

Cultural Practices for Native Forb Seed Production



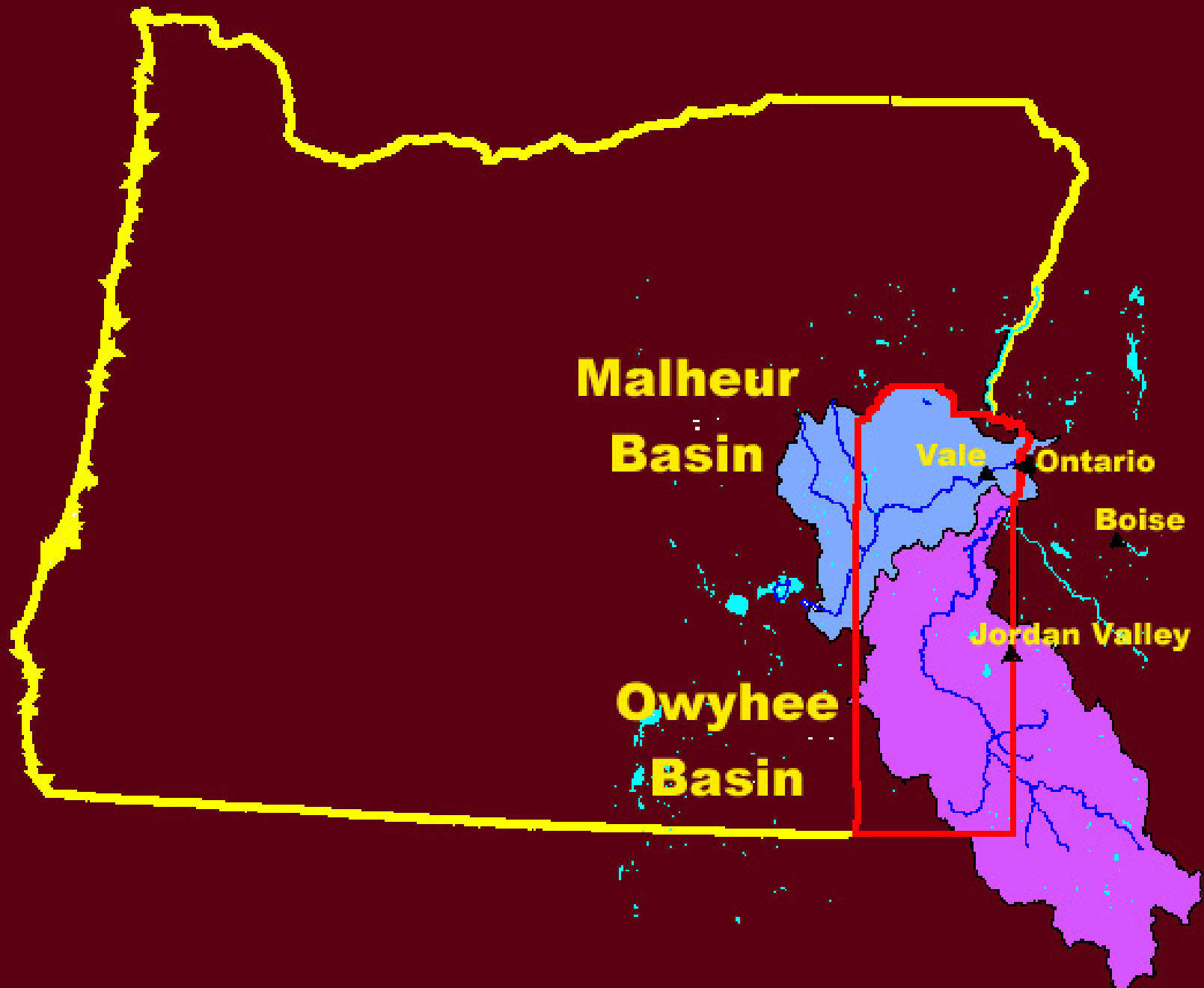
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**Malheur
Basin**

**Owyhee
Basin**

Vale

Ontario

Boise

Jordan Valley











Why try SDI irrigation?

