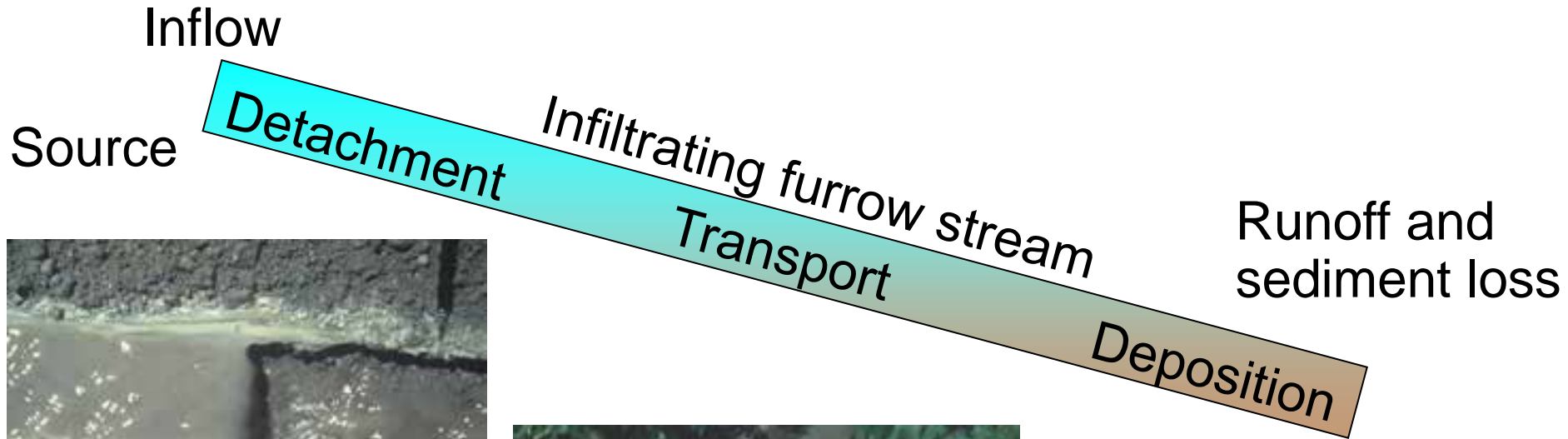


**Reduction of soil salinity and sodicity levels  
in the topsoil through the use of Erocontrol  
Polymer**

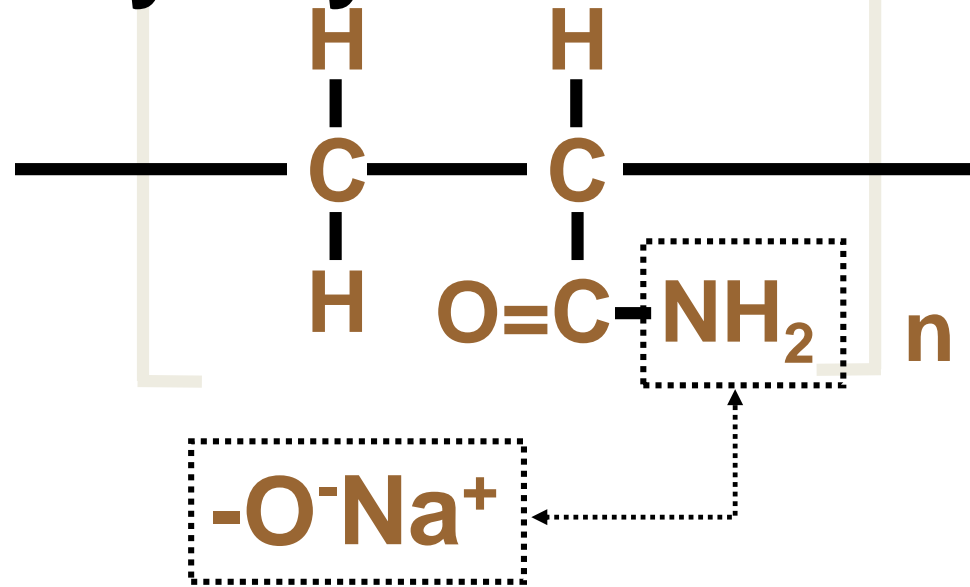
## Model of Furrow Erosion

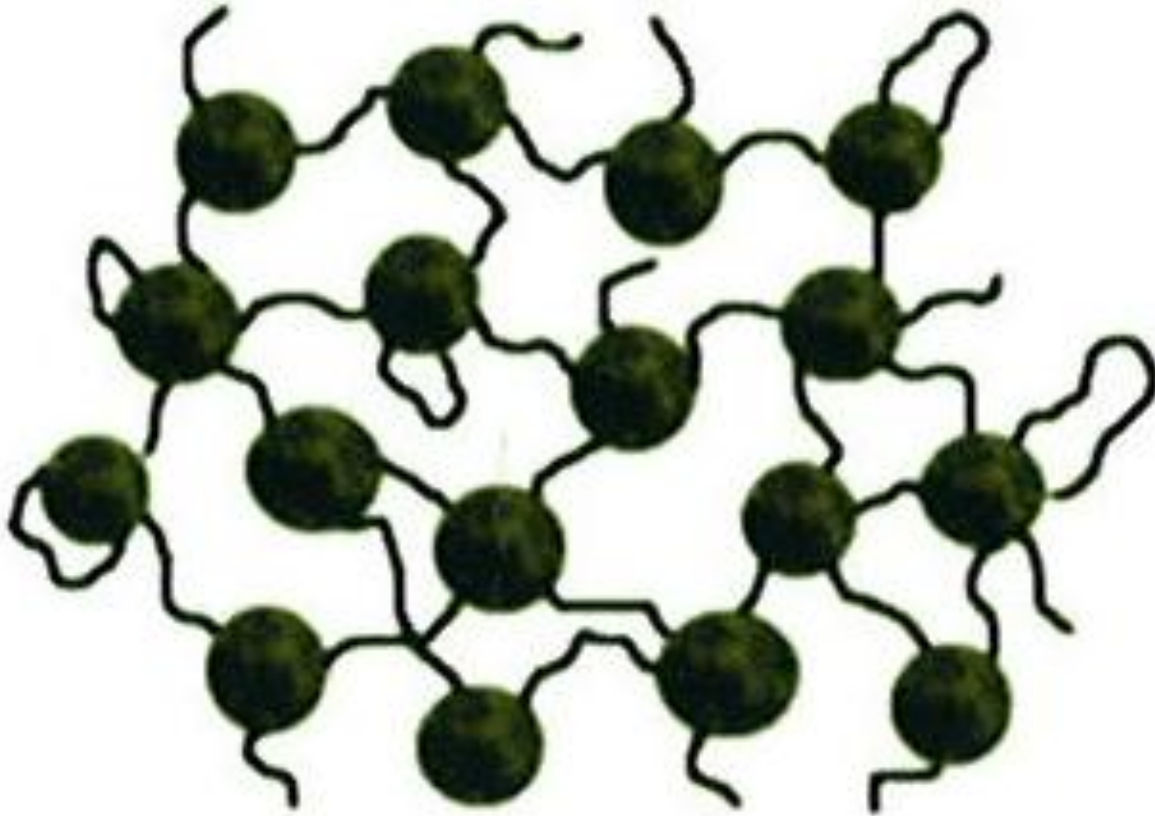


