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Auto Indoor Hydro Phonic Fodder Grow Chamber

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Abstract

1) ***Hydroponics is changing the agriculture industry slowly. the ability to grow indoor brings another dimension to agriculture. We have develop a mini fodder grow chamber, they aregrow a fodder within week,***
2) ***A chamber maintain a temperature and moisture monitoring to ensure proper indoor growconditions for a good growth.***
3) ***The system makes use of arduino controller and many more senser to control temperaturemoisture.***
4) ***The system use the motor to ensure water level, pump motor and adjust water level motorssome types of motor are use for maintain water level in chamber.***
5) ***5) In chamber we use artificial sunlight is switched on and off as per use.***
6) ***In this chamber water are circulate in water pump and also added a some nutrient in wateralso. And fan work at a maintain a surrounding atmospheric air.***

I. INTRODUCTION

1) The word hydroponics has its derivation of combining the two Greek word, hydro meaningwater and phonic meaning labour.
2) The ability to produce crop would no longer be chained to the soil but certain commercial crops could be grown in large quantities without soil in chamber in chamber we have use same water nutrient to grow a plant rapidly ,
3) Hydroponics is a more sustainable option both environment and economically it require lessnumber of land and less worker.
4) It is protect rain, thunderstorm and any other natural activity because of there chamber andbig size of hydroponics house are green net ,
5) Hydroponics is a promising agriculture technology to meet production needs of there futurewithout sacrificing environmental sustainability ,
6) They more safe techniques because of their chamber they are managed all weather condition in peacefully. In old forming techniques farmers are spend to much time in there farm to protect there farm and sprike to there crop. They are risky techniques.

II. CAD DESIGN

1) This was based on the project scope of both designing the internal layout of the chamberand designing the hydroponics system.
2) Choose a chamber, helping that ensure that it contain the necessary features and as per ouruses.
3) In must important part of chamber is there floating bed they design properly. Such includeprogramming consideration leaving room.
4) Design internal layout will need to include at least three different hydroponics system.Provide a water pump, water circulating pipe and leave the space for grow it station.
5) Before designing the system and calculating pipe and pump sizes.
6) It rate design and calculation to ensure that a favourable design is chosen.

III. COMPONENTS

1) In there chamber following components are use
   i) pump motors ii) piping and drainage connector iii) supporting frame iv) water tank v) temperature senser vi) water senser vii) controlling circuitry viii) LCD display ix) keypad
   xi) transparent chasing xii) cooling fans xiii) pipes and joints xiv) mounts and culling

- • supplied frame :- outer casing will be mad up of mild steel
- • transparent chasing :- it will be made up to acrylic sheet
- • tray :- plastic tray will be used
- • water tank :- metal tank will be used to store water

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- • piping :- pipe will be use for supplies water
- • fans :- two 12v fan will be used
- • grow light :- it will be mount on the top side of plants.

IV. ADVANTAGE

1) Crop can be grown without soil, crop are diseases free because of soul contains mostnumber of disease but in this tech soil not use.
2) Labour for tilling, cultivating, fumigating, watering and other traditional farming areeliminated.
3) Easy to increase their chamber size and shape to there uses.
4) Conversation of water and nutrients are more soluble. They are pollution free of land.
5) Fast in progress because of there nutrients. Nutrients are help to grow plant rapidly.
6) It is more safer than old traditional method.

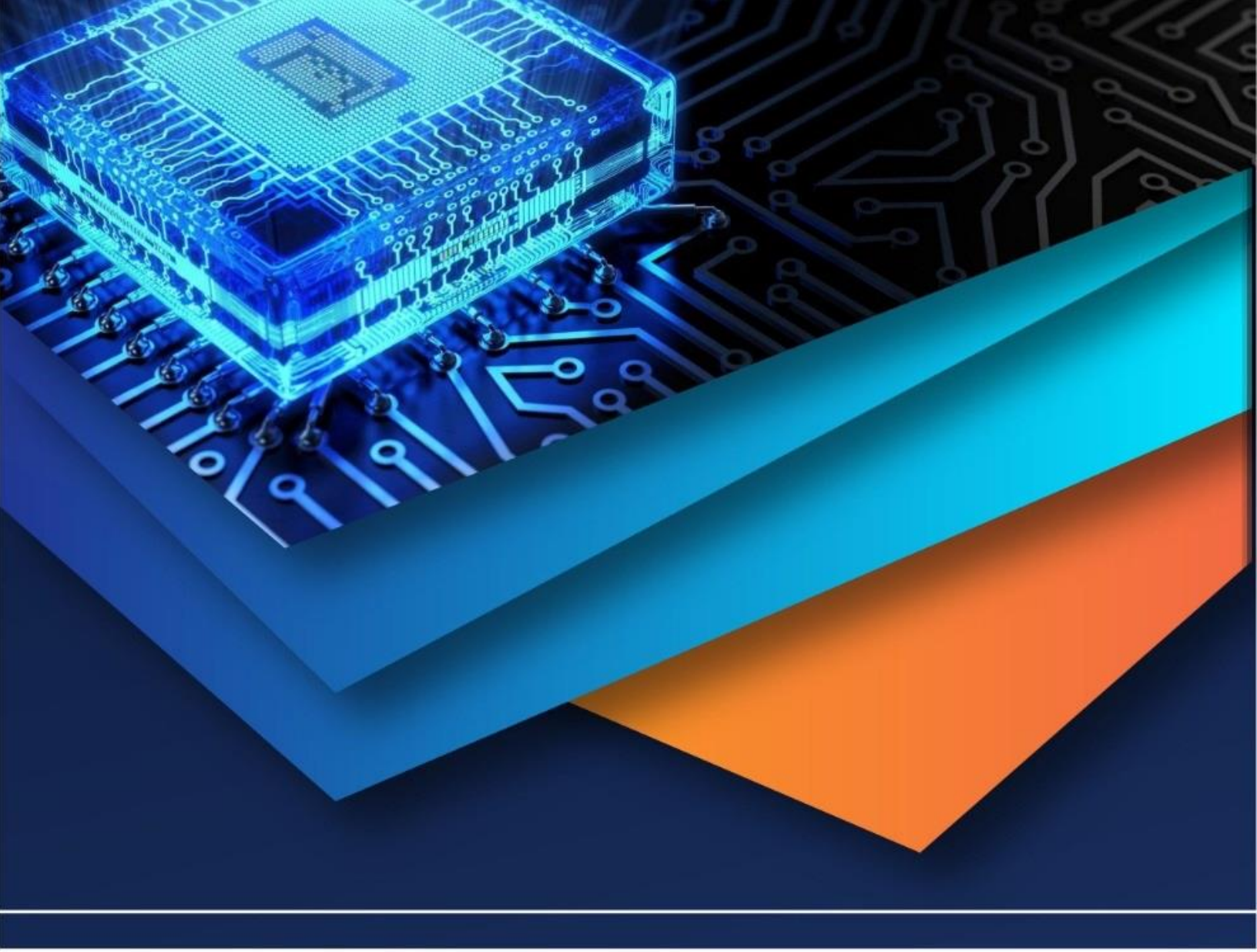
V. DISADVANTAGED

1) The original construction cost per acre is more and they not dissemble they will be constructedin one time.
2) Trained person must be required. knowledge of fodder grow and of the principal of nutrient isimportant.
3) They only use of fodder or any other type of vegetable plant.
4) Observation must be required in every day.

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