- 1. Cultivated seed production requires dependable production.**
- 2. Excess water stress has hurts flowering and seed set.**
- 3. Total water requirements are unknown, but probably are low.**
- 4. Furrow and sprinkler irrigation encourage weeds and disease.**

Objectives

Test SDI for stable, efficient native forb seed production using small amounts of supplemental irrigation water.

1/10 acre of 7 Species

E. umbellatum, Sulfur-flower buckwheat

P. acuminatus, Sand penstemon

P. deustus, Hot rock penstemon

P. speciosus, Showy penstemon

Lomatium grayi, Gray biscuitroot

L. dissectum, Fernleaf biscuitroot

L. triternatum, Nineleaf biscuitroot







Design

Drip tape burried 12 inches deep

Tape 5 feet apart

T-tape TSX 515-16-340

**30-inch beds, seed drilled 15" to
each side of the tape**

**Forbs established in 2005 using
5.5", for 2006 0, 4.8, 8.7 inches.**

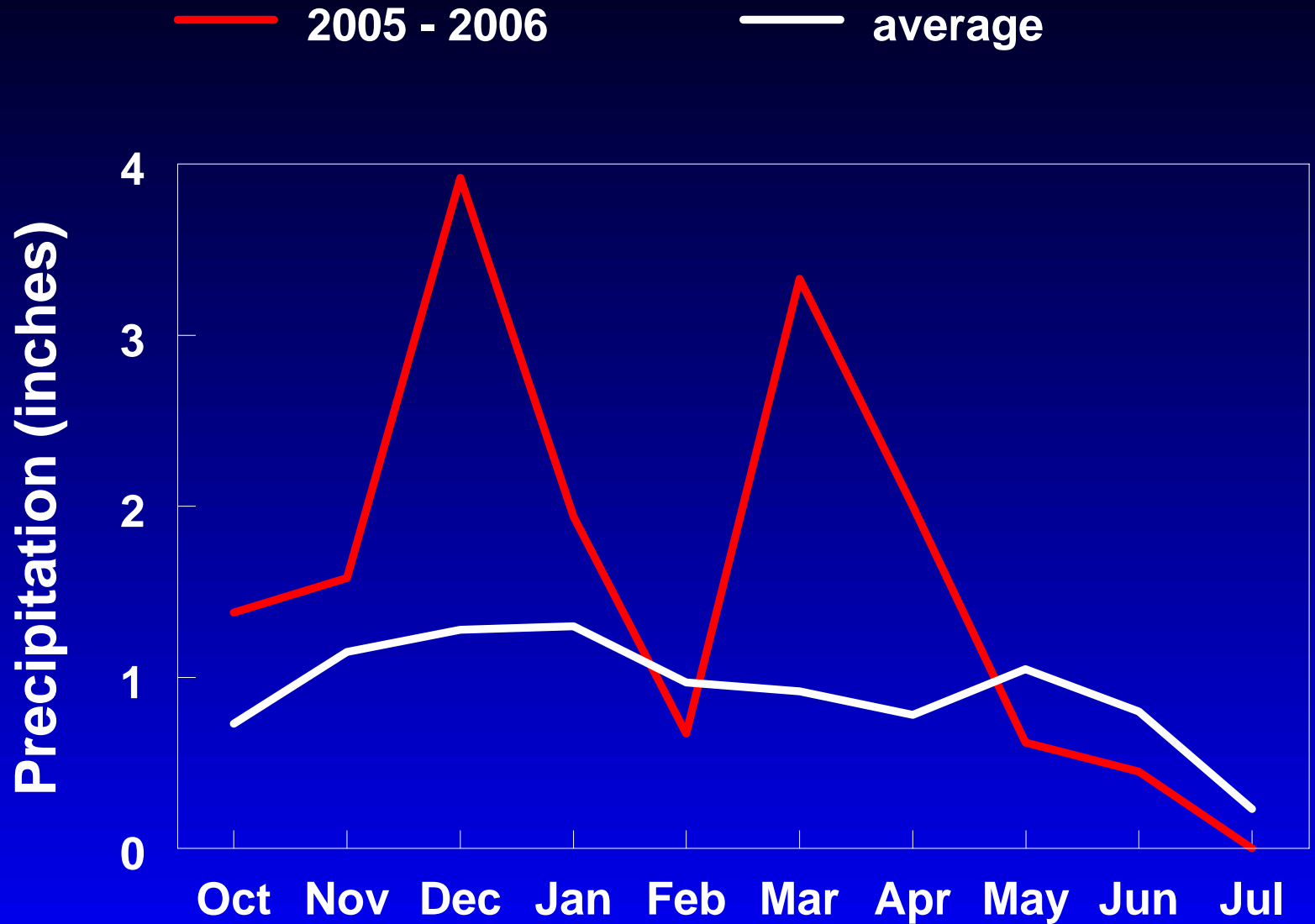








Typical and actual rainfall

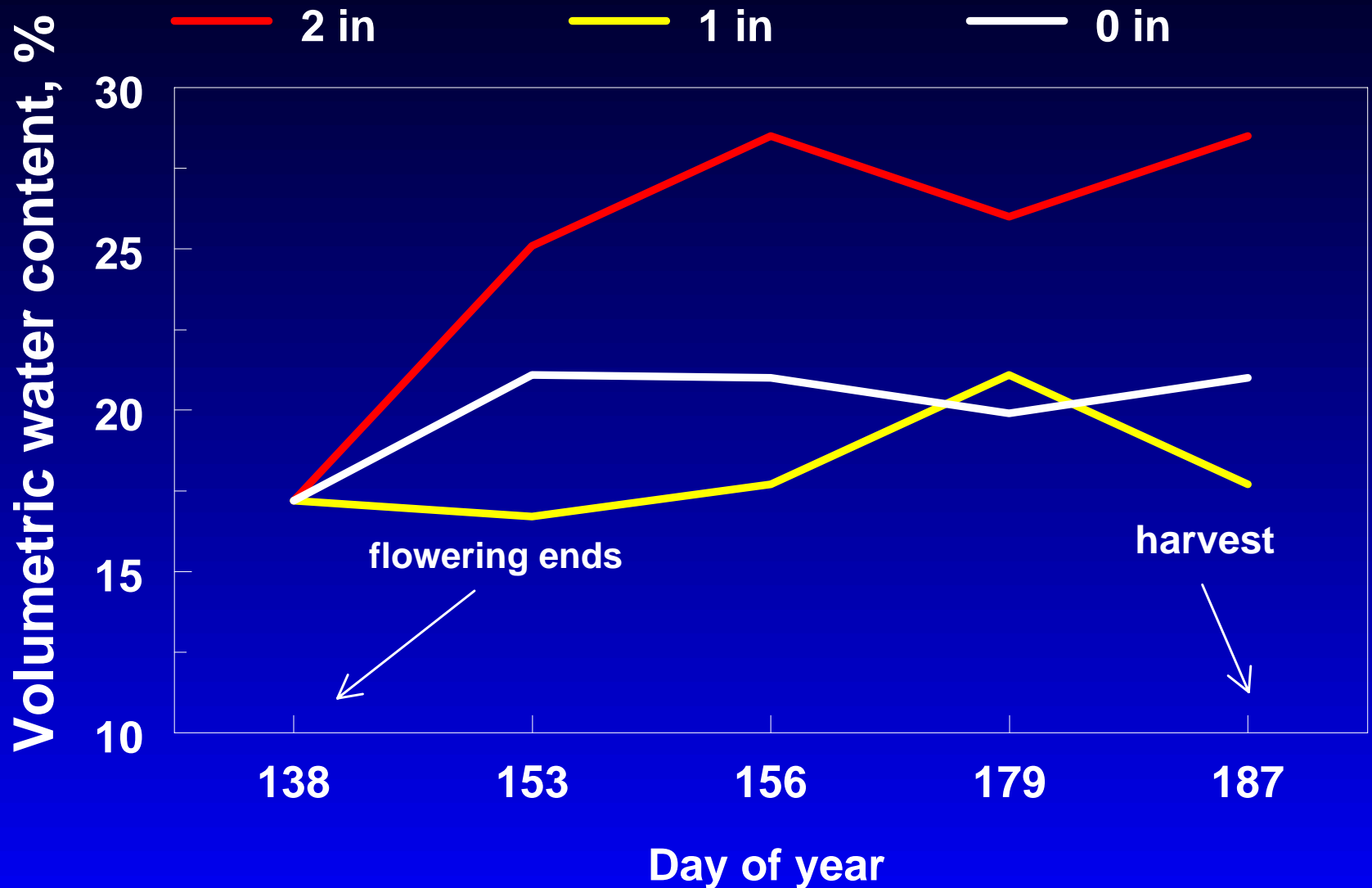


Penstemon acuminatus

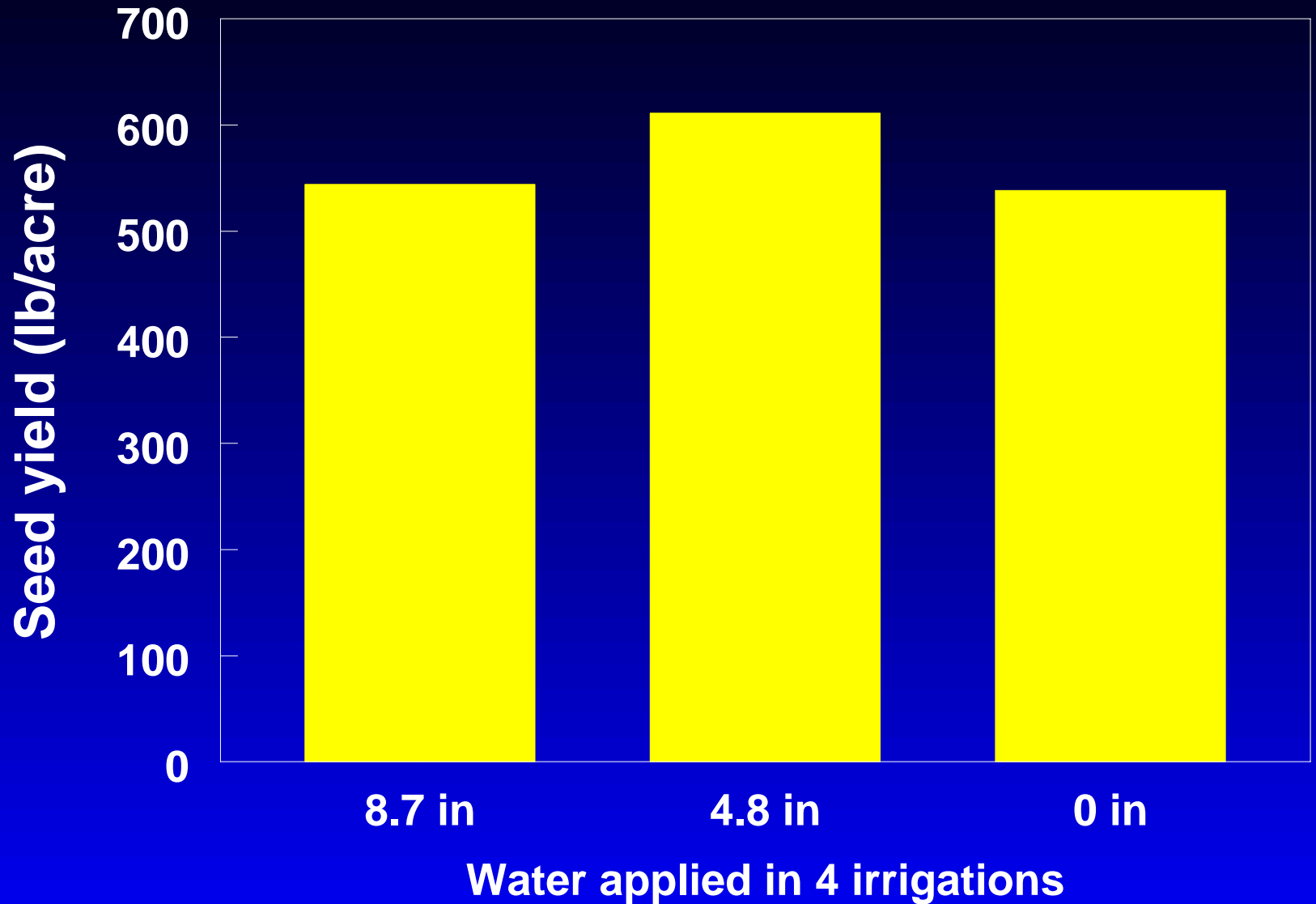
