Bromus racemosus (= *B. commutatus*)
distribution map
www.plants.usda.gov

Region V (Southern) Referee Report

Materials and Methods

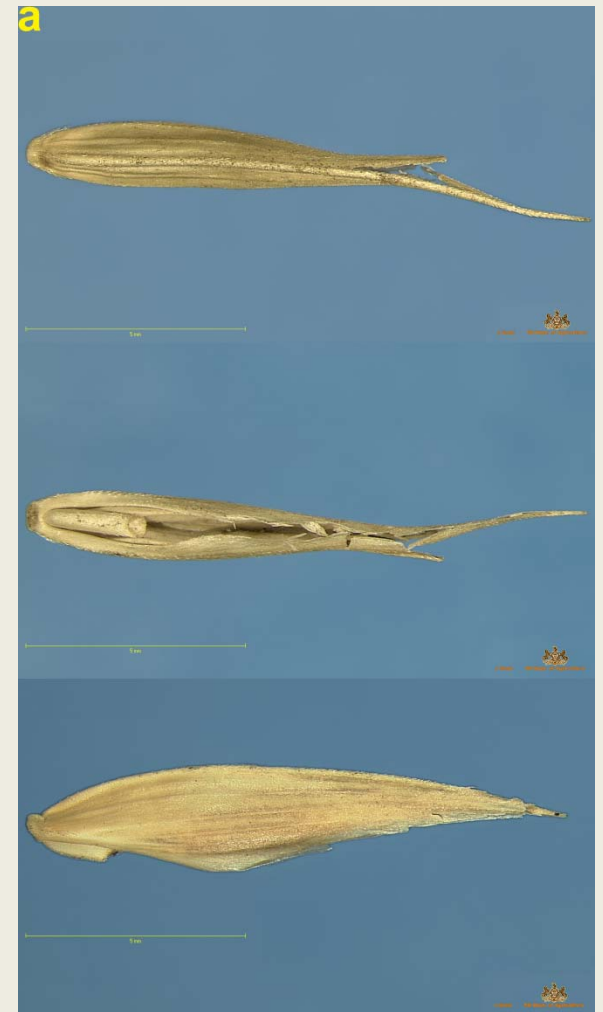
Image sets of 7 species posted online

Identify species using
Lemma, Palea and Lateral Views

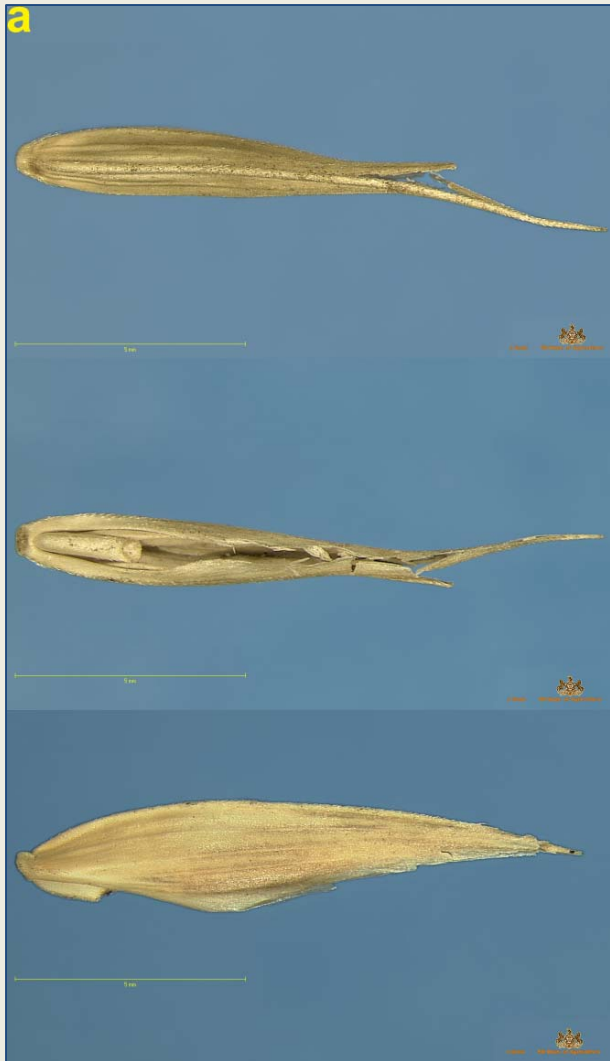
Answer sheets provided

<http://www.rs.uky.edu/sections/seed/Bromus.php>

Images by Johnny Zook (PA)



