LATER MATURITY-----

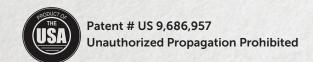
FIXatioN matures approximately 14 days later than Dixie Crimson Clover and up to 28 days later than other commercially available Balansa varieties, while still producing greater overall growth throughout the growing cycle. This later maturity allows for multiple cuttings/grazing and reduces the likelihood of unwanted re-seeding. Fully developed plants exhibit excellent re-growth, and recover more rapidly than other clovers.

VERSITILITY

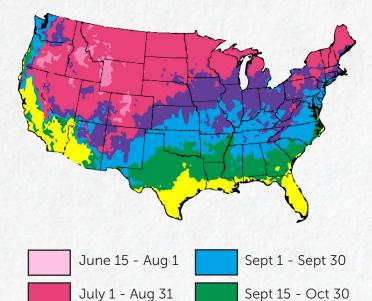
Balansa clover can be used as a cover crop for nitrogen production and weed control or as a forage in mixtures with other legumes and grasses. It can also be used for hay; silage (by itself, with small grains, or in rotation with corn silage); or for overseeding warm season grasses. Crops can utilize the nitrogen created by FIXatioN over the winter months, lowering future production costs.

Grows up to 3ft high with stems as long as 10+ ft.





PLANTING



Aug 15 - Sept 30

	Drilled	Broadcast
Seeding Rate	Mono-culture 5 lbs/acre	Mono-culture 8 lb/acre In mixes
	3 lbs/acre	5 lb/acre
Planting Depth	1/8- 1/4th inch	
Ideal Soil	Soil pH of 4.5-8.0, tolerates poorly drained soils with moderate salinity.	

Oct 15 - Dec 15

FIXation Balansa clover has proven again and again to truly be an innovative step in seed research and sustainable agriculture. Not only does it save us from the rising cost of commercial inputs, it saves our soil from the detrimental and erosive effects of those inputs. The results: higher yields, healthier soil, and a cleaner earth.

Novel solutions for growing concerns.





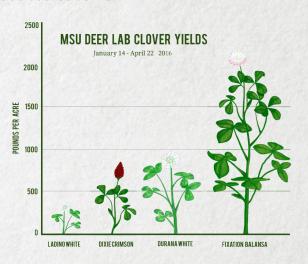


We've combined the best in forage and cover crop research to find an effective new solution for your growing concerns.



WILDLIFE PLOTS

FIXatioN is a favorite of deer, elk, game birds and even waterfowl. FIXatioN should be seeded 45 days prior to the hunting period in most cases. FIXatioN is recommended for use with radishes, oats, and Frosty berseem clover. FIXatioN is the most tolerant clover when it comes to flourishing in a wide range of soil types such as, low pH, wet soils, negative temperatures, or partial shade. FIXatioN will thrive in typical challenging soil conditions. It will also continue to produce large amounts of highly nutritious forage long after hunting season is over. This will lead to larger, healthier wildlife in the following year and will make your favorite hunting spot their favorite food source as well.



The graph above represents the amount of forage biomass accumulated from Jan 14 – April 22, 2016. Trial conducted on Mississippi State University Demonstration Property. Led by Bronson Strickland, MSU Deer Lab.



HAY

FIXatioN can be cut for hay to produce a crop with crude protein levels ranging from 22%-28% and relative feed values ranging as high as 277. Due to the tremendous amount of potential biomass, we recommend that swaths are made as wide as possible to facilitate fast dry down.



COST-EFFICIENCY

FIXatioN's tiny seed size means a little bit goes a long way. The cost-per-acre is up to 50% less than that of other legumes making it an economical alternative for planting alone or as part of grass mixtures. As a nitrogen-fixing cover crop, it reduces the need for expensive fertilizers. As a forage, under proper management, it can regenerate itself from seed for up to 3 years.

