2011

Multi-Formes Environment inc.




- Plantation
- Erosion control
- Shore revitalization

1976 - 2011

35 years of innovations

The company

Founded in 1976, Multi-Formes is one of the most important North American manufacturers of products for the horticulture industry. The company makes and markets over 300 products and keeps growing by introducing innovative products that meet the needs of the marketplace.

In 2007, Multi-Formes set up the Environment division in order to offer a range of products based on 100% natural coconut fibers. These are used for various landscaping projects using natural products rather than heavy-handed civil engineering techniques.

Effective and biodegradable, our products are used to fight erosion and revitalize barren areas. They are used to promote vegetation growth and encourage biodiversity.

Multi-Formes is also a modern 15,000 sq. ft. plant and warehouse located in Quebec, Canada. This means a large storage capacity and continuity of supply. We sell our products directly from this warehouse, no intermediaries. Choosing Multi-Formes is opting for Quality, Innovation, the Best prices, Reliable delivery and products Indispensable for the care of the environment.

Marquis Patry, president

Check all our catalogues at
www.multi-formes.com

Our divisions

Environment

Horticulture

Nursery

Christmas

Natural solutions from an abundant natural resource

Did you know....

Coconut-based products are a wise choice for the environment because they are made from recycled coconut shells... an abundant and rapidly renewable ressource.

Products derived from coconuts reduce our environmental impact. They replace ecologically-harmful products as well as natural products whose extraction destroys habitats. Coconuts grow abundantly in coconut palms. They mature within 12 months then fall to the ground.

A choice renewable resource, coconut fibers are used in a wide-range of landscaping products. Multi-Formes invites you to discover theses natural and cost-effective quality items. Designed for use in horticulture and landscaping, they represent a wise and conscientious choice for the environment.

What is COIR ?

Coir is the name given to the brown fibers that make up two thirds of a coconut. These fibers form a thick and resistant spherical casing that protects a white and fleshy interior. Once extracted, then washed and sun-dried, the fibers, 100 % natural and biodegradable, can be transformed into a wide range of environmentally-safe products.

The interior is used in food production. Rich in potassium, iron, magnesium, phosphorus, copper and zinc, a coconut is exceptionally nutritious. Thus, this renewable resource can both feed humans and provide a variety of safe products to improve our surroundings.

Product storage

Natural coco fibers contain tannic acid. This agent prevents mildew and repels termites and other insects. Biodegradable in the field, coir products can be stored for years in a dry environment, without swelling or degradation.

BioDISC
PLANTATION

Allows young trees to grow vigorously

Quick and easy to install

During its first years, a tree competes with plants and weeds for nutrients and water from the soil. That's why it's important to inhibit the growth of vegetation around saplings.

Our BioDISCs give young trees a chance to quickly establish their roots and grow vigorously. Completely biodegradable, BioDISCs are an economic and ecological way to accelerate the growth of a plantation and improve its visual aspect.

BioDISC 45 cm

Saplings and shrubs • Sarket gardening • Bio-produce

- Eliminates competing weeds around saplings
- Increases the amount of sunshine young plants receive
- Preserves soil moisture
- Prevents weed trimmer injuries
- Facilitates finding plants before cutting them down accidentally

Diameter	Product Code	Shape	Weight	Thickness	Units / package
45 cm	# 620-45cm	Circular	1200 gr /m^2	10-14mm	50
60 cm	# 620-60cm	Circular	1200 gr /m^2	10–14mm	50

Other sizes or shapes available on request.

Technical data

Composition	Compressed coconut fibers with a latex coating on one side *(Latex is a natural adhesive produced by Heveas (rubber trees))*
Product life	2 to 3 years (depends on the type of soil). Then biodegrades and enriches the soil with organic materials.
Certification	Approved for biologic agriculture by Ecocert Canada
Shape	Pre-cut circle with a star-shaped hole in the center. Quick and easy to install.
Thickness	10-14mm or 0.40"-0.56" (Thicker than BioDISCs for nurseries)
Average weight	1,200 grams/sq. m. (20% more fibers)
pH	Neutral (5.5 - 6.5)

Easy to carry
+/- 28 lb. / pkg.

