

Exactrix Global Systems.  
 Spokane, Washington  
 Date: May 27, 18  
 Description: Reverse Feeder Dike.  
 Author/Teachers: Swanson and Swanson.

Seed Row Saturation allows 95% stands in 4 days.

**It Works at economic costs of \$5.00 to \$6.50 per acre.**

Tested in tillage and no-tillage systems:

the following crops from 0, 20, 30, 40, 50, 65 to 95 gallons per acre on 40 inch row spacing to 10 inch row spacing.  
 The Standard is set at 50 to 65 gallons per acre on 30 inch row spacing.

1. Wheat, Oregon, tillage. 18 inch.
2. Sugar Beets, Wyoming. 22 inch
3. Cotton, Texas. 30 inch and 40 inch rows
4. Soybeans, Kansas. 20 inch rows.
5. Winter Canola, Kansas. 20 inch rows.
6. Dwarf Essex, Washington State. 10 inch rows.

Seed Row Saturation is Exactrix Terminology for

1. Imbibement of the seed.
2. Feeder Dike establishment.
3. Flush of abscisic acid.
4. Ability to plant seed with low soil moisture at high soil temperatures.
5. Applied to a No-tillage system with capillary movement of soil moisture.

**Seed Row Saturation,  
 Lineal Row requires 60 ML per meter of H2O.  
 Rates to 90 ML per meter is tested.  
 Lower rates hurt yield. Nominal is 60 ML.**

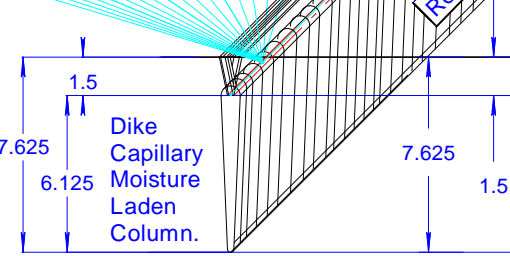
Reverse Feeder Dike. In No-tillage Systems.  
 A dike fissure is a geological term of flood basalt formations

Applied at 50 to 65 gallons per acre on 30 inch row spacing at 1.5 seed depth.  
 Yielder criteria at 150 gallons per acre on 10 inch.

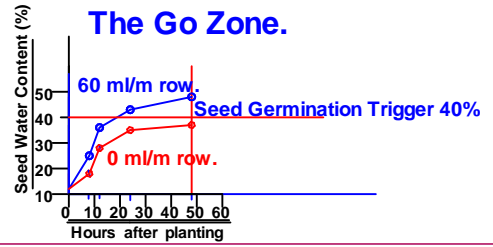
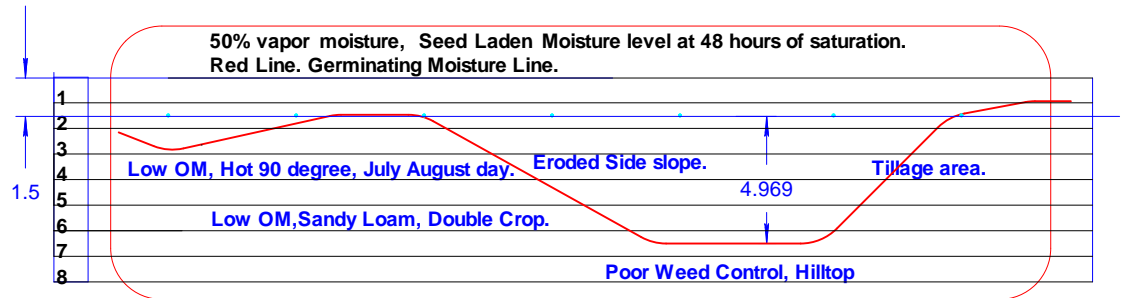
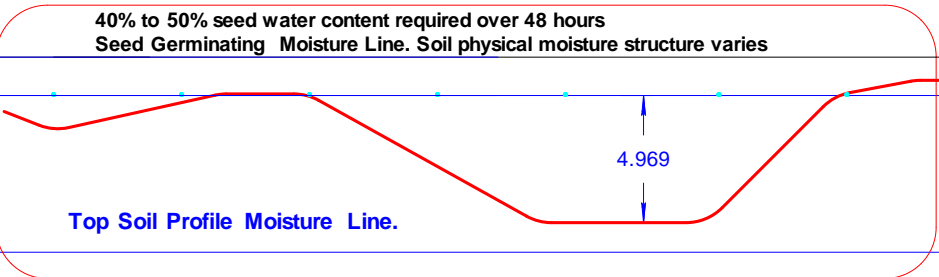
Meets Floyd Bolton Criteria in Tillage.  
 2 ounces per 3.1 feet.  
 1 gallon in 198.4 feet.

Seed sized to .061 dia. or greater.  
 Planter cell diameter at .055.

Berry, Planter Grade at .075"  
 Spacing at 5 inch, Optimized



Reverse Feeder Dike.  
 Connector Channel to consistent germinating moisture.  
 Rapid radicle root extension. 1 gallon per 198.4 feet.  
 Emergence in 4 days at 90 degrees F.



Percent Water Content In Relation to time (hours) after planting.

At 0 ml or 60 ml per row injection rates into the nonfallowed soil in 1981-1982.

The results for other water injection rates were intermediate to results for these two treatments and are not shown.

Researchers concluded that 20 ml and 40 ml are non-commercial rates. The flush of Abscisic Acid is critical in all cases and types.

A small amount of water....about 2 ounces every 3.1 feet is 60 ml per meter.

Supporting Technical Documents  
 Water Injection at Seeding of Winter Wheat.  
 Floyd E. Bolton, Fariborz Noori, Dale Moss.  
 Agronomy Journal, 77:906-908, 1985.

## Works Best In No-tillage

Third Year representation following winter wheat or a non lequme crop.  
 Soil Physical Structure Capillary movement Greg Schmick WSU.