Tail  
Ditch

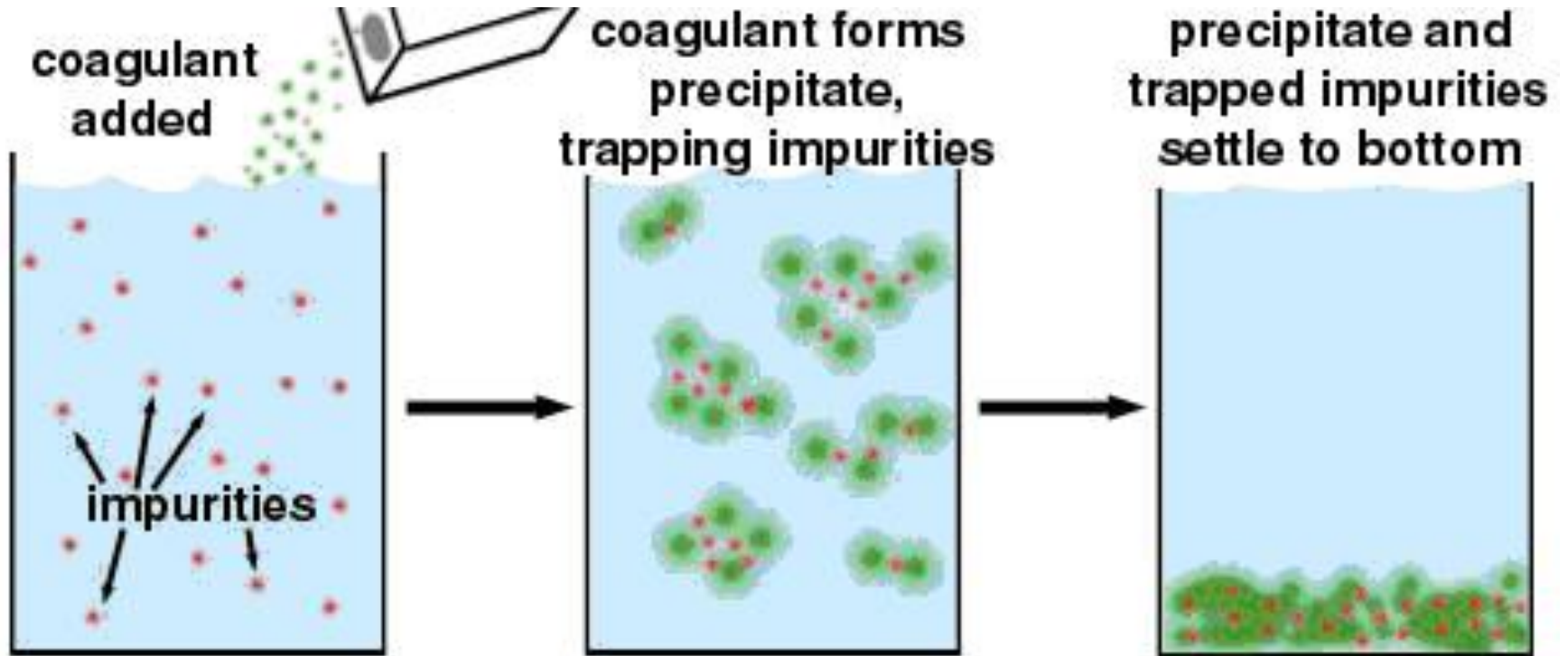
## Anionic Polyacrylamide

- PAM is a polymer of acrylamide (AMD) monomers
- Erosion PAMs are 12 to 15 Mg/mole & >150,000 chained monomers/molecule.
- Erosion PAMs have <0.05% unreacted AMD (500 ppm)

