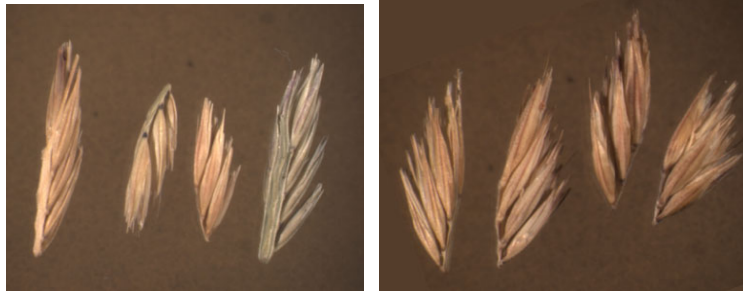


Tetrazolium methods for *Bouteloua curtipendula*

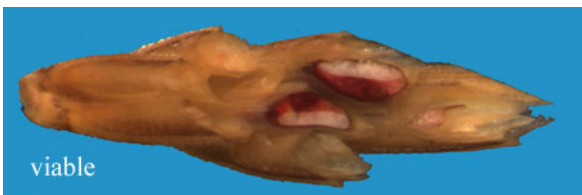
The seed unit of *Bouteloua curtipendula* (sideoats grama) is usually an entire spikelet. It can also be a single floret or a caryopsis.



Two alternate methods: lateral cut and caryopsis extraction

lateral cut

Spikelet is cut laterally through all caryopses and then stained.



caryopsis extraction

Spikelet is examined and dissected with tweezers and the largest or healthiest-looking caryopsis is extracted, longitudinally cut and then stained.



lateral cut**advantages:**

Fast preparation and evaluation.
All the caryopses in the spikelet are tested.

disadvantages:

The analyst is only looking at the laterally cut edge and could miss root or shoot problems that are not evident from this view. Beginners may not be adept at making a lateral cut that exposes all the caryopses.

caryopsis extraction**advantages:**

Easy evaluation: the analyst looks at a standard longitudinal cross section of a caryopsis. All the structures are visible.

disadvantages:

Longer preparation time. This method relies on choosing the best caryopsis in the spikelet. If the analyst chooses a dead caryopsis, there is no way of knowing if another caryopsis in the spikelet would have been viable.