

## **UNIQUE – soil amendment.**

### **History & Introduction**

In 1992 Down to Earth developed and built a novel barn system for pigs: the Eco Barn. This barn design received the "Farmer of the Year Award" from the S.P.C.A. In this environmentally and animal friendly barn the pigs are housed in roomy pens and kept on a thick layer of sawdust bedding. All the soiled bedding and the animal waste is removed from the barn on a daily basis and moved into a sophisticated composting system. An aerated floor system maintains oxygen levels between 8-12%, which is essential to stimulate the development of aerobic micro-organisms. The temperature is kept between 55 and 65 C. All pathogens and weed seeds are killed during the composting process. The composting process itself takes about 7 weeks. After that the compost is stored for at least 8 weeks for curing; the finished product is a very stable product. After the curing process it is ready for bagging and shipping. The bags are biodegradable and are woven from coarse fibers, which allows air to penetrate into the bags, so the bacteria flora stays aerobic.

### **The Product**

UNIQUE is a micro-biologically active, organic soil amendment, which is produced under closely controlled conditions.

The only ingredients used to produce UNIQUE are: pig manure and sawdust/shavings.

### **Beneficial Properties**

UNIQUE has properties which are highly beneficial to maintain and enhance a healthy ecosystem in soils. Although UNIQUE is in it self an organic fertilizer, the main benefits for soil and plants are the high concentrations of aerobic micro-organisms and fungi. UNIQUE contains very high concentrations of Pseudomonads (6.5x 100 milj CFU/gdw.) The Agriculture Research Centre in Agassiz has conducted a number of trials in 2002-2004 and has shown the significant benefits in disease control from Pseudomonad species. Pseudomonad bacteria are especially beneficial in controlling root diseases. UNIQUE also contains fungi species, which produce antibiotic like substances, which are able to kill soil pathogens. The fungi also enhance the soil structure and water holding capacity. In short this all will result in a healthy, balanced soil, loaded with a broad spectrum of beneficial micro-organisms, in which plants develop a healthier and more extensive root system .

### **Nutrients**

UNIQUE is an organic fertilizer. Its N:P:K(Nitrogen, Phosphorus, Potassium) ratios are: 2:4:2. These values have to be multiplied by a factor 3 to make a fair comparison with chemical fertilizers. The value of an organic fertilizer like UNIQUE is far higher than a chemical fertilizer, since almost all of the fertilizer stays in the soil and will be taken up by the plant's root system. A large % of chemical fertilizers will drain from the soil to the ground water and can not be utilized by the plants. An added benefit of UNIQUE is the availability of many beneficial micro elements, like: Calcium, Iron, Sulfur, Phosphorus, Manganese and many others.

## **Trials**

Down to Earth has conducted a number of trials in commercial greenhouses. The results of the trials has proven significant improved performance of flowers and vegetable plants, UNIQUE was also able to control root rot. Root rot is caused by Pythium; a root fungus which has infected all soils used for commercial crop production in the Fraser Valley. Many garden soils are infected with the same root fungus.

## **Markets**

UNIQUE is mainly sold to the commercial greenhouse industry, but many gardeners have seen the benefits of UNIQUE and are using it year after year. UNIQUE is available in 40 l. bags, which weigh about 35 lbs. Many garden clubs place orders for their members in the early spring.

## **Application**

Easy application : top dress a layer of 2-3 cm (= 1 inch) thick around the plants. 1 bag of 40 liters covers about 4 sq. meters ( 30 – 40 sq. feet).

Application should be done in the early spring or late fall. Application should be repeated at least once every year; an extra fall application will give your garden a head start in the spring.

UNIQUE can also be mixed with potting soils.

Application for vegetable gardens. Before seeding or planting one may mix the top soil (rotavating) with a layer of about 1 inch of UNIQUE . After germination of the young plants top dressing, once /month, should be done during the growing season. This practise will add sufficient nutrients to the soil to grow a variety of vegetables.

## **Availability**

UNIQUE is available all year round. It can be picked up or delivered. We may make arrangements with your club to deliver bagged product at the location of your garden club meetings.

For more information, please phone: 604-856-6929  
or e-mail: [delint@shaw.ca](mailto:delint@shaw.ca)

Ask for Cors or Ann de Lint.

Our Address: 28005 McTavish Road, Abbotsford, BC, V4X 2B9.