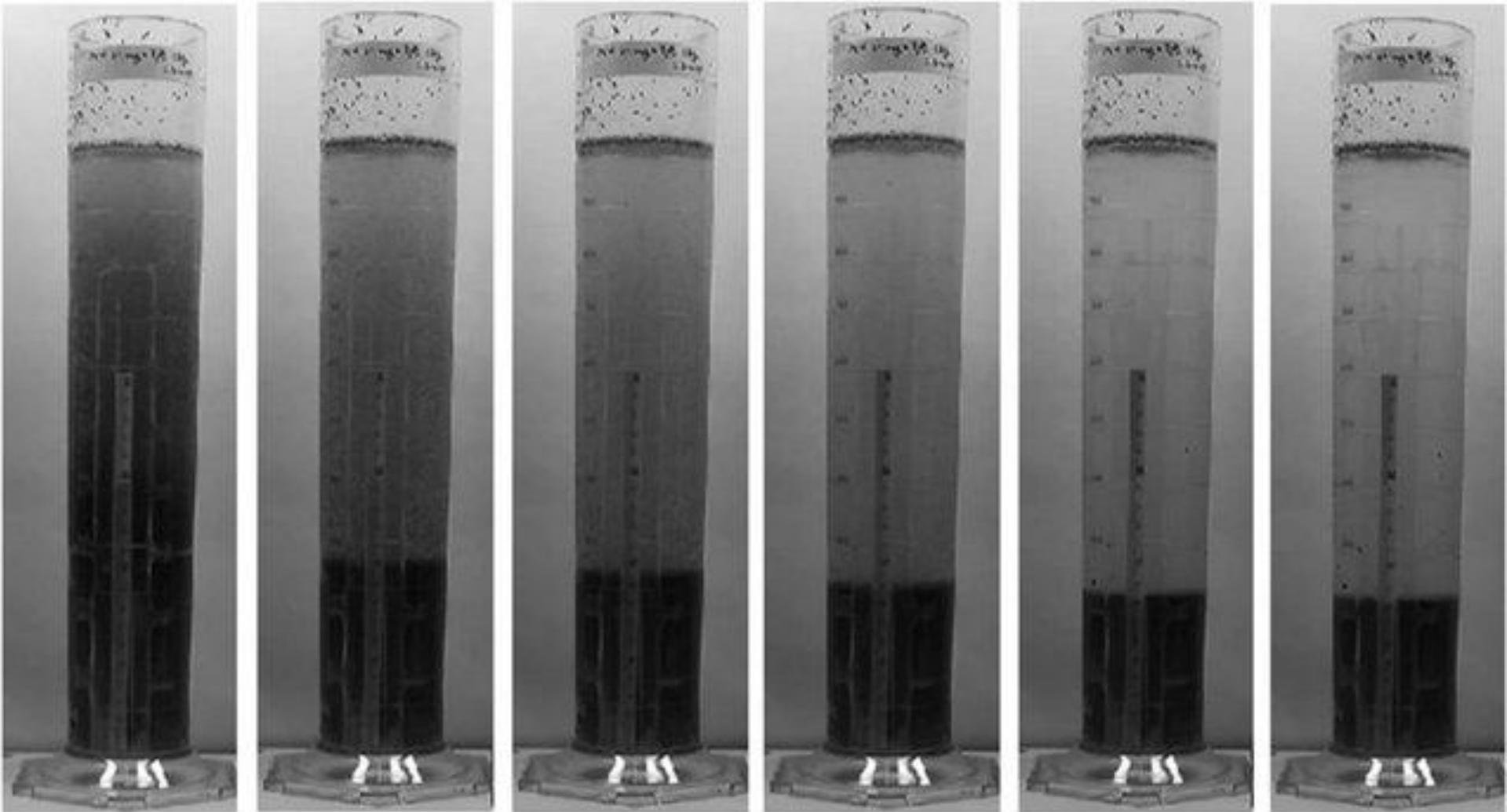




**FLOCCULATION**  
(polymeric flocculant)



# FLOCCULATION