Sand penstemon



Soil water content for the 0 - 36 inch depth for *Penstemon acuminatum*



Seed yield in response to irrigation for *Penstemon acuminatum*

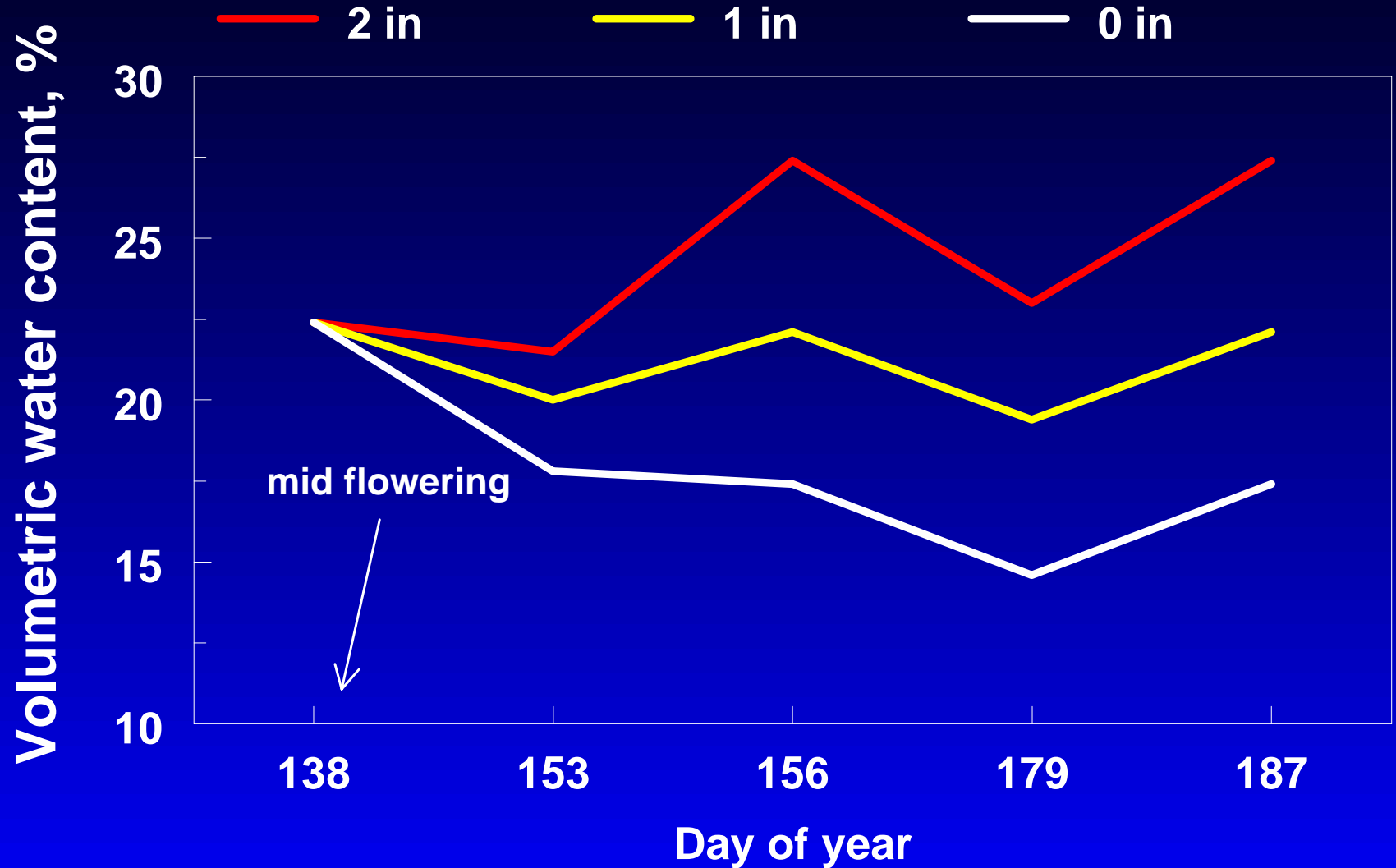


Penstemon speciosus

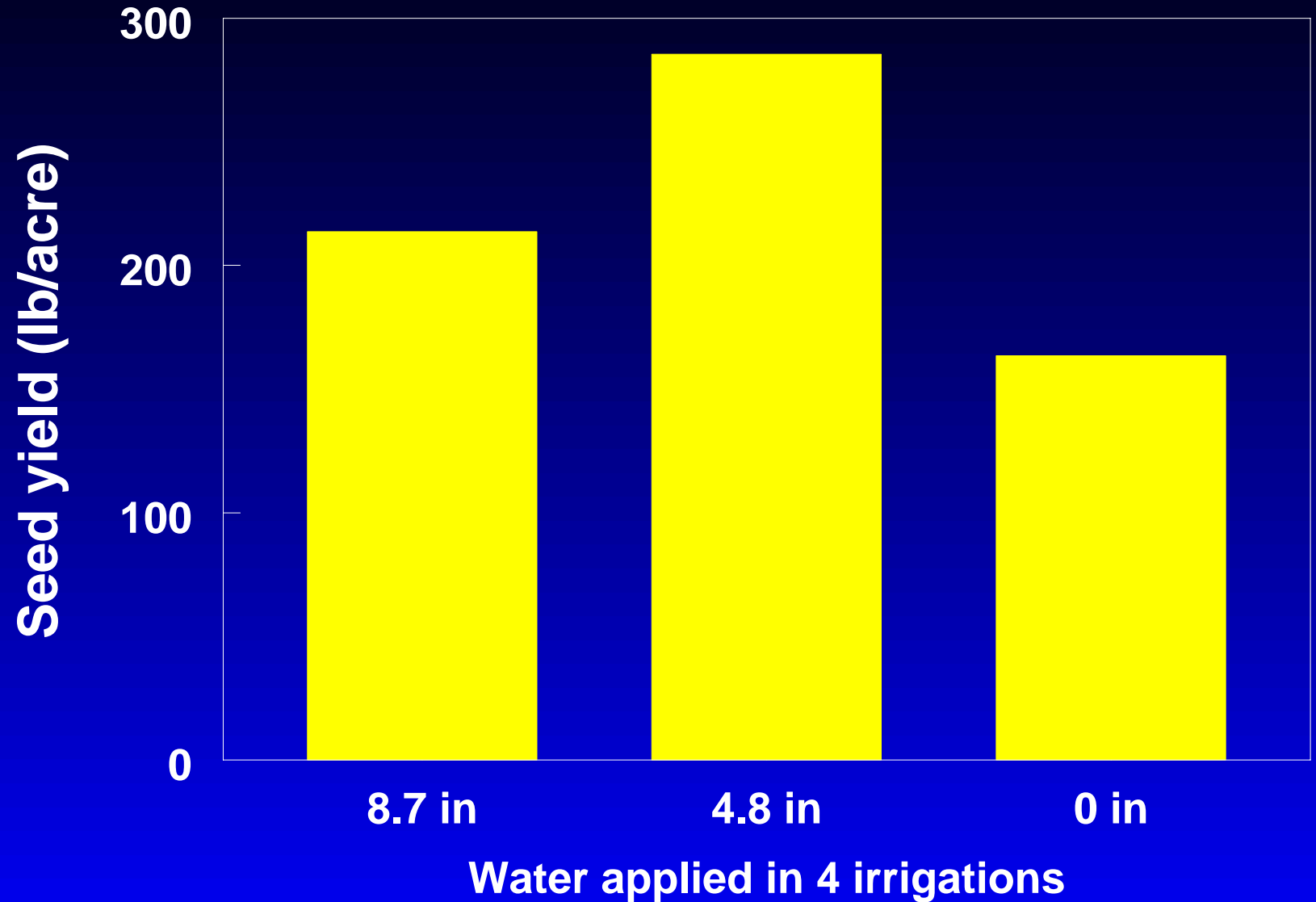