Installation

Put the glazed side (the latex side) face down on the ground. Fasten with metallic U-pins.

In a large plantation, the BioDISC can be installed directly on the grasses around the trunk as long as it is securely fastened. The grasses will decay under the BioDISC. However, a BioDISC will last longer if it is applied directly on bared soil.

1 **Plant the sapling and water generously.**

2 **Install the BioDISC, overlap and fasten the ends.**

3 **Fasten with at least two U-pins. See page 11.**

Other sizes

Sizes from 16 to 34 cm (6.3" to 13.3") are also available. They are used for potted plants by nurseries and allow growing without herbicides.

These BioDISCs are thinner (8-10mm) and their product life in the field may be shorter. Can be used for special projects.

Control erosion while restoring a natural habitat.

Photo : Les Feuillages du Québec Inc.

CoirMAT

 # 900

For slope 1:1 and more

 # 700

For slope until 1:1

 # 400

For slope 3:1

Control erosion and restore the vegetation cover that promotes biodiversity .
Used for road embankments, shores, ditches, green roofs, landfills, etc.

A CoirMAT is a machine-weaved net made from coir cord. Coir (coconut fiber) is a natural product of coconut trees (*Cocos Nuceifera*). It is 100% biodegradable and contains no additives (chemicals, colorants, etc.).

CoirMATs are appropriate for most civil engineering projects where parts of the landscape must be restored to a natural appearance. Designed to protect from rain splash erosion and wind erosion, it lasts 5 to 6 years - long enough for vegetation to take hold and assume its protective role. (Product life may vary accordingly with climatic and physical conditions.)

The high tensile strength of CoirMAT enables it to withstand physically harsh environments such as abrupt slopes and rivers with strong currents. It resists extremes of temperatures and wind. It is appropriate for dunes, semi-arid and mountainous areas, and other places where wind and sun exposure makes it difficult for vegetation to start.

Flexible, light and easy to stake, CoirMATs install quickly and follow the contours of uneven terrain.

Produit #	Code	Weight	Mesh size	Dimensions	Area/ bundle	Delivery
CoirMAT # 900	# 950-900	913 g/m²	10 mm X 7 mm	2 m X 40 m	160 m² (2 nets, 80 sq. m./each)	6 bundles/pallet
CoirMAT # 700	# 950-700	718 g/m²	12 mm X 10 mm	2 m X 40 m	160 m² (2 nets, 80 sq. m./each)	6 bundles/pallet
CoirMAT # 400	# 950-400	420 g/m²	20 mm X 20 mm	2 m X 50 m	200 m² (2 nets, 100 sq. m./each)	6 bundles/pallet

CoirMAT

 # 900 - # 700 - # 400

Technical data

- **Composition** — Coir fibers weaved into sturdy string
- **Durability** — 5 years. Then biodegrades into organic matter that enriches the soil.
- **Certification** — Approved for biologic agriculture by Ecocert Canada
- **Water retention** — 9 times its weight
- **UV resistance** — Lasts longer than synthetic materials
- **pH** — Neutral (5.5-6.5)

Photo : Les Feuillages du Québec Inc

Installation

CoirMATs and CoirBLANKETs are fastened with wood stakes or metal U-pins (also used for joints) depending on the slope and the nature of the soil.

CoirBLANKET

CoirBLANKETs are made from coir fibers encased in a photo-degradable polypropylene net. They are used for erosion control on gentle slopes. They allow seeding and stabilize seeds and seedlings.

Code	Weight	Mesh size	Thickness	Dimensions	Area / roll
# 940-9X9	343 g/m²	9 mm X 9 mm (Photodegradable netting)	5 mm	2.4 m X 50 m	120 m²

Natural coco fiber logs for shores, completely biodegradable and safe for wildlife.

