

A NATURAL TECHNOLOGY TO CONTRAST EROSION AND DESERTIFICATION

Prati Armati srl is a Company that developed an innovative green technology called **PRATI ARMATI®** used to contrast erosion on slopes, embankments of roads, highways and railways, banks of rivers and water ways, and for recovery and re-naturalization of degraded areas such as quarries, mines and landfills. The Company co-operates for many years with research Organizations in geotechnical, geological, botanical and agronomic fields.

PRATI ARMATI® is a natural technology that:

- 1. uses seeds of herbaceous perennial deep rooting plants, mostly autochthonous, capable to grow on practically any lithotype and climate
- **2.** contrasts EROSION even on most barren ground types, such as:
 - · SOILS (clay, silt, sand, gravel and mixtures thereof)
 - ROCKS (as long as they are altered or broken) such as weakly cemented conglomerates, marls, calcarenites, flysch, pyroclastics, shales, acid or basic rocks
 - · soil with added lime up to 5% by weight
 - soil contaminated by hydrocarbons and heavy metals in concentrations up to 10 times higher than the limits admitted by law
- 3. reduces water infiltration into the ground thanks to the thick leaves blanket and favours water removal from upper soil layers thanks to evapotranspiration, with positive effects on some geomechanical parameters of soil: saturation, pore pressure, cohesion, shear strength, etc
- **4.** fully replaces a whole package of works-artifacts-materials used in traditional interventions to contrast erosion: geocells, geonets, biomats, mulch, wood fiber bound matrix, plastic materials, topsoil etc, resulting in important technical, economic and environmental advantages
- 5. re-naturalizes slopes, favouring biodiversity and accelerating ecological succession
- 6. subtracts up to 400% more CO₂ than traditional plants
- 7. requires no maintenance (mowing, watering, fertilizing, etc).





Italy, Motorway A3 Salerno-Reggio Calabria: sandy clay soil



A NATURAL TECHNOLOGY TO CONTRAST EROSION AND DESERTIFICATION





Italy, Spoleto (PG): limestone quarry

PRATI ARMATI®

A NATURAL TECHNOLOGY TO CONTRAST EROSION AND DESERTIFICATION





Italy, Orvieto (TR): pyroclastic deposits and basaltic outcrops

PRATI ARMATI®

A NATURAL TECHNOLOGY TO CONTRAST EROSION AND DESERTIFICATION





Italy, Motorway Catania-Siracusa: conglomerates, siltstones, sandy limestones