Region V (Southern) Referee Report Results



Bromus catharticus

Bromus unioloides

Bromus willdenowii

rescuegrass

prairie brome

92%

Region V (Southern) Referee Report Results



Bromus japonicus

Japanese brome
Japanese chess

79%

14% *B. commutatus*

Region V (Southern) Referee Report Results



Bromus commutatus

hairy brome
hairy chess

77%
9% *B. japonicus*

Region V (Southern) Referee Report Results



Bromus hordeaceus

Bromus mollis

blando brome
soft chess

91%

Region V (Southern) Referee Report Results

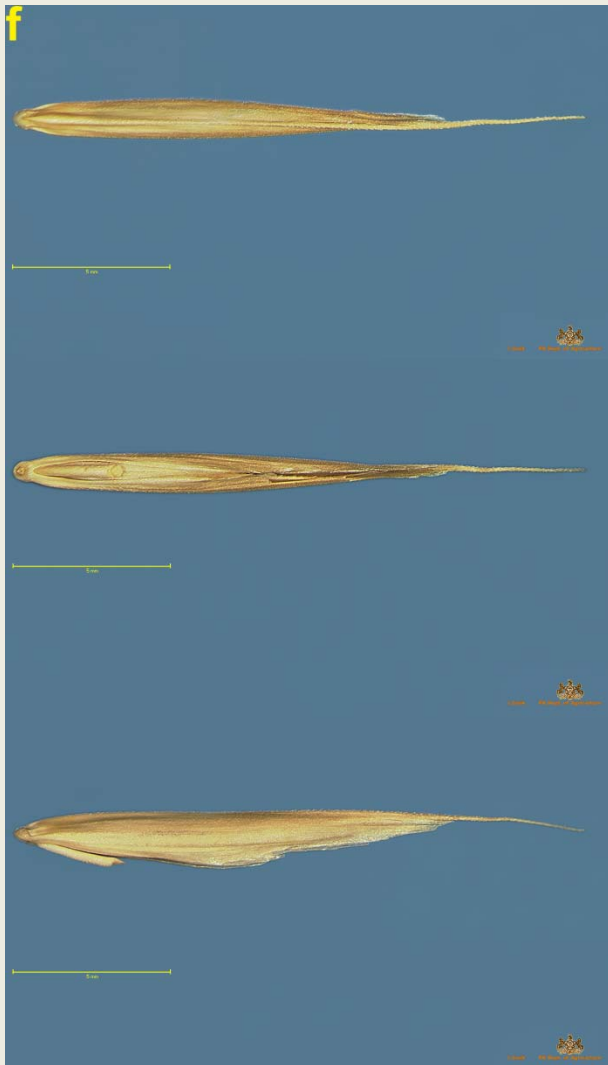


Bromus inermis

smooth brome

95%

Region V (Southern) Referee Report Results



Bromus marginatus

mountain brome

83%

Region V (Southern) Referee Report Results



Bromus secalinus

cheat
chess

100%

Region V (Southern) Referee Report Results

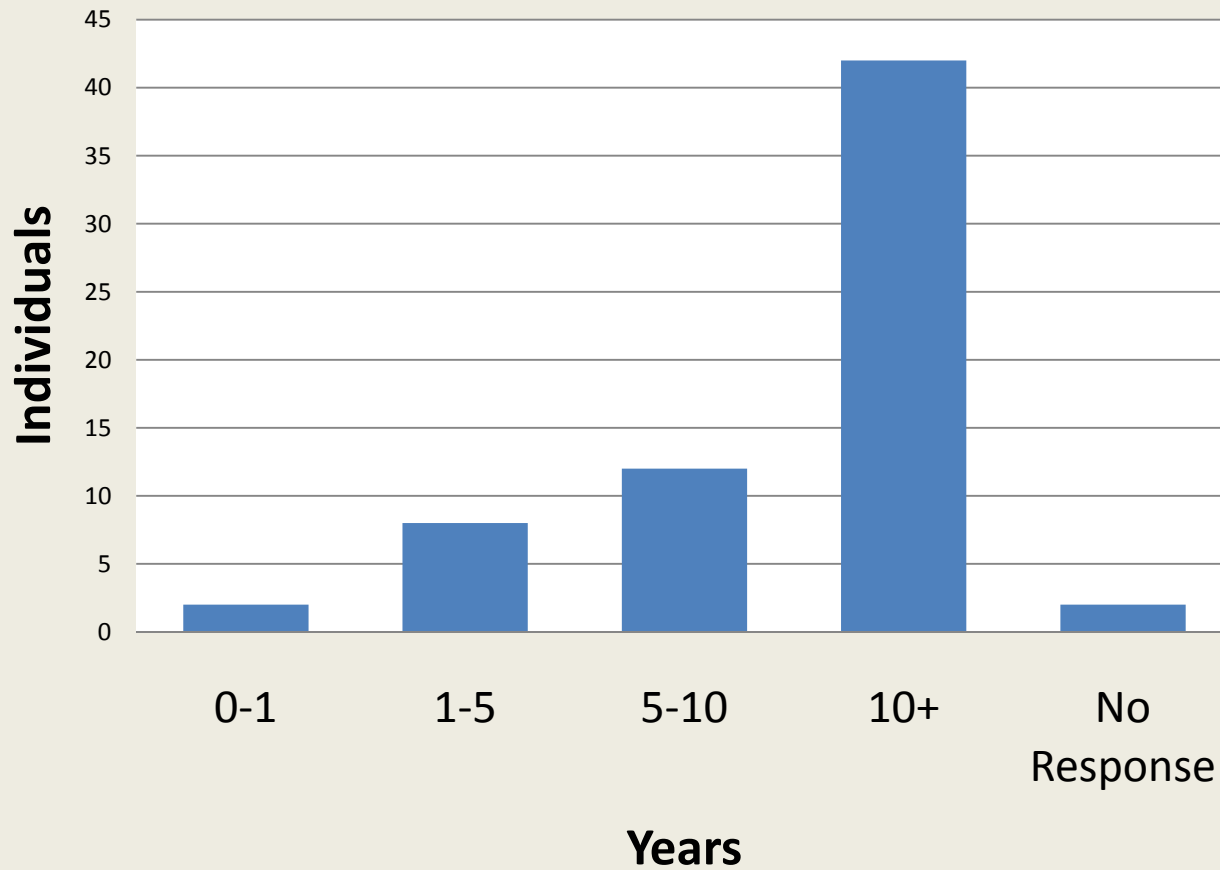
66 Participants

52% from Southern Region

33 Laboratories

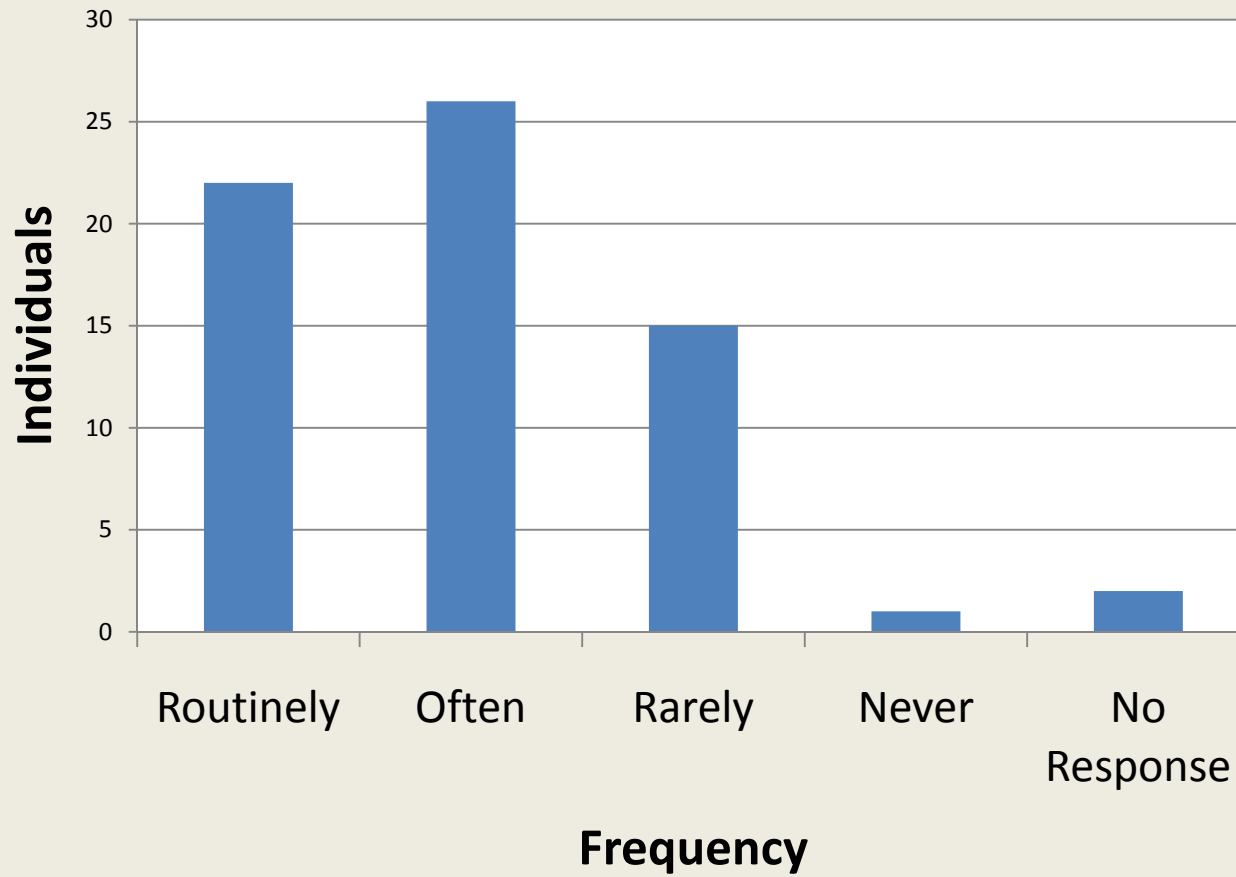
Region V (Southern) Referee Report Results - Continued