Royal or Sagebrush penstemon



Soil water content at the 0 - 36 inch depth for *Penstemon speciosus*



Seed yield in response to irrigation for *Penstemon speciosus*



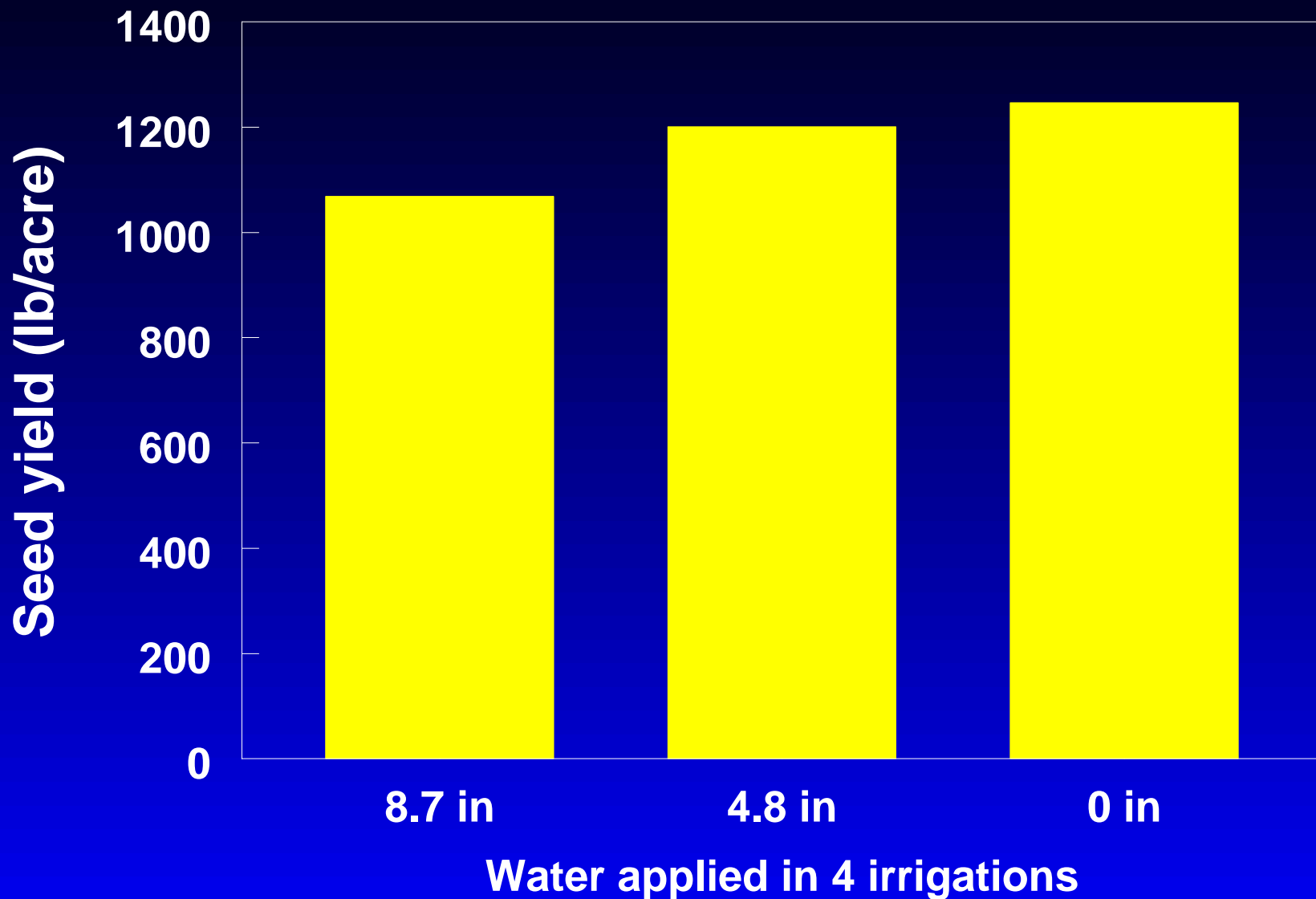


Penstemon deustus

Hotrock penstemon



