



Hydroponics is a method of growing plants without soil. Scientists have been studying hydroponics since the 1600's. However, a hydroponic system for growing plants in large quantities has not existed until very recently. The concept of using fully automated hydroponics to produce feed for livestock has the potential to change the way livestock producers operate.

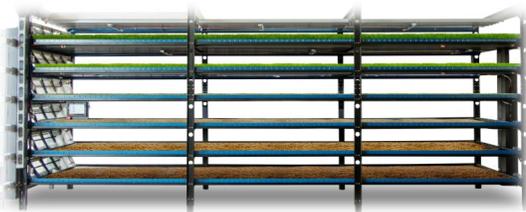


Under the traditional methods growing feed for livestock in a field is time and resource intensive. It requires hundreds of acres of land, thousands of gallons of water, hundreds of hours of labor, tractors and combines, hundreds of gallons of fuel, several applications of fertilizer and chemicals, and large long-term storage facilities. If a farmer wishes to increase production output, he or she must proportionally increase all of the resource inputs. Even then, crop quality and yield remain at the mercy of the weather (e.g., drought, heavy rain, hail, high winds and extreme cold).

Rising land prices are a market driver that makes land acquisition unattainable for many who do not have financial means. Land shortages are also a market driver. Oftentimes, available land does not exist within reasonable proximity to a producer's current operation, and when landowners pass their land down generation after generation, it can leave adjacent operations land-locked for decades.



For those who do have available cropland, Mother Nature becomes a market driver. Field grown feed output remains dependent on the cooperation of weather and weather's unpredictability creates drastic fluctuations in the livestock feed market. Bad weather reduces yield and causes high retail feed prices; good weather causes low payouts for crops.



To address these challenges, HydroGreen has developed our Grow System technology. This "land on a stand" system uses hydroponics to control the variables that affect traditional methods. Our system resides in a building, thereby negating weather disruptions, and it requires only a small fraction of the

land, water, and labor required of field production. A mechanized design automates the hydroponic growth from seed to live green feed on a rolling film. With the push of a button, the system seeds, waters, lights, monitors, harvests and then runs a post-harvest clean up. The result is a reduction in feed expenses by nearly 14%. In addition this system can produce fresh and highly nutritious feed, on a daily basis, year-round without chemical pesticides or fertilizers. This makes organic production a viable option for producers.

HydroGreen feed works for most animals, including dairy cattle, beef cattle, swine, sheep, goat, poultry and equine, and for all sizes of producers from hobby farms to large concentrated animal feeding operations.

The world's population continues to grow and so does the demand on livestock producers to produce more food while retaining quality and affordable prices. Hydroponic technology can assist producers in achieving more cost-effective solutions that help them remain profitable and produce enough food to meet the ever-increasing global food demands.