Participant Experience Level



Region V (Southern) Referee Report Results - Continued

Bromus Exposure



Region V (Southern) Referee Report Results - Continued

Participant input on Bromus species most difficult to identify

B. arvensis

B. biebersteinii

B. briziformis

B. carinatus

B. catharticus

B. commutatus

B. diandrus

B. hordeaceus/mollis

B. inermis

B. japonicus

B. marginatus

B. racemosus

B. riparius

B. rubens

B. secalinus

B. tectorum

Region V (Southern) Referee Report Challenges

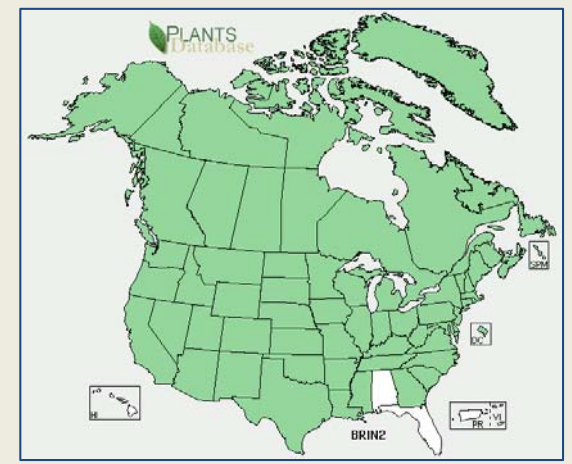
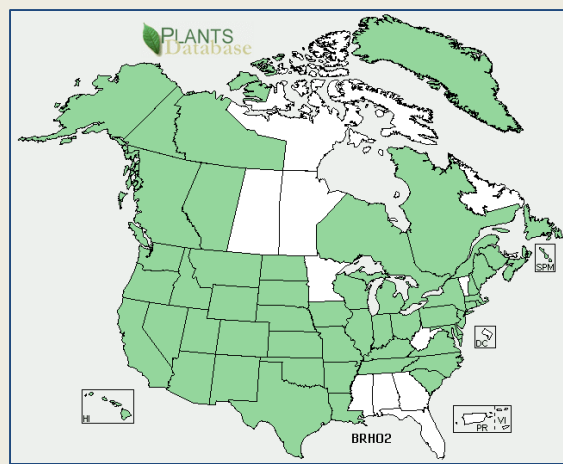
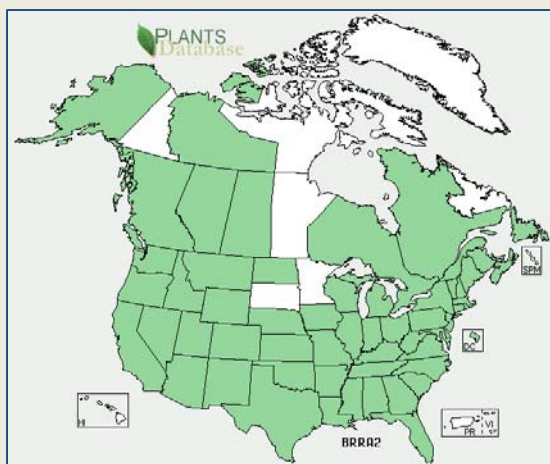
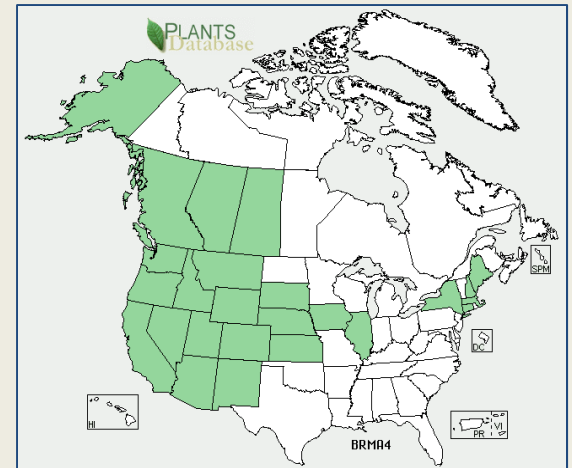
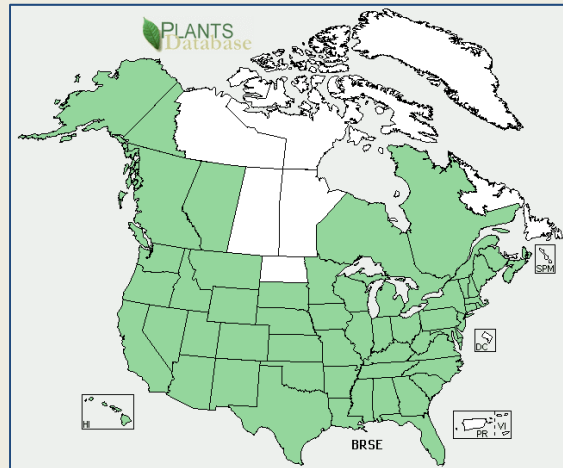
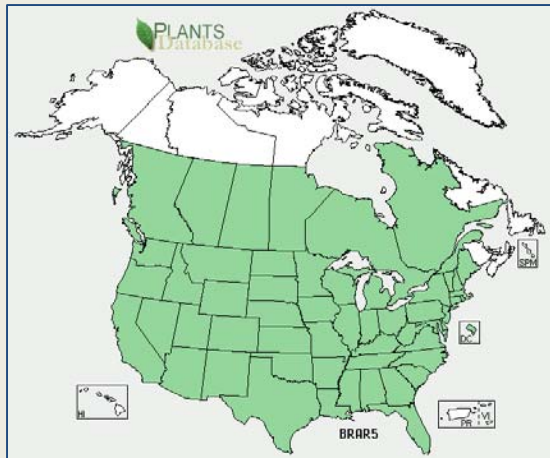
Name changes, var. & spp. confusing

Number of species/taxa

Arbitrary characteristics used for id difficult to standardize. For example: Awn length as defining character - typically missing in milled seed samples.

Experience

Region V (Southern) Referee Report Challenges



Bromus distribution maps www.plants.usda.gov

Region V (Southern) Referee Report

Conclusions

Bromus identification is challenging

Was this referee valuable?

Yes

Allowed some analysts to study seed kinds rarely or never seen

In/across lab conversation about techniques for id

Identified difficult species to prioritize educational efforts (i.e. images, factsheets, posters, newsletter articles)

Region V (Southern) Referee Report

Bromus Identification

Thank you

Referee participants

(names have been forwarded for participation credit)

Johnny Zook

Answer key and this presentation will be posted
at the same web address

<http://www.rs.uky.edu/sections/seed/Bromus.php>

after the meeting