Seed yield in response to irrigation for *Penstemon deustus*

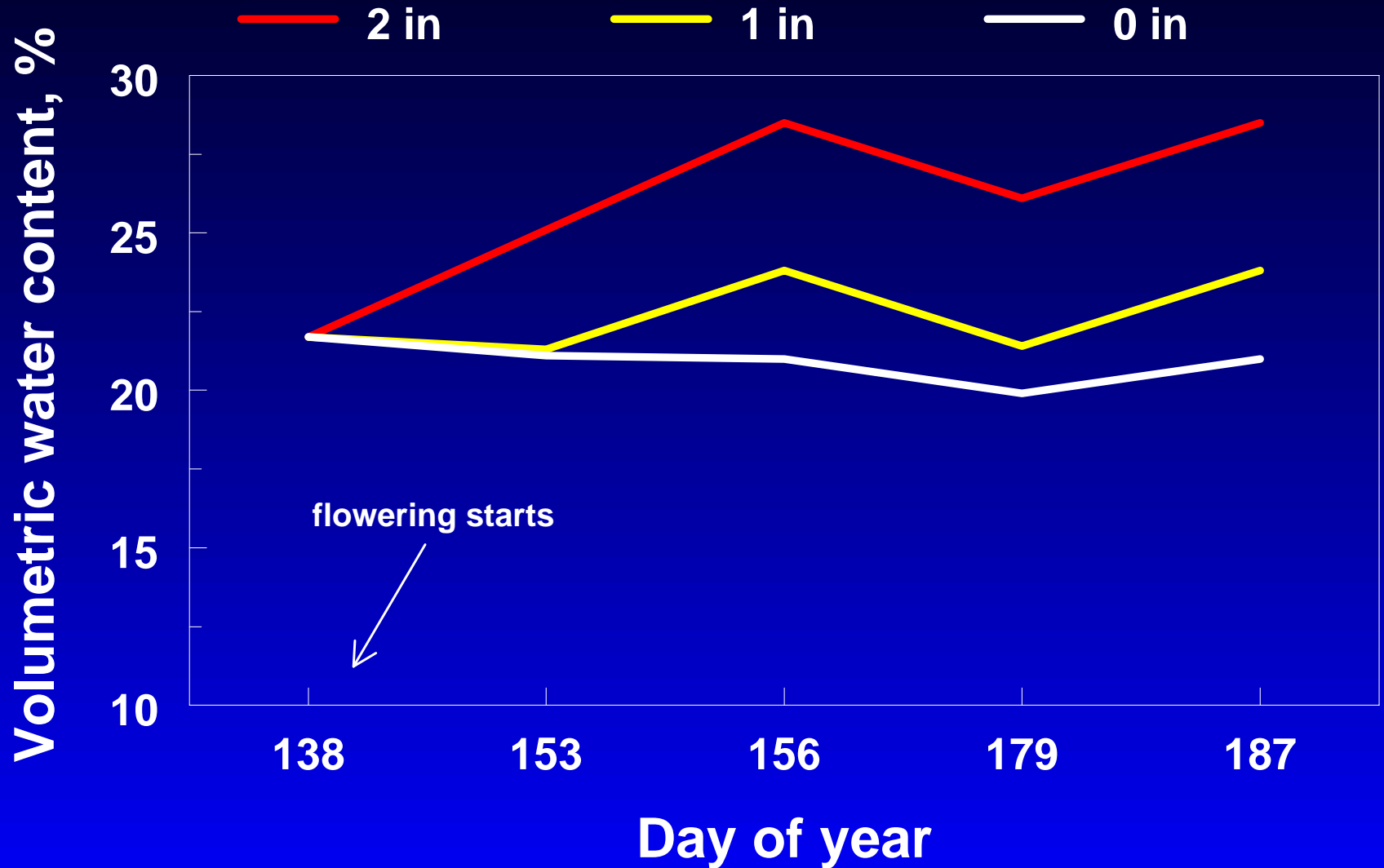


Eriogonum umbellatum

Sulfur buckwheat



Soil water content at the 0 - 36 inch depth for *Eriogonum umbellatum*



Seed yield in response to irrigation for *Eriogonum umbellatum*

