

PRATI ARMATI®

DESERTS

HURRICANES



**PRATI
ARMATI®**

a natural technology
fighting erosion and desertification

GULF of MEXICO

**STOP erosion
despite HURRICANES**



PRATI ARMATI®

GULF of MEXICO

STOP erosion despite HURRICANES

- The largest polyethylene plant of Central America, an investment of more than 5 billion USD.
- We show the results on slopes where the installed PRATI ARMATI® green mantle is fully operating and protects the surfaces from erosion caused by heavy rain and hurricanes.
- The following pictures show the involved areas before and after treatment and the full success of PRATI ARMATI® technology, in sharp contrast with the traditional techniques failure.



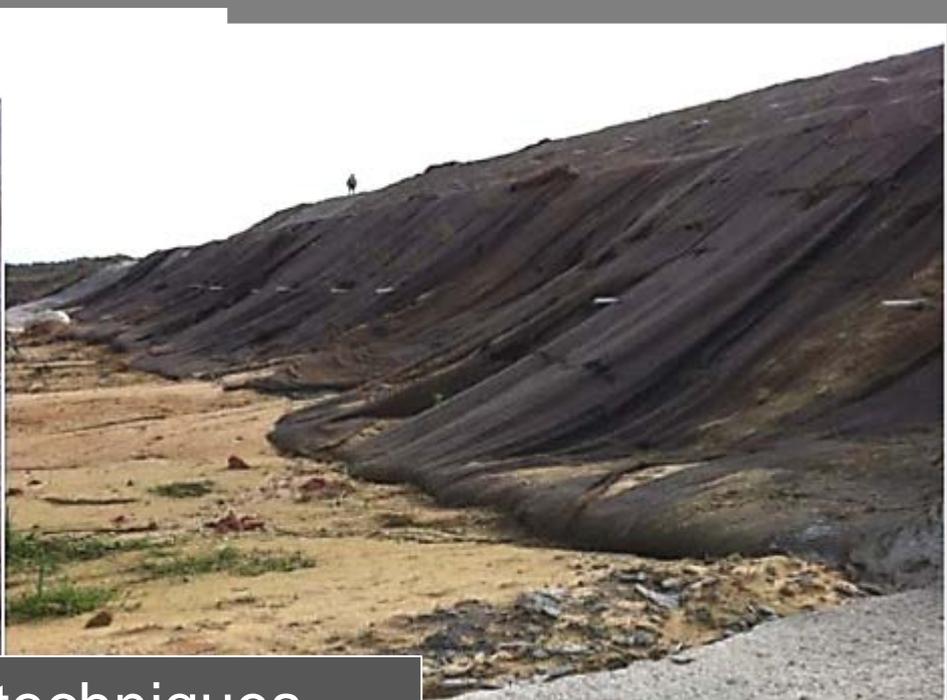
traditional techniques
after HURRICANES





traditional techniques
after HURRICANES





traditional techniques
after HURRICANES





**PRATI ARMATI®
after HURRICANES**



**PRATI
ARMATI®**

a natural technology
fighting erosion and desertification

**PRATI ARMATI®
after HURRICANES**



**PRATI
ARMATI®**

structural technology
fighting erosion and desertification

**PRATI ARMATI®
after HURRICANES**



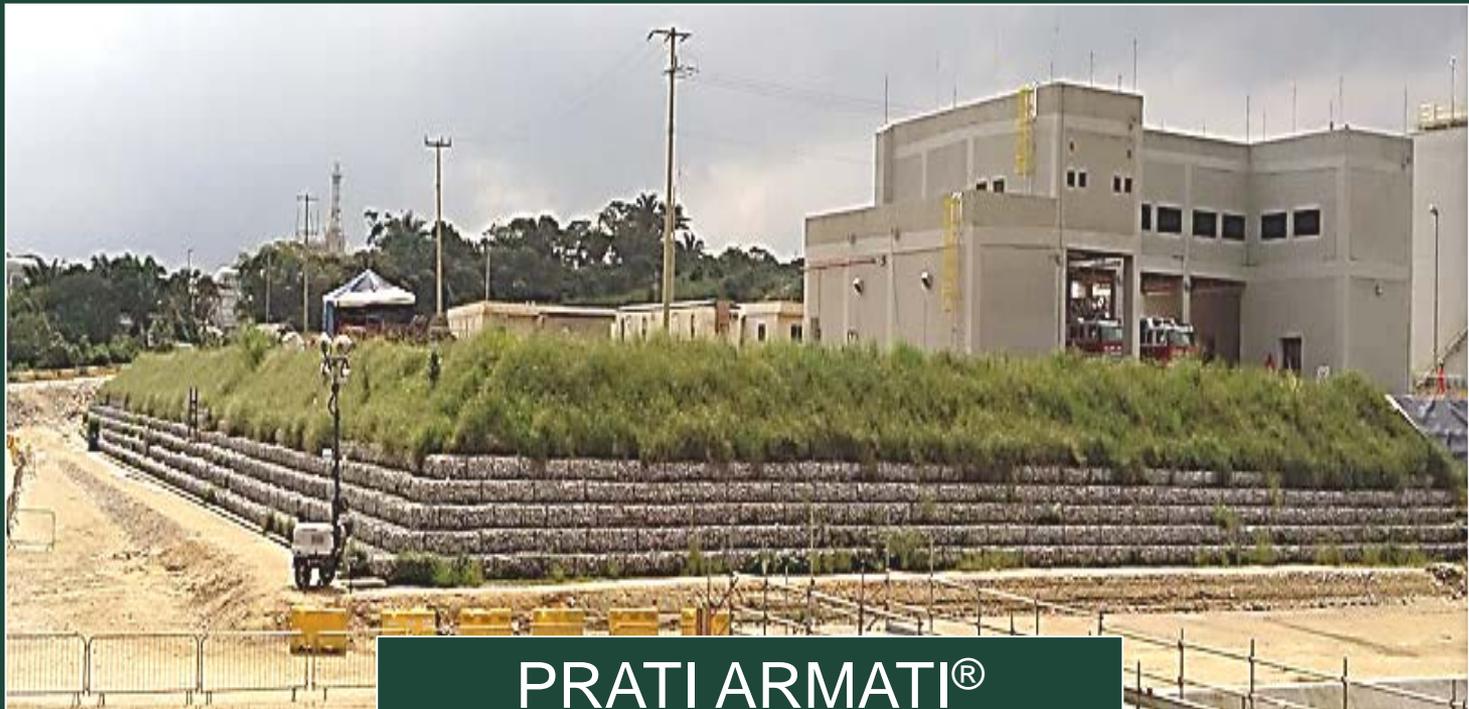


PRATI ARMATI®
after HURRICANES

**PRATI ARMATI®
after HURRICANES**



24.11.2014



**PRATI ARMATI®
after HURRICANES**





PRATI ARMATI®

a natural technology
fighting erosion and desertification

**PRATI
ARMATI®**

a natural technology
fighting erosion and desertification

AFRICA

**PRATI ARMATI® Technology
for any lithotype and climate**

ALGERIA - Sub Saharian Zone



PRATI ARMATI®

Intervention to block erosion and favor re-naturalization on slopes of the new railway lines in Sub-Saharan areas of Algeria

Soil erosion processes may severely damage infrastructures and environment.

Water erosion can fill the canals and ditches, undermine the feet of reinforced concrete works, cause silting of rivers and reservoirs.

The wind erosion causes the detachment and transport at distance of dust, sometimes contaminated.

Among the techniques that have proven particularly effective in contrasting these phenomena, perennial herbaceous plants with deep rooting represent an optimal solution both for technical and environmental aspects and because they require low energy consumption for installation and are maintenance-free.

The positive effects of the vegetation cover had so far focused on the root contribution to enhancing the shear strength of the land and therefore the slope stability factor.

The arboreal and shrubby plants are actually slow growing and have no influence, especially in the early years, in isolating or mitigating erosion damage. Properly selected herbaceous plants, fast and deep rooting, may instead germinate, quickly take root, grow and survive in soils with phytotoxic and climatic conditions unthinkable for conventional vegetation.