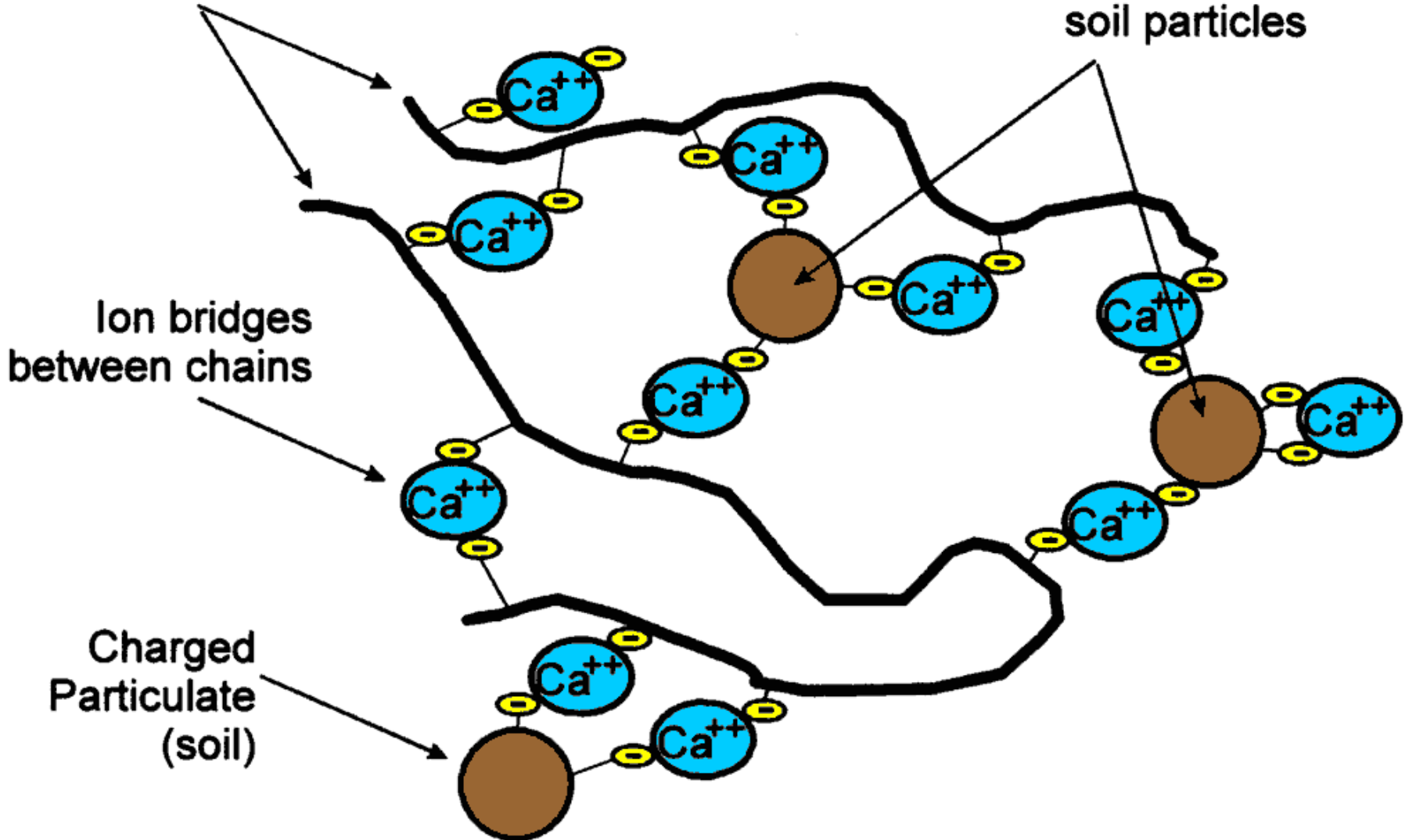


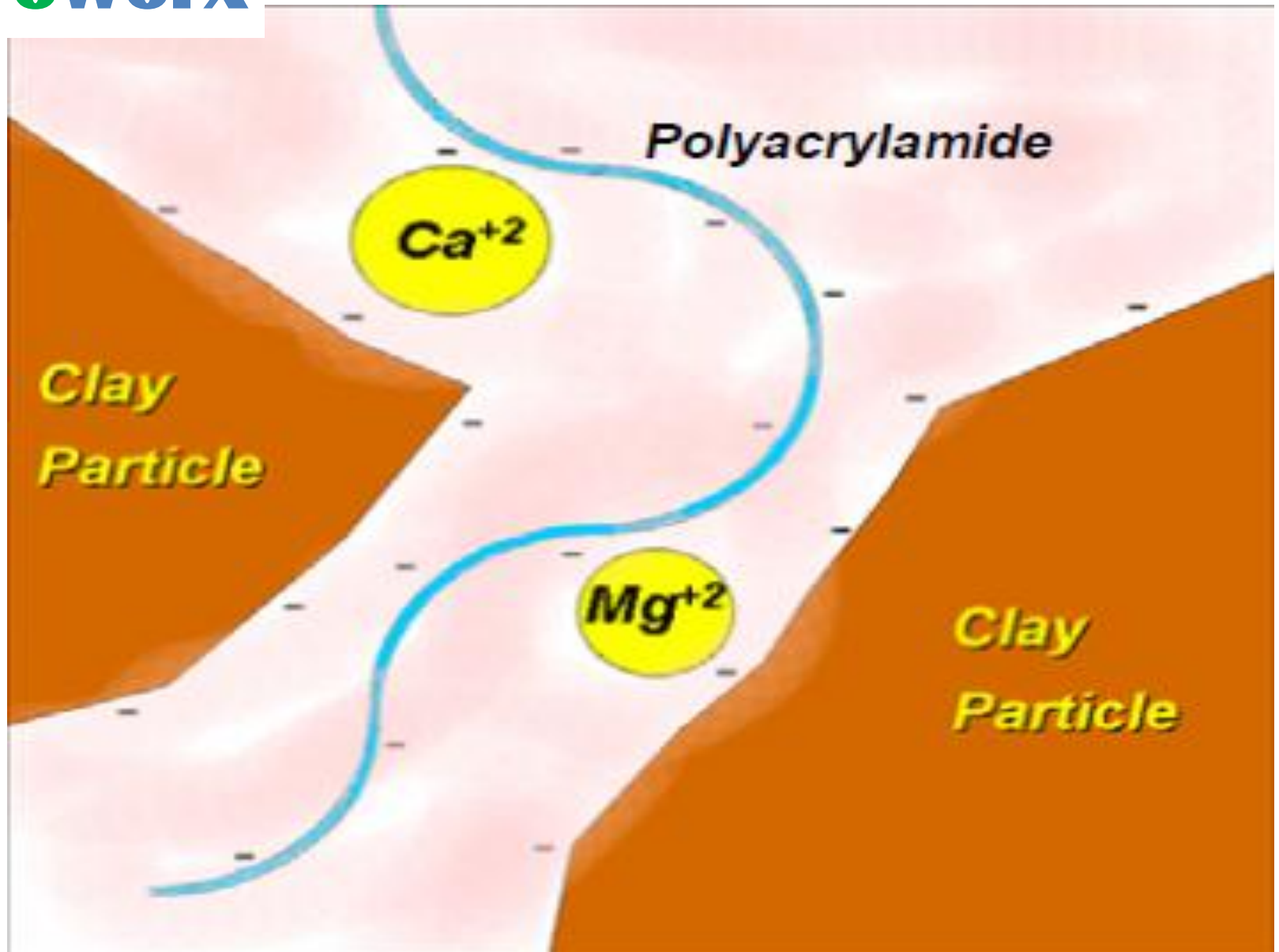
PAM Anionic  
Polymer Chain

Chain bridging  
between charged  
soil particles

Ion bridges  
between chains

Charged  
Particulate  
(soil)







