NEED OF GREEN FODDER FOR COWS

Green fodder is the natural diet of cattle. Green fodder is the most viable method to not only enhance milk production, but to also bring About a qualitative change in the milk produced by enhancing the content of unsaturated fat, Omega 3, fatty acids, vitamins, minerals and carotenoids.

WHY HYDROPONIC FODDER?

In India, the demand for green fodder is increasing on the account of diversified use of agricultural residues. Adequate attention is not being given to production of fodder crops due to increasing pressure on land for production of food grains, oil seeds and pulses. In order to meet this increasing demand for green fodder, the next best alternative is Hydroponics Fodder to supplement the meagre pasture resources.

Hydroponic Fodder is essentially the germination of a seed (such as malt barley or oats) and sprouted into a high quality, highly nutritious, disease free animal food. This process takes place in a very versatile and intensive hydroponic growing unit where only water and nutrients are used to produce a grass and root combination that is very lush and high in nutrients. This green fodder is extremely high in protein and metabolisable energy, which is highly digestible by most animals.

Some of the benefits of hydroponic fodder production being,

- *Land preservation & Water conservation.*
- *Faster growth and maturity.*
- *Contamination free.*
- *Minimal use of Fungicide and Pesticide.*
- *Less labour and maintenance costs.*
- *Control over growing environment.*
- *Time saving.*
- *Continual produce.*
- *Weed free & Highly palatable & Nutritious fodder.*

CE- Hydroponic Fodder Equipment.

CE- Hydroponic Fodder Equipment is available in variants as per production capacity as 100 Kg,250 Kg, 500 Kg and above in variants of 500kg.

How it works?

- *A selection of seeds, grains are spread onto the specialized growing trays and are watered at pre-determined intervals with overhead sprays & sprinklers.*
- *A set temperature & controlled environment is maintained inside the growing chamber automatically, to ensure the best growth and highest nutritional value fodder possible.*
- *Each day you simply slide the feed out of the trays, rinse the tray, reseed and push the newly seeded tray into the other end of the system. The system holds enough trays to ensure you produce your desired and nominated amount of feed every day as per the machine size.*
- *Feed-quality maize germinates within 24 hours of seeding. The fodder grows in the same tray for 7-days and is ready for harvest at a 2 to 3 inch high grass mat. It takes seven days to grow from seeding to feed out & later a per day production.*

"Actual Images are worth than Thousand Words"

Seed Requirements: The grain should be clean, free from broken or infested seeds, untreated and viable.

Pre-soaked Seeds

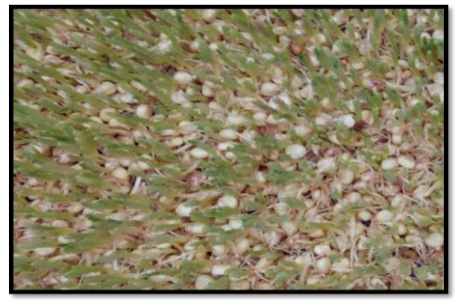
Day -01: Initial Sprouting

Day -02 Actual Sprouting

Day -03 Sprouting & Initial Shoot

Day -04 Initial Stem Growth

Day -05 Root Mat



Day -06 Root Mat /Stem Growth

Day -07 Green Fodder Harvest Ready

Compared to ordinary cattle feed, this method of pasture production require far less space and the pasture produced has superior nutritive value. Small scale farmers have a lot to gain from this revolutionary technology as they can instantaneously transform into large scale producers on their small parcels of land. The content are fed as food and grain such as barley, oats, wheat, maize and others. Barley & Maize are the grain of choice due to its superior performance followed by oats. Grains develop roots and green shoots to form a dense mat.

Our fodder production system exploits the protein release properties of various grasses triggered by early stage germination, so that green fodder harvested in just 7 days can give a protein boost of up to 4 times that available from open pasture grasses and significantly increased metabolizable energy readings, to benefit your ruminant animals and your farming operations.

