**AERIFI CERTIFIED RADISH**

- **VERY LATE MATURING**
- **LONGER TAP ROOT**
- **GUARANTEED GENETIC PURITY**
- **INCREASE SOIL FERTILITY**
- **IMPROVE SOIL QUALITY**
- **WEED SUPPRESSION**
- **REDUCE WATER RUNOFF**

**CERTIFIED FOR PREDICTABLE RESULTS**

Aerifi is bred for uniform growth, fast establishment and later maturity; Aerifi flowered 3-4 days later than the competitors variety. Aerifi was also bred to produce an extra long tap root. In 2013 Aerifs’ tap root was 130% longer than a leading competitor brand and in 2014 it was 110% longer. This extra long tap root allows Aerifi to excel at scavenging lost nutrients deep in the soil profile. As it decomposes those nutrients are released back into the top-soil and made available for the next crop.

Aerifi is also very fast to germinate which allows it to out compete weeds. It’s fast growth gives Aerifi a better chance to establish before temperatures drop and kill slower varieties.

As a CERTIFIED crop you are guaranteed that what you plant is the crop you paid for. This certification process assures that the results you have come to expect will be repeated year-after-year and that your cover crop is performing at it’s optimum level.
WHAT ARE COVER CROPS
Cover crops are crops planted primarily to manage soil fertility, soil quality, water, weeds, pests, diseases, biodiversity in farm systems.

Cover crops are of interest in sustainable agriculture as many of them improve the sustainability of farm attributes and may also indirectly improve qualities of neighboring natural ecosystems. Farmers choose to grow and manage specific cover crop types based on their own needs and goals but can also be influenced by the biological, environmental, social, cultural, and economic factors they operate in.

INCREASE CROP PRODUCTION
One of the primary uses of cover crops is to increase soil fertility. These types of cover crops are referred to as “green manure.” They are used to manage a range of soil macronutrients and micronutrients. Of the various nutrients, the impact that cover crops have on nitrogen management has received the most attention from researchers and farmers, because nitrogen is often the most limiting nutrient in crop production.

Often, green manure crops are grown for a specific period, and then plowed under before reaching full maturity in order to improve soil fertility and quality.

Green manure crops are commonly legumes. Legume cover crops are typically high in nitrogen and can often provide the required quantity of nitrogen for increased crop production. This quality of cover crops is called fertilizer replacement value

ADD VITAL ORGANIC MATTER
Cover crops can also improve soil quality by increasing soil organic matter levels through the input of cover crop biomass over time. Increased organic matter enhances soil structure, as well as the water and nutrient holding and buffering capacity of soil.

Soil quality is managed to produce optimum circumstances for crops to flourish. The principal factors of soil quality are soil salination, pH, microorganism balance and the prevention of soil contamination.

CROWD OUT COMPETITION
Thick cover crop stands often compete well with weeds during the cover crop growth period, and can prevent most germinated weed seeds from completing their life cycle and reproducing. If the cover crop is left on the soil surface rather than incorporated into the soil as a green manure after its growth is terminated, it can form a nearly impenetrable mat. This drastically reduces light transmittance to weed seeds, which in many cases reduces weed seed germination rates.

In a recent study released by the Agricultural Research Service (ARS) scientists examined how rye seeding rates and planting patterns affected cover crop production. The results show that planting more pounds per acre of rye increased the cover crop’s production as well as decreased the amount of weeds. The same was true when scientists tested seeding rates on legumes and oats; a higher density of seeds planted per acre decreased the amount of weeds and increased the yield of legume and oat production.

STOP SOIL EROSION AND BETTER UTILIZE WATER
By reducing soil erosion, cover crops often also reduce both the rate and quantity of water that drains off the field. Cover crop biomass acts as a physical barrier between rainfall and the soil surface, allowing raindrops to steadily trickle down through the soil profile. In addition increasing the biomass of the soil helps to retain this moisture.

Just before cover crops are killed they contain a large amount of moisture. When the cover crop is incorporated into the soil, or left on the soil surface, it often increases soil moisture. On farms where water for crop production is in short supply, cover crops can be used as a mulch to conserve water by shading and cooling the soil surface. This reduces evaporation of soil moisture.

UTILIZE LOST NUTRIENTS BURIED DEEP IN THE SOIL
Cover Crops are an ideal way to re-capture lost nutrients. Nutrients are often carried down the soil profile never to be utilized. Cover crops can tap into those lost nutrients and bring them to the suffer. Choose species with long root systems.