They also allow to reduce the infiltration of water in case of heavy rainfall and to remove through evapo-transpiration significant amount of water, thereby contributing to the prevention of deep instability phenomena.



PRATI ARMATI®

a natural technology
fighting erosion and desertification



2 years later
blooming season



PRATI ARMATI®

a natural technology
fighting erosion and desertification



2 years later
blooming season

PRATI ARMATI®

a natural technology
fighting erosion and desertification



06.05.2017 11:59
3 years later



PRATI ARMATI®

a natural technology
fighting erosion and desertification

2 years later
blooming season

PRATI ARMATI®

a natural technology
fighting erosion and desertification

06 05 2017 3 years later

PRATI ARMATI®

Is an anti-erosion technology that can block erosion on any lithotype and climate conditions, using only seeds **of perennial deep rooting herbaceous plants** PRATI ARMATI®, natural-autochthonous-non GMO, capable to capture from the atmosphere 400% more CO₂ compared to traditional grassing systems.

Studies, theses, research and experiments performed at major Italian Universities and hundreds of installations both in Italy and abroad, demonstrated that thanks to PRATI ARMATI® it is possible to:

1. **increase the shear strength** of the surface layers of soils by injecting an additional cohesion benefit of 5-15 kPa thanks to the radical apparatus
2. **block erosion in any climate and soil conditions**, even on polluted and sterile lithotypes: for example on tunnel muck, without using topsoil or other products and materials
3. **decrease water infiltration and increase transpiration** thus contributing to improve, also in depth, the key geomechanical parameters of the soil, such as saturation, cohesion, etc. hence mitigating even the risk of landslides at average depth
4. **eliminate the topsoil that erodes and slips downstream, and any other products and plastic materials**, such as geocells, geomats, geonets, biomats, mulch, bonded wood fiber matrices, liquid jute, reinforced hydroseedings, etc., moreover avoiding irrigation systems or rescue irrigations
5. **eliminate traditional civil works for capture and surface regimentation of rainwater** (gutters, Finsider pipes, concrete tiles, ditches etc.) by working directly on the ground as is, with strong technical advantages, cost and time savings, reduction of permanence and site risks, zeroing maintenance and assuring durability with time

5 GEOTECHNICAL PROBLEMS: *a single solution...*

... natural, autochthonous, perennial, cheap, quick installing, low energy-intensive, maintenance-free