CoirLOG

CoirLOGs protect shores from wave action and enable revegetation. They are used in areas where the banks are unstable or affected by contaminated water. They prevent additional erosion.

Technical data

- Composition — Compressed coconut fibers encased in a CoirMAT mesh
- Durability — 4 to 5 years. Then biodegrades into organic matter that enriches the soil.
- Length — 3 meters (10 feet)
- Diameter — 30 cm (12 inches)
- Weight — 30 kg (66 lbs)
- Water retention — 9 times its dry weight.
- ph — Neutral (5.5-6.5)
- Buoyant — Yes
- Seeding — Yes, vegetation proliferates in CoirLOGs.
- Flexibility — Supple, can be bent

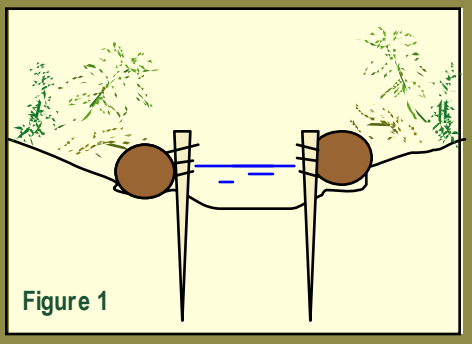


Figure 1

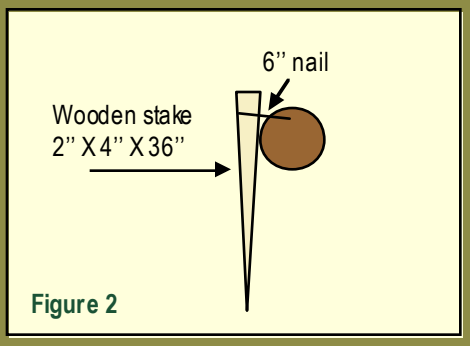


Figure 2

Installation

Attach CoirLOGs end to end and place them along the shore. Water should comes up to 1/2 to 2/3 of their height (figure 1) if vegetation is to be planted directly in the logs.

Secure CoirLOGs with 2" x 4" x 36" wooden stakes in which a 6 inch nail has been driven through the top (figure 2). The stakes should be spaced 36" (24" if the current is strong). Hold the CoirLOG firmly against the embankment and drive the stake in on the side facing water (figure 1). Put stakes on both sides if the log cannot be braced against the embankment (figure 3). The nail must hold the CoirLOG firmly against the bottom. Attach the log to the stake with string Coir ROPE (See page 11).

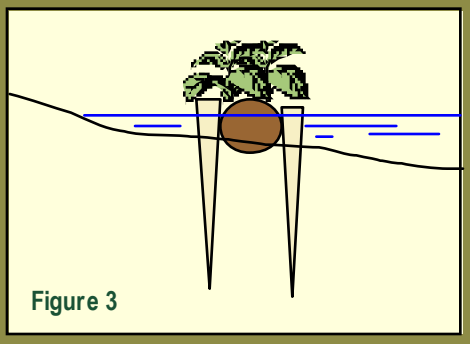


Figure 3

Once the CoirLOGs are secured, planting can begin. Use local wetland plants. If the water level is high enough, insert plugs deeply into the log's fibers every 6". If the water level is too low, plant in the surrounding soil. The plants will overtake the CoirLOGs gradually (figure 4).

Note: Stack CoirLOGS to get greater support. Cover the slope of a bank completely where current or wave action is strong. Shores damaged by erosion can be restored with CoirLOGs installed in staggered fashion such as a sloping wall. In time, sediments will accumulate in front of the logs.

