

HYDROMULCHING

Ref: HM "BFM-EC



CCTP BASE EURO-MAT "BFM EC HYDROMULCHING WITH UAB INPUTS

Type :

For erosion control in temperate & humid zones during favourable sowing periods. Slopes from 15° to 30° and with a slope development < 5m.

Project with significant environmental constraints.

WARNING :

Each project has its own specific features, which sometimes require the input quantities to be refined. The data contained in this document are averages used on similar projects.

Euro-Tec technicians are at your disposal for further information and to prepare your seed mix - www.euro-tec.fr

Scope of application :

This SCC describes the procedure for revegetation using HYDROMULCHING.

In contrast to HYDROSEEDING, HYDROMULCHING is a technique that prevents seeds and fertilisers from being washed away, but also prevents soil erosion before vegetation has even become established.

HYDROMULCHING, characterised by a quantity of fibrous material (mulch) > 40 gr/m² - 400 kg/ha, also provides a favourable environment for the germination and rapid establishment of the herbaceous layer.

- HYDROMULCHING EQUIPMENT

Seeding will be carried out by HYDROMULCHING using specific equipment of the EuroMulcher type, complying with the EC directive defining requirements in terms of health and safety (EU Directive 2023/12/30) and compatibility of worksite equipment with electromagnetic waves (EU Directive 2014/30). ***An EU plate certifying compliance with these directives must be affixed to the equipment, and a certificate of approval must be provided to the SPS (health and safety coordinator).***

The equipment will preferably be fitted with a petrol engine, which is fully in line with a CSR approach that aims to protect people by limiting emissions that are sources of fine particles in particular and by limiting noise.

To ensure a "neat application that respects the works and collateral facilities, the equipment will also be fitted with a semi-rigid hose reel, a shut-off valve and removable nozzles.

A description of the equipment and the certificate of approval must be attached to the tender.

1-1 Description of supplies

1-1-1- Seeds

The company will prove the origin of the herbaceous species in the mixtures by means of the certificates of origin issued by the Service Officiel du Contrôle des semences (SOC) and marked on the seed bags.

These certificates, which are less than 3 months old, indicate for the certified species :

- The supplier's name or code,
- The batch number
- Species and variety

After each job, the contractor must provide the project owner or project manager with all the information needed to check the quality and quantity of the seeds used (SOC labels).

1-1-2 -Soil conditioners

All fertilisers and soil improvers must comply with EEC regulations.

- Germination activator: VEGE-MAX or equivalent
Concentrated, 100% soluble liquid supply of humic and fulvic acids.

VEGE-MAX is a soil improver with a high C/N ratio that maintains, improves and protects the physical and chemical properties, structure and biological activity of the soil

At the soil-root interface, VEGE-MAX strengthens the clay-humus complex, improving the soil's air/water balance, water retention capacity and cation exchange capacity (CEC).

Composition:

Dry matter	21 %
Organic carbon (corg)	10.1 %
Corg/N	20.2
Total potassium oxide (K ₂ O)	5 %
Electrical conductivity	150 mS/m
pH value	13

- Organo-mineral fertiliser (NFU 42-001) type VERT-EXPERT "NATURE".
Obtained from plant and animal organic matter including algae, castor oilcake, vegetable oilcake and C3 sterilised animal powders.
Product suitable for use in Organic Farming in accordance with EC regulation no. 834/2007

Composition:

Dry matter content (weight of OM / raw product) (fruit cake and pulp, composted poultry manure, etc.)	90%
Organic matter on raw product (rate)	50%
Organic mineral fertiliser NPK 6-3-6 + 0.5 FER	NF U42-001
Total nitrogen (N) :	6 %
Of which organic :	5.5 %
Phosphorus :	3%
Potassium :	6%

-1-3- Hedging products

- EURO-MAT "BFM-EC" fibrillar anti-erosion matrix or equivalent
A EURO-MAT fibrillar membrane is a fibrous complex applied by
3 - CCTP HM "BFM-EC

hydromulching, composed of fibrous materials stabilised with binders and colloids.

The inputs used in the complex are of French origin and UAB certified: Usable in Organic Agriculture in accordance with regulations (EC) no. 834/2007 and 889/2008. These characteristics will be specified on the description or technical data sheet.

Composition:

Raw material	Recycled cellulose / Pinus	
Fibre length	2 to 6 mm	
% Cellulose	26 %	
% Wood fibre	65 %	
% Guar binder additive	9 %	
% Water retention capacity / dry weight (ASTM D7322)		1300 %
% Moisture	(+/- 2 % variation)	8 %

1-1-4 Water in the hydraulic mixture

The water used to make up the hydraulic mixture must have chemical characteristics compatible with the germinative activity of the seeds and the emergence of the seedlings.

The Company is responsible for obtaining the necessary authorisations to pump water. Before the start of the worksite, the Company must provide the project owner, without the latter being held liable, with proof of the pumping authorisations obtained from the competent authorities.

1-2 Hydromulching: Description of implementation

1-2-1 - Dosages per hectare HYDROMULCHING

The application is made in two applications with a "reinforcement" 6 to 12 months after the initial HYDROMULCHING.

	First pass	Second pass
Euro-seeding mixture ref (Kg/ha)	250	-
VEGE-MAX growth activator (L/ha)	50	50
VERT-EXPERT "NATURE" organo-mineral fertiliser (kg/ha)	600	800
EURO-MAT BFM EC erosion control matrix (Bt/ha)	240	

1-2-2 Receipt of supplies

In order to facilitate control of supplies, they must be delivered in a single consignment.

1-2-3 Quantity survey of works to be seeded

The surface area of the sites to be grassed will be agreed before the work begins so that supplies can be delivered all at once.

1-2-4 Guarantee

The guarantee covers the following points:

- Density & uniformity: 1 month after the first germinations, as long as the conditions have been favourable, a seedling count will be carried out - The expected result must be at least 40 u / dm² - The areas counted will be used as a standard to assess uniformity - Any patch or area that has not come through properly (excluding mineral areas or areas > 40%) will be repeated - A patch is considered to be a patch where the density of seedlings is less than 20 u / dm².
- Stability: No gullies will be tolerated - These gullies will have to be reseeded.
- Quality of the plant cover: At the end of one growing season after sowing and fertilisation, the plant cover must show no signs of deficiency or disease that would endanger the survival of the established grass layer. If this is the case, fertilisation or treatment must be carried out as soon as possible, after approval by the project manager.