FIXatioN has survived temperatures of -15°F in lowa with no snow cover

COLD TOLERANCE

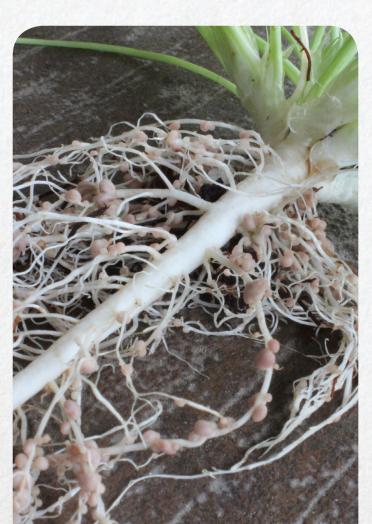
While most Balansa clovers are not very cold tolerant, FIXatioN was bred to endure low temperatures and harsh conditions. With a rosette growth habit that hugs the ground for warmth, it survived three straight days of sub-zero temperatures under snow cover during one of the coldest winters on record in field trials in Kinderhook, NY (2013-14).

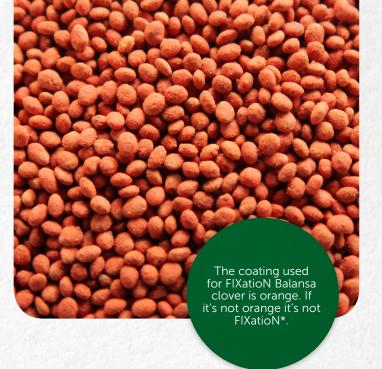
COVER CROP

Cover crops like FIXatioN Balansa Clover can be an important source of nutrients for the following crops. FIXatioN clover extends a tap root deep into the soil in the fall even though it might not exhibit a lot of above ground growth. This tap root is excellent for mining nutrients that lay deep in the soil and bring them up to where they are stored in the plant material. Once the cover crop is terminated and the plant tissues decompose, these minerals are released for use by the following crop.

FIXatioN is also very effective at creating nitrogen. Nodules that are on the tap-root interact synergistically with the special rhizobia contained in the seed coating to "fix" nitrogen from the air. This nitrogen is also stored in the plant's tissues. Once the cover crop is terminated the microbes in the soil break down the plant material and in turn, make this nitrogen available to the following crop. Plant based nitrogen is more stable in the soil than commercial nitrogen. As a result, the nitrogen created by the FIXatioN cover crop will continue to be released over time for future crops.

Capable of creating more than 300lbs of N per acre in a monoculture.





BREAK UP COMPACTION

FIXatioN Balansa Clover features a tap root that delves down more than 30 inches during the winter and early spring. The aggressive nature of its below ground growth during the offseason breaks up the hard pans, creates channels for improved water percolation and opens up airways in the soil which leads to increased microbial growth.

POLLINATORS

FIXatioN flowers can range from white to pink and are very attractive to pollinator insects. A single plant can have over 100 flowers. Its pollen contains 27-29% protein (dry weight) producing a light-colored honey with a very distinct and pleasing flavor. The pollen produced by balansa clover has been documented to meet all the dietary needs of European honeybees, one of the few clover species to do so.

*FIXatioN seed coated for the organic market will be greyish brown in color due to OMRI restrictions on coating colorants.

WEED SUPRESSION

FIXatioN's huge amount of biomass aids in weed suppression and keeps the soil cool and moist. In Oregon field trials, FIXatioN outgrew and smothered rogue daikon radish plants that had not winter-killed.

LIVESTOCK

Livestock and wildlife love FIXatioN for its excellent palatability and digestibility! It is ideal for forage because it is nutrient dense and produces Bio-Massive yields. With FIXatioN's high crude protein levels and relative feed value, you will see better gains and healthier animals.

Capable of producing as much as 96,000lbs of highly digestible green forage per acre!

PASTURES

When fall planted, FIXatioN is an aggressive forage producer in the late spring and early summer months. Well-established fields are capable of withstanding multiple cuttings/grazings. FIXatioN plants retain actively growing leaves along the entire stem. This growth habit allows for better recovery than seen in Crimson, Arrowleaf, and other annual clovers. The small seed size and hardiness allow FIXatioN to be successfully broadcast on established pastures, although better results are obtained when drilled. Recent studies in New Zealand show that Balansa clover is a better component in pasture mixes than white clover. This is because the life cycle of Balansa clover is ending when the grass component of the pasture is becoming stressed. FIXatioN also excels in pastures because the nitrogen collected in the plant material is released annually back into the soil for the use of the grasses. Perennial clovers, such as white clover, utilize the majority of the nitrogen that they create for their own preservation, giving up little to the grasses.