# **EROCONTROL Application vs No EROCONTROL**



**WITHOUT  
PRODUCT**



**WITH  
PRODUCT**

**EROCONTROL Application**



## PROBLEM SOIL Compacted and Unproductive



## TREATED SOIL Open, Fertile and Receptive



SHALLOW,  
STUNTED ROOTING  
OCCURS

POOR AIR &  
WATER  
MOVEMENT

WATER PONDS  
ON THE  
SURFACE

ENHANCED SOIL  
STRUCTURE HOLDS  
WATER &  
NUTRIENTS

ROOTS, WATER &  
AIR MOVE FREELY  
& DISTRIBUTE  
UNIFORMLY

INCREASED  
YIELDS  
AND SOIL  
PRODUCTIVITY

IMPROVED  
WATER  
INFILTRATION



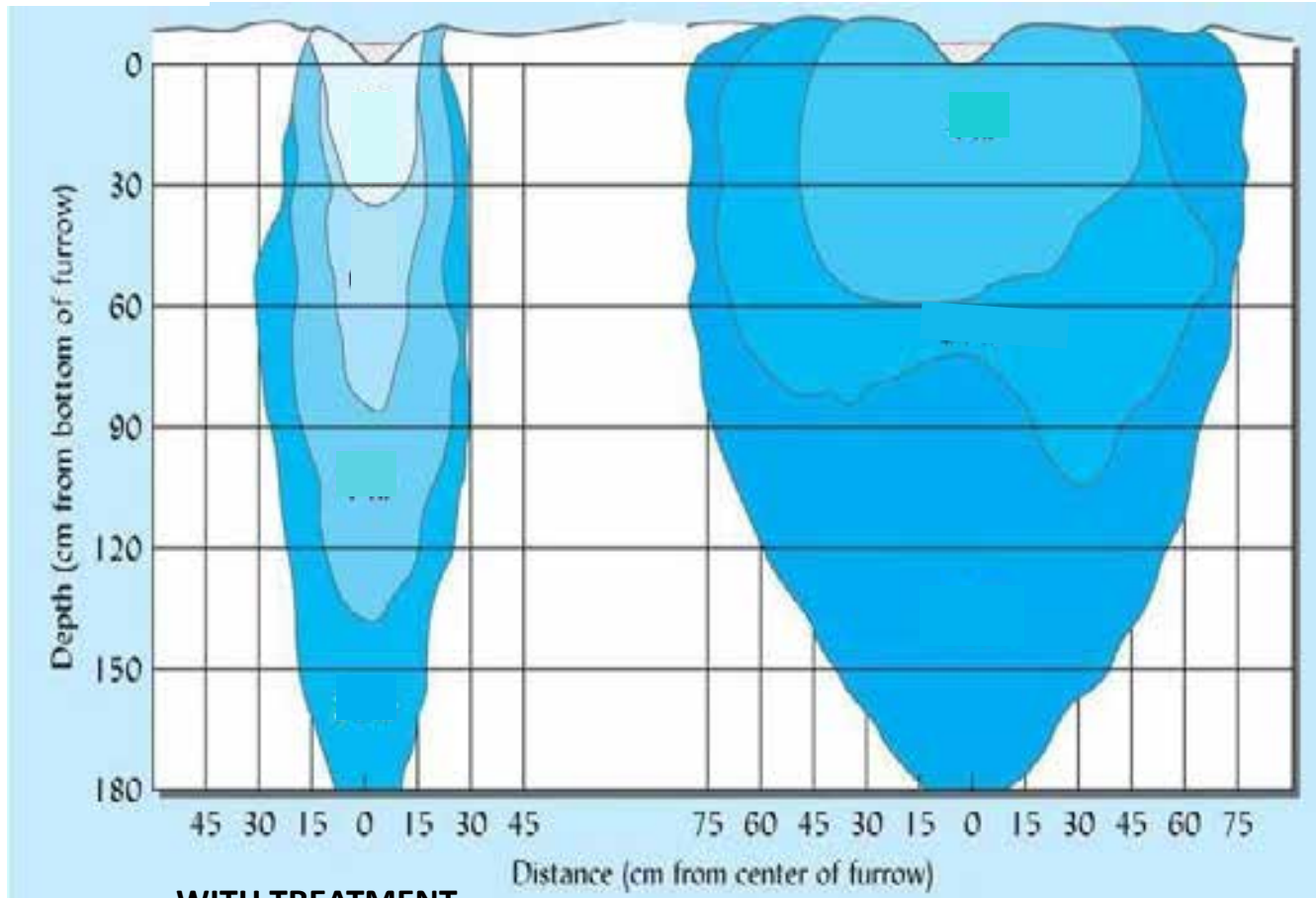
## EFFECT ON SOIL INFILTRATION

- **Depends on type of Soil**  
**Net Infiltration Increases of:**  
**50 % in Clay Soils**  
**15 % in Loam Soils**  
**Increases 25 % lateral wetting in surface furrows**

