Claims

1. A manufacturing method of a ~~Special~~ special ~~Organic~~ organic ~~Nutrient~~ nutrient ~~Soil~~ soil for ~~Organic~~ organic ~~Plants~~plants, comprising ~~the details of~~:

choosing ~~Manures~~ manure of sheep and cattle fed by natural forage ~~are carefully chosen~~ as main raw fertilizer sources and nutrient sources~~.~~ , ~~Natural~~ the natural forage ~~refers to the grass~~being grown naturally ~~and never been~~without ~~used~~ use of ~~with~~ pesticides, fertilizers or artificial additives~~.~~ ;

forming a~~The~~ mixture ~~contains~~ containing 80% of sheep~~fold~~ manure and 20% of cattle manure by weight~~.~~ , ~~The~~ the ~~benefit of~~ sheep~~fold~~ ~~manure is that the sheep urine in it contains~~ containing an ~~large amounts of~~ active substance to ~~make it become full~~form ~~nutritious~~ organic fertilizer ~~to fit the~~for plant growth~~.~~ ;

drying the mixture;

~~The dried sheep and cattle manures are grinded~~ grinding the mixture to ~~reach the~~ attain particle sizes ~~as~~ of between 0.2 to 0.5 mm~~,~~ ;

~~added~~ adding ~~with~~ water ~~till~~ to the ~~moisture~~ mixture ~~up~~ to control moisture at 55%±5~~%,~~ %;

mixing with anaerobic bacteria; and ~~blended thoroughly. Then natural anaerobic fermentation or industrial biological aerobic fermentation is applied to ferment completely. The~~

~~last step is the harmless treatment to inactivate all worm eggs, harmful germs and weed seeds. The final product is dark brown and has no odor. This main raw source will be~~

~~mixed~~ mixing with sand and natural peat according to ~~the~~ one of the proportions ~~as~~ selected from: 10-50%, 20-70%, and 10-30% ~~(the selection of the proportion is based on the crop species) to become the Special Organic Nutrient Soil for Organic Plants~~. ~~The plants grown in this Special Organic Nutrient Soil can meet all the technical indicators of organic food standards.~~

2. A ~~using method of the Special Organic Nutrient Soil for Organic Plants described in claims 1, characterized in that the~~ semi-closed cultivation tank ~~is~~ used during ~~the~~ planting of the organic plants using the special organic nutrient soil as manufactured in claim 1,. ~~The cultivation~~the tank ~~is~~ being built ~~by~~ using pollution free materials, ~~with the width of 50-150 CM and the height of 20-40CM. The~~a length of the tank ~~is~~ being determined according to ~~the~~a size of ~~the~~ a greenhouse, and ~~the specific dimensions of width and height depend on the actual~~ needs of the organic plants, the tank comprising:

~~. All the~~ inner surfaces ~~except the one~~surrounding the soil ~~used for planting~~ are ~~sealed~~ covered by a plastic sheet ~~specific for planting with proper thickness~~ to isolate the inner surfaces from the soil. ~~and surroundings. Put the Special Organic Nutrient Soil into the tank in order to carry on the seeding and transplantation. The appropriate thickness for the soil is between 15 to 30cm, and different crops will require different thickness values, for instance, leaf vegetables could use the thickness of 15cm while solanaceous vegetables prefer 30cm, and certain special~~

~~plants could even use thicker organic nutrient soil.~~

3. A ~~using method of the Special~~ special ~~Organic~~ organic ~~Nutrient~~ nutrient ~~Soil~~ soil ~~for Organic Plants~~ as ~~claimed~~ manufactured in claim ~~2~~ 1 ~~characterized in that the Special Organic Nutrient Soil for Organic Plants can be~~being able to be used in all planting areas without any geographical restrictions.

4. A ~~using~~ method of using the ~~Special~~ special ~~Organic~~ organic ~~Nutrient~~ nutrient ~~Soil~~ soil ~~for Organic Plants~~ as ~~claimed~~ manufactured in claim ~~2~~ 1, ~~characterized in that the~~wherein organic plants can either be straight seeded or seedling planted in ~~the~~ a cultivation tank of claim 2 ~~with the different spacing which is different among the crop species. During the planting~~, and wherein ~~the~~ row and plant spacing ~~should be appropriately~~is adjusted ~~to the~~for growth spacing.

~~5. A using method of the Special Organic Nutrient Soil for Organic Plants as claimed in claim 2 characterized in that when adopting the semi-closed cultivation tank there is no material limitation as long as pollution free for the plants. Nevertheless it must be completely isolated from the soil of ground so that there will be no fertilizer leakage. Drip irrigation, sprinkler irrigation, infiltration irrigation or flood irrigation can be used as watering methods, and moisture in the tank should be controlled between 40% and 50% based on the different crops, environment temperature and environment humidity.~~

Description

Manufacturing and Using Methods of a Special Organic Nutrient Soil for Organic Plants

1. Field of Invention

The invention belongs to agriculture planting field, particularly involving organic plant cultivation.

2. Background of the invention

Artificial soil cultivation technique has high promoting value in crop planting area and its application will be progressively enlarged due to the gradual reduction of arable lands and the increasing demand for crops' nutrition, quality, and safety. Currently, the technique has developed rapidly and been wildly used in many developed countries in the world to cultivate the high quality and yield crops especially the organic vegetable, which makes it account for a very high proportion in facility agriculture area. Artificial soil cultivation, a high technology in modern agricultural development, processes the advantages of no environmental and geographical restriction, preventing the underground diseases and pests, and efficiently overcome different obstacles, in addition to the traits of saving water and labor, stable and high yield, convenient implementation for standardization management, and meeting the requests as organic and so on. China already has certain foundation in the application in the area. For example, the research departments represented by The Institute of Flowers Chinese Academy of Agriculture have been developed a practical artificial soil cultivation system and method which suites Chinese situation, conforms to the requirements of agriculture and organic agriculture