Guaranteed, year-round production of fresh, green fodder

- *The system ensures constant high quality green fodder.*
- *It is rich in vitamins, minerals and growth factors.*
- *Because it is grown naturally, there are no antibiotics, hormones, pesticides or herbicides.*
- *In areas with poor or no grazing, green feed production is an attractive, Profitable and financially viable alternative.*
- *Highly palatable and nutritious.*
- *Reduces feeding costs.*
- *No long-term storage of large quantities of feed is necessary.*
- *Increases digestibility of nutrients.*
- *Improves general animal health and disease resistance*
- *The process guarantees optimum production and accelerated growth*
- *Increases new born survival rate.*
- *The feed output can be regulated and controlled to fulfil livestock needs.*
- *A high yield can be obtained in a very small area.*
- *The process requires low water and energy consumption.*
- *The green feed can be produced anywhere, in any weather conditions.*
- *no fuel costs related to cultivating and harvesting*
- *There is no damage from insects or free-roaming animals.*
- *1 kg of dry seed yields between 6 and 6.5 kg of green fodder.*
- *Any water source can be used in the system*
- *The water can be applied and re-applied continuously.*
- *1 kg of green feed only requires 3 litres of water*
- *Conventional growing requires around 80 litres to produce the same quantity*
- *The fibre-rich root system is also consumed – therefore there is no nutrient wasting.*
- *Increase your independence by growing food for your animals with no need for cultivated land.*

CE-Hydroponic Fodder VS Fodder Grass on Land

CE- Hydroponic Fodder Equipment	*Fodder Grass on Land*
Fodder grass in hydroponic Equipment has 7 days to growing cycle.	*Fodder grass on land takes 60 days to grow.*
Most Easy Way of Harvesting and cost for Harvesting is very less.	*Harvesting Procedure is time consuming & costly affair on ground based fodder.*
There will be no pre- requisites in machine so no labour for that job.	*Agricultural preparation of land various types such as digging, stirring and overturning. More labour required.*
In Hydroponic Machine System, negligible land requires so enough scope for other cash crop. We can set up in small area or even in cow Shades.	*Due to more use of land require for fodder grass, there will be less option for other cultivation.*
Hydroponic Machine System doesn't have a soil base. It grows on trays.	*Fodder grass on land requires the base as soil which has many impurities.*
Production Capacity – Multi -Tray Rack Position 100 Sq.ft – 30,000Kgs(approx. per year)	*Production capacity- 1000 sq.ft/year- 6500 kg.(Approx.)*
Hydroponic Machine System is grown without any pesticides and without land thus its 100% Organic.	*Fodder grass on land grow with the help of pesticides and also has many foreign matters so it become almost inorganic.*

Silent Features of Machine

- *Cycle time for grow fodder is 7 days.*
- *It takes less space.*
- *Less water consumption.*
- *Less electricity.*
- *Outside environment doesn't affect the inside fodder.*
- *365 day production throughout the year.*
- *Highly low cost production, significant savings can be made in the cost of feeding livestock.*
- *No fungal/bacterial /microbial growth due to sanitization of water & air.*
- *Unskilled laborers can operate the system.*
- *No need for tractors and expensive equipment's.*
- *1Kg of seeds results in to 6kgs of fodder, which is free from Insects, Parasites, fungus & Micro-organisms.*

Celeritus Benefits to Farmers.

Celeritus Engineering will hopefully encourage many other Indian farmers to look at their own farming practices and help them to make the necessary changes needed, to provide a sustainable, efficient method to increase their on farm profit with minimal outlay and very low continual running costs.

This hydroponic fodder system has the potential to allow farmers to yield a fodder that has the ability to provide huge ecological and economic advantages. This is due to the reduction in the amount of land required for maximum livestock production proving to be an asset for both regions where agriculture is difficult and in densely populated areas that lack sufficient growing space. This use of lesser grazing area to feed stock could in turn provide more acreage for food crop production thus improving the economy of the land. Such a system allows the farmer to have control over the feed production 365 days of the year rain, hail, shine or snow thus allowing the turnover of quality and quantity livestock. The farmer to now able to send stock to the markets at near peak condition, selling when the prices are suitable instead of having to accept poor market prices because of poor conditioned cattle.

Contact Details :-
Celeritus Engineering

Help line 24 X 7 E Mail : info@celeritusindia.com

Niraj Dave : (+91) 972 771 0443 Ahmedabad (Gujarat)

Abhishek Thaker : (+91) 865 745 4756 Pune (Maharashtra)