

# The Buzz about Radishes and Turnips

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# Claims about Radishes

- They cure every disease known to man!
- They control soybean cyst nematodes (maybe)
- They show “anti-tumor” activity\*
- They are good for the treatment of asthma and other chest complaints\*
- They go 24” deep and mine 200# N every time (um...no)

\*<http://www.pfaf.org/database/plants.php?Raphanus+sativus+oleiformis>

# The Buzz about Radishes and Turnips

- Daikon Oil Seed Radishes are from the Japanese table vegetable market
- Selections from this species have resulted in larger tubers
  - Tillage Radish™, GroundHog™, others?
- Fodder or Forage Radishes have less tuber and more tops
  - Used as green manure in Europe cover crop/grazing situations

# What is a “Daikon” Radish?

- The word Daikon actually comes from two Japanese words: dai (meaning large) and kon (meaning root). Daikon is a root vegetable said to have originated in the Mediterranean and brought to China for cultivation around 500 B.C. Roots are large, often 2 to 4 inches in diameter and 6 to 20 inches long. There are three distinct shapes - spherical, oblong and cylindrical.

# What is a “Daikon” Radish?-2

- Radishes have been developed in the Orient which develop very large roots, reportedly up to 40 or 50 pounds, and with leaf top spreads of more than 2 feet (they require a long growing season for such development. These types are grown in the U.S., mainly by Asians for use in oriental dishes). Most of the commonly available Chinese radishes are white, but some are yellowish, green or black.

<http://daikonradish.com>

<http://whatscookingamerica.net/DaikonRadish.htm>

# The Buzz about Radishes and Turnips

- VNS Radishes are just that...Variety Not Stated...so there is no way to determine what you are getting
- Daikon Oil Seed Radishes were not necessarily selected for large tuber growth...some may be large, some may be smaller...

# The Buzz about Radishes and Turnips

- GroundHog™ and Tillage Radish™ brands were selected for larger tubers
- GroundHog™ is raised in New Zealand
- Tillage Radish™ is grown in multiple areas
- These are “selections”...they are not like hybrid corn...not every plant is identical
- Tillage™ and GroundHog™ radishes are each unique and selections derived from the forage radishes research program at the University of Maryland.

# Marketing Radishes can be...

- **Fun**-People like to see BIG
- **Challenging** – everyone wants the BIGGEST Radish for their advertising
- **Interesting** – Can producers believe everything they read?
- **Interesting** – are these the “do-all” cover crops?
  - Do they do all that the advertising/dealers claim?
  - Is one brand or variety superior to another?



# The Buzz about Radishes and Turnips



- Female Radishes seem to exhibit a “modest” side.