**CONTROL**

**TREATED**

## Modifies the wetting Bulb



**WITH TREATMENT**



**WITHOUT TREATMENT**



**Eliminates Surface Sealing (Crusts)**





**Without Erocontrol**



**With Erocontrol**

## APPLICATION OF EROCONTROL IN QUIBOR VALLY:

**Clay Soil– High tendency for crust formation and low Infiltration  
(Vertic Haplocambids Soil, very fine clay)**

**Crop: Unions 500.000 Plánts per Ha.**

**NORMAL Drip irrigation**

**Irrigation Water EC :**

**1,5 dS/m**

**EC Between furrows:**

**1,8 dS/m (Wetting Bulb)**

**CE Outside Furrows:**

**8,4 dS/m (Out of W.B.)**

**TEST Production**

**58,6 Tons per Ha**

**Test Area: 20 Hectares**

**Witness Production**

**38 Tons per Ha**

**Witness Area 180 Hectares**





# SALINITY MANAGEMENT

PAM  
en el agua boteo  
10 ppm  
CE 8,2 dS/m  
En el borde

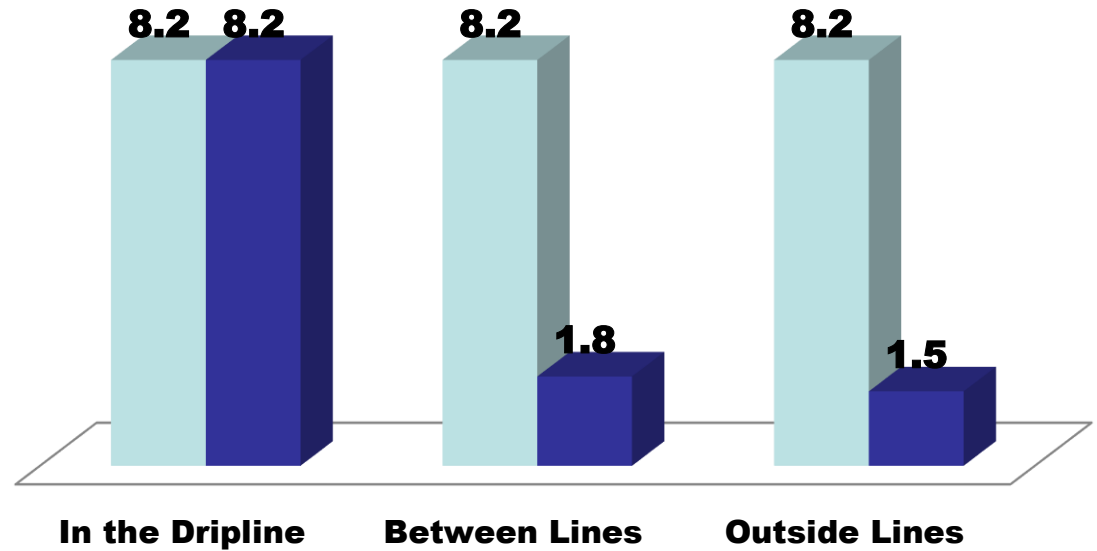
PAM  
en agua boteo  
10 ppm  
CE 1,8 dS/m  
Entre cintas

