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The modern technological platform awkwardly imitates the Nature. Teaching the Geosciences, development of technology, overcoming the problem of uncertainty of geospheres is impossible on the base of outdated knowledge. An emphasis is to be done not on the natural analogues, but on our new technologies – Biogeosystem Technique (BGT*). BGT* is a transcendental (not imitating the natural processes) approach to soil processing, regulation of fluxes of energy, gas, water, matter and biological productivity of biosphere:

Intrasoil milling processing in 20-50 cm soil layer provides new soil disperse system, best conditions for stable evolution of techno-soil and plant growth in period up to 40 years after the single processing.
Pulse intrasoil discrete irrigation provides an injection of small discrete dose of water which distributes in vertical soil cylinder. Lateral distance between successive injections is 10-15 cm. The water within 5-10 min after injection spreads in cylinder of diameter 2-4 cm at depth from 5 to 50 cm. The soil carcass around the cylinder is dry and mechanically stable. Mean thermodynamic soil water potential after watering is of -0.2 MPa. Stomatal apparatus is in a regulation mode, transpiration rate is reduced, soil solution concentration increased, plant nutrition rate and biological productivity are high. No excessive plant transpiration, evaporation and seepage of water from soil.
Intrasoil environmentally safe waste return during intrasoil milling processing and (or) intrasoil pulse discrete plants watering with nutrition. Is provided the medically, veterinary and environmentally safe recycle of municipal, industrial, biological and agricultural wastes into the soil continuum. All applied substances transform to plant nutrients, not degrade to the greenhouse gas, or become the deposit of waste.

Capabilities of intrasoil technologies of BGT* to correct and sustain the Nature: Correct soil evolution, long-term biological productivity of intrasoil processed soil of 150% higher compared to initial. Save of fresh water by intrasoil irrigation up to 20 times. Biological return of matter and high biological productivity of soil by environmentally safe intrasoil waste recycling.

On the base of BGT* are opened the opportunities for: controlled, stable, safe, biologically effective soil, environment and landscape; improved equilibriums in soil, environment and landscape; reduced water consumption; improved waste management; reduced flux of nutrients to water systems; carbon transformation into the soil to the state of elements of plant nutrition; reducing degradation of biological matter to the state of greenhouse gases; increasing biological consumption of carbon dioxide by photosynthesis in terrestrial system; prolongation of the phase of carbon in terrestrial biological system for greenhouse gases sequestration; extension of the active area of biosphere on terrestrial part of the Earth; high rate oxidation of methane and hydrogen sulfide by oxygen, which is ionized in photosynthesis, and thus is biologically active; high biological product output of biosphere.
The higher biomass on the Earth, the more ecologically safe food, raw material and biofuel can be produced, better conditions for technologies of Noosphere. Uncertainty of soil, hydrosphere, environment and climate will be reduced by the BGT* methods. Are available BGT* robotic systems of low cost and minimal consumption of energy and material.

Key words: Biogeosystem Technique, intrasoil milling processing, pulse intrasoil discrete irrigation, safe waste return.

HS7.5; NH1.21 Hydroclimatic extremes under change: Advancing the science and implementation in hazard prevention and control

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