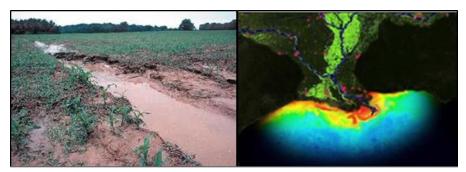
## Mission: To develop a Crop Database for the US that will allow producers to quickly and easily select the ideal cover crop or even cash crop for their climate, region and soil type.



Left: Damage to agricultural land due to water erosion. Right: Hypoxic zone in the Gulf of Mexico as a result of excess nutrients in runoff water.

## **Erosion and Soil Loss**

- <u>1.9 billion tons</u> of soil erodes annually
- Billions of dollars in nutrients washing downstream
- Plus indirect costs:
  - Loss of fertility
  - Yield losses
  - Productivity losses for the water bodies

• Easily prevent these potentially devastating effects by using cover crops



Left: Forage radish is effective at alleviating compaction.



Crimson clover is a legume cover crop that fixes N from the atmosphere and after termination can release that N to the following crop.

## Benefits of cover crops include:

- Improved water holding capacity
- Deep rooted cover crops can improve rooting depth
- Relieve soil compaction
- Act as catch crops
- Erosion control and prevention
- Reduce N fertilizer inputs with legumes



Cover crops are extremely effective at suppressing weeds and resisting compaction in large open areas such as the rows in this orchard.



Wind and water erosion can be prevented simply by planting a cover crop.