PAM  
10 ppm  
CE 1,5 dS/m  
En la cinta

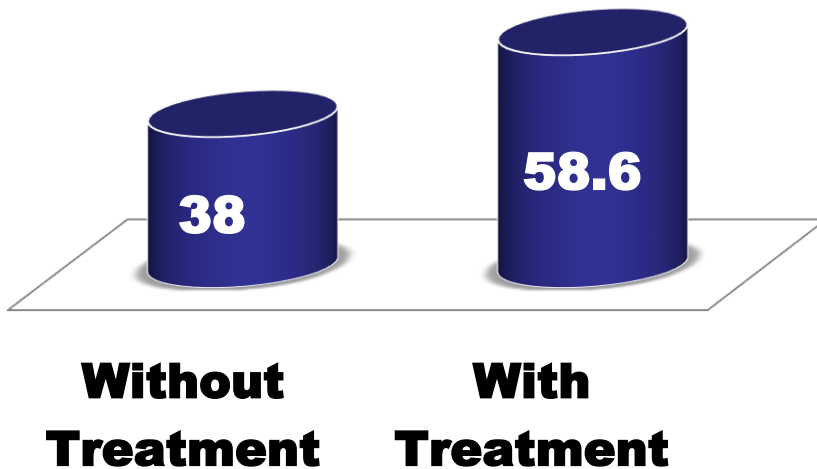
E.C. in dS/m

■ E.C. Before Treatment ■ E.C. After Treatment

78 % reduction of E.C at harvest



Production Tons/Ha



54,21 % increased production/ha

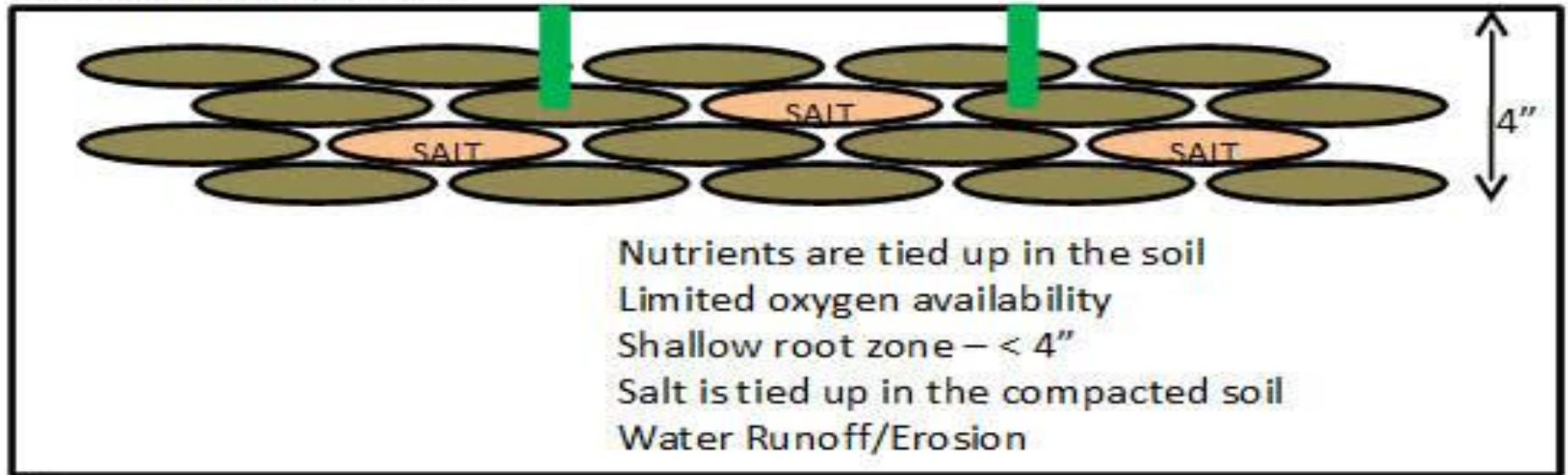
# Pushes away the Salts



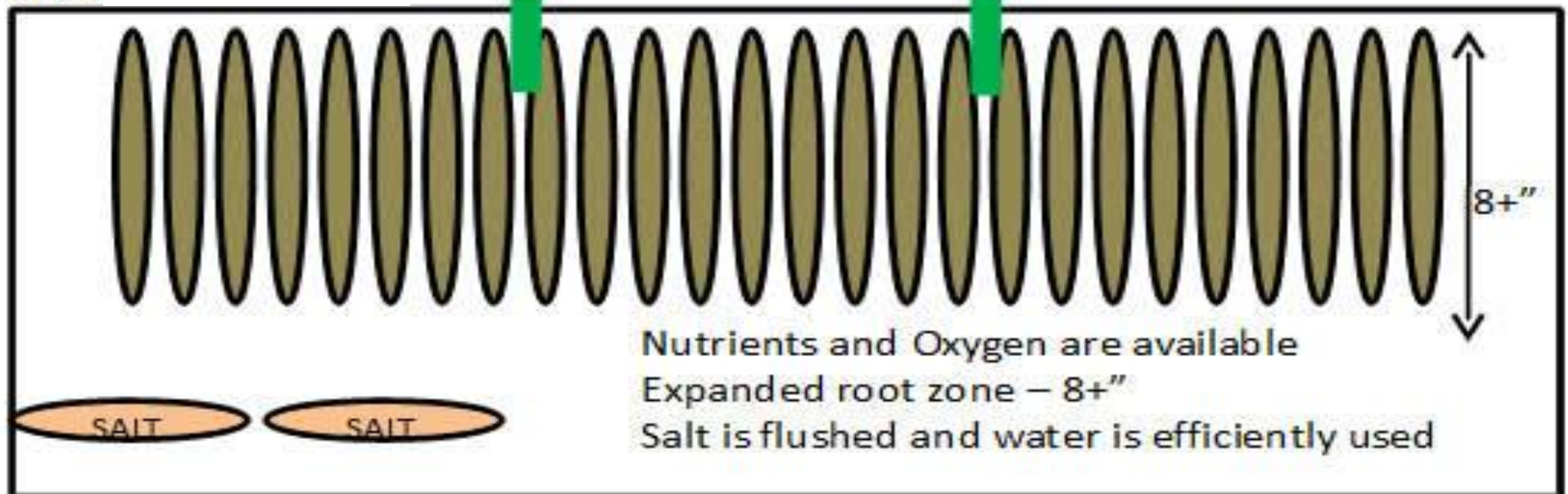
PAM

1 ppm

## Heavily Compacted Soil



## After



**Thank you!**

**AgroWorx**