

Conservation Agriculture

Nitrogen from Legume Cover Crops



Root nodules on white lupin house bacteria responsible for nitrogen fixation. *Photo courtesy of E. van Santen, Auburn University.*

Crimson Clover – up to 150 lb N/acre

- Good residue persistence
- Erosion control
- Weed control
- Attracts beneficials
- Scavenges nutrients
- Excellent forage quality



White Clover – 80 to 130 lb N/acre

- Erosion control
- Weed control
- Attracts beneficials
- Excellent forage quality

Hairy Vetch – 90 to 200 lb N/acre

- Erosion control
- Weed control
- Attracts beneficials
- Scavenges nutrients



Lupin – up to 350 lb N/acre

- Reduces soil compaction
- Erosion control
- Weed control
- Attracts beneficials
- Nematode control

Winter Pea – 90 to 150 lb N/acre

- Good forage quality
- Attracts beneficials
- Erosion control
- Weed control



USDA-ARS National Soil Dynamics Lab
Conservation Systems Research



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