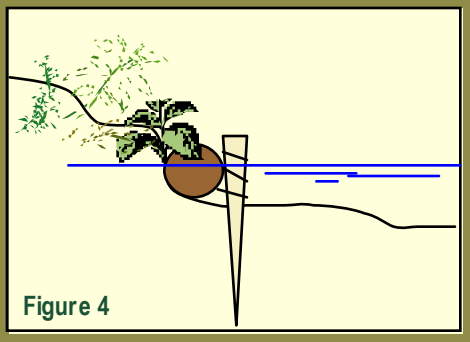


Figure 4

Coconut roll

Made of 100% natural compressed coconut fibers.

Uses

Hedges
Market gardens
Biological gardens

INTRANTS ECOCERT Contrôlé par Ecocert

Technical data

• Composition	Coconut fibers
• Durability	2-3 years. Then biodegrades into organic matter that enriches the soil.
Certification	Approved for biologic agriculture by Ecocert Canada
• Length	25 feet
• Width	3 feet
• Thickness	1/4"
• Box	1 roll
• pH	Neutral (5.5-6.5)
• Pallet	16 rolls
• Product code	#401-ROLL

Coco mulch

Natural soil cover that prevents weeds and gives a unique appearance. A bloc of 8.5 lb, once soaked, provides 2 cubic feet of mulch or the equivalent of a 30*lb* bag of cedar mulch.

Dimensions: 12'' X 12'' X 6''
Weight: 4 kg (8.5 lb)
 # 980-MULCH

Coco peat

Replaces peat moss. Coco moss aerates and enriches the soil just like peat moss.

Equivalent to a 3.3 cubic feet bag afterwatering.

Dimensions: 12'' X 12'' X 6''
Weight: 5 kg (11 lb)
 # 975-PEAT

Fasteners

Fasteners for the installation of

BioDISC • CoirBLANKET • CocoROLL • CoirMAT

Metal U-pins

Product code	6" (15 cm)....# 430-AN6 8" (20 cm)....# 430-AN8
Composition	Steel, clear finish
Dimensions	Length: 6"....11 g (0.116mm) Length: 8"....11 g (0.116mm)
Qty/box	1,000 pins
Weight/box	6" (15 cm): approx. 40 lbs (18 kg) 8" (20 cm): approx. 60 lbs (27 kg)

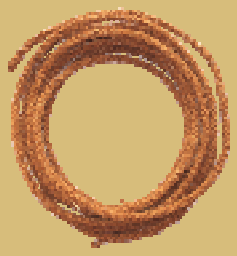
Other sizes available on demand.

Metal stake

Produit code	# 890-MET6
Composition	Steel, clear finish
Dimensions	Length : 6'' (15 cm) Calibre : 9 g (0.144 mm)
Qty/box	1000 units / box
Weight/box	+/- 30 lbs (18 kg)

Other sizes available on demand.

Biodegradable coir string



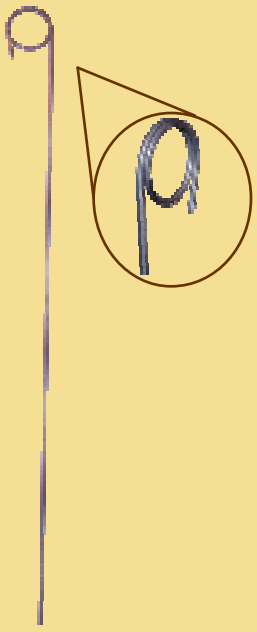
Cable of fibers of coconut (10 mm)

Product code	# 965-ROPE
Composition	Coir fibers
Length	1,500 ft
Diameter	3/8" (10mm)

Rope of fibers of coconut (5 mm)

Product code ...	#966-5MM
Composition	Coir fibers
Length	5000 pieds
Diameter	3-5 mm (3/16'')

Identification stake



Stem made from rust-proof galvanized steel. Sturdy, thus easy to spike. Identify young plants by inserting a label. Reusable.

Product code	# 896-IDE25
Composition	Galvanized steel
Length	25'' (64 cm)
Calibre	6 g (0.160 mm)
Box	50 units / box

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