GeoNatural™ products

GeoNatural™ products are resources for soil and water related improvements and restorations which are made from natural fibers. These products are completely free from any synthetic materials that can pose a threat to wildlife and natural resources. The most significant feature of these products is their complete biodegradability. As their functional life ends, they become mulch which further improves soil conditions for better plant growth. RoLanka offers GeoNatural™ products made of coir (coconut fiber), a renewable natural resource.

- **Coir fiber is unpalatable to wildlife**, which makes them a more suitable green resource for environmental restorations and wildlife habitat improvements.
- **Coir fiber is an abundant, renewable natural resource.** Coir fiber is one of the most durable and readily available natural fibers. The tensile strength of coir fiber exceeds that of straw and excelsior (wood fiber) and jute.
- **Coir fiber is strong, durable and versatile.** The versatile coir fiber is used to make variety of GeoNatural™ products for erosion control, sediment control, soil bioengineering, landscaping and gardening.
- **Woven bristle coir blankets provide protection for tough erosion problems.** RoLanka’s BioD-Mat® woven bristle coir blankets have a higher tensile strength and a four- to six-year functional life. These hold moisture and support seed germination and seedling growth. The ability to plant through the mat without having to cut into it is a big advantage in these semi-permanent, open weave blankets. They are excellent for use in establishing vegetation in channels and slopes. Vegetation successfully comes through these mats and field experiences support these products.
further due to the ease of mowing and maintenance of the restored areas. These semi-permanent natural blankets have repeatedly proven to perform better than the synthetic permanent mats and provide true green solutions in these applications. There are variety of woven coir blankets available in the market. Rolanka offers the woven coir mats made from bristle coir fiber, the longer stronger coir fiber. These blankets and stronger and durable than woven coir blankets made from mix coir fiber or mattress coir fiber.

- **Coir fiber is an excellent sediment filter.** Coir fiber medium in coir sediment control products provides better filtration than straw, wood fiber and other non-degradable products. EPA field studies have shown that coir fiber not only removes sediment, but also phosphorus and heavy metals.

- **Coir sediment control products can be left on site at the end of a project to biodegrade.** This adds organic matter to enrich the soil and lowers sediment control costs by eliminating the need to remove, haul and dispose of the material. This in turn, reduces pressure on landfills and provides true green solutions to protect our environment.
Mixed coir woven mat

Bristle coir woven mat

Vegetation coming through woven coir mats.

Planting through the open weave BioD-Mat blankets
RoLanka’s GeoNatural™ products are available for erosion control, sediment control, soil bioengineering, wetland restoration and organic gardening. They include:

1. **Soil Erosion Control Blankets:**
   - **Temporary Mats**
     - BioD-Straw
     - JuteMat
   - **Extended Temporary Mats**
     - BioD-StrawCoco
     - BioD-OCF
   - **Semi-permanent Mats**
     - BioD-Mat 40
     - BioD-Mat 60
     - BioD-Mat 70
     - BioD-Mat 90

2. **Soil Sediment Control Products:**
   - BioD-Watl
   - BioD-SiltCheck
   - BioD-SuperWattle
   - BioD-Rockbag
   - BioD-Pillow
   - BioD-Liner

3. **Soil Bioengineering Products:**
   - BioD-Block
   - BioD-Roll
   - BioD-SuperLog
   - BioD-SuperRoll
   - BioD-Twine

4. **Wetland Restoration Products:**
   - BioD-Pillow
   - BioD-Liner
   - BioD-Mat 40
   - BioD-Weedmat

5. **Organic Gardening Products:**
   - BioD-Medium