# Earthworms seem to like Radish





# Is this Radish helping the soil?-

## YES!!

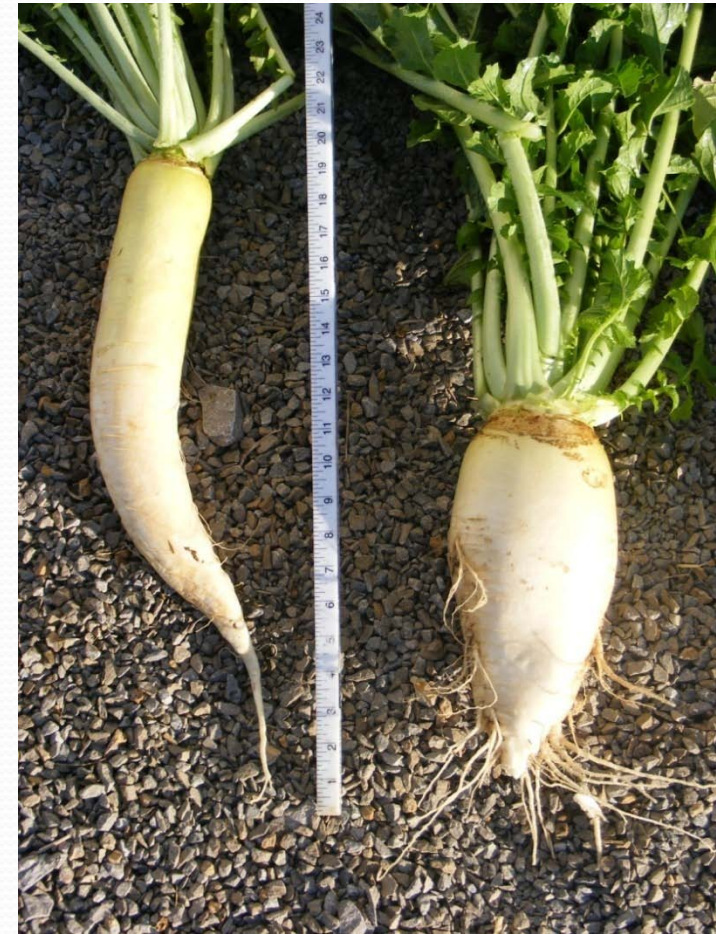


# Radishes help “build the soil”





# GroundHog™ Radishes @ 8 Weeks





# GroundHog™ “State Fair” Radish with Hairy Vetch





# Spring 2009 weed control from Radishes



# Radishes may or may not break through the plow pan



- Radishes respond to compaction...possibly by “drilling through”
- Possibly by making a “right turn”



# Soil Fertility Matters

Radishes are “voracious” scavengers of Nitrogen



Hog Manure applied after  
~75 bu./acre wheat  
Ron Frahm's farm



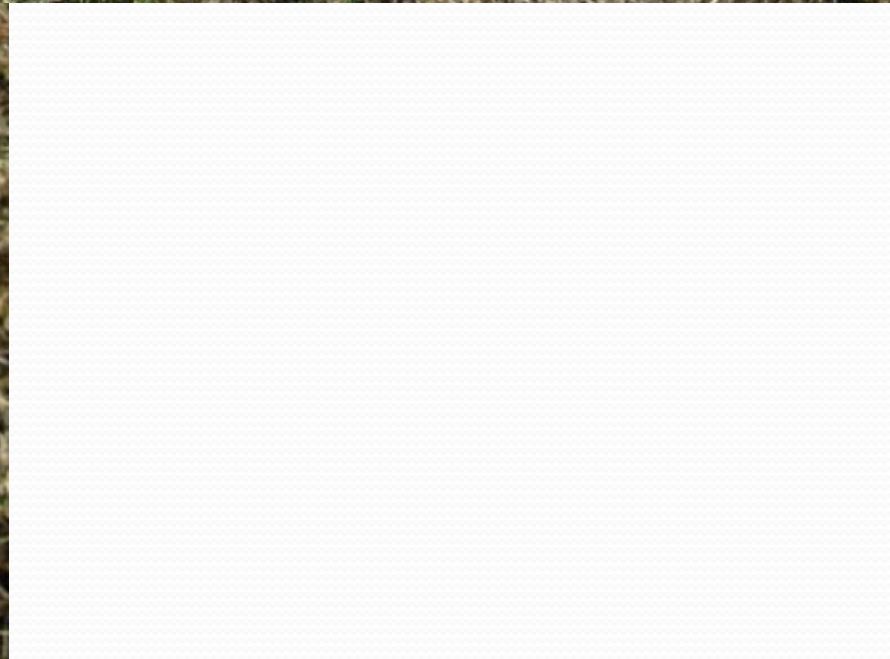
No additional fertility after  
120 bu./acre wheat



# Experimental Radish varieties









# Radishes produce seed!





# Radishes and Turnips have different tuber types



# Turnip types show great variability.







Leafy  
-7 Top

Lower  
Forage  
and Bulb  
Yield



Leafy  
-Appin

High Forage  
Yield-  
Low Bulb  
Yield



Globe  
-Purple Top  
-Green Globe

Med Forage yield  
Med Bulb yield



Tankard  
-Barkant

High Bulb Yield  
Med Forage  
Yield

## Types of Turnips



Pasja Hybrid Brassica

Tankard-type turnip



23 2:18 PM



# Appin Turnips @ 8 Weeks



# Late planted Appin Turnip

(photo taken 3/2/2010- Campbell Hill, IL)



# What we know about Radishes/Turnips...so far

- Planting rate and soil-types will greatly affect the radish size/shape
- If we want radishes with smaller girth then increase seeding rate
- If we want the “State Fair” type we need a very good nitrogen supply (manure, or high N-producing legume) and a lower seeding rate
- They do smell badly when deteriorating...tell the neighbors what you are planting before they call the fire department.



# Thanks!

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