

## REPORT OF ROUND TABLE SESSION 4

## ORGANIC WASTE TREATMENT: SAFETY IMPLICATIONS

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The number of contributions has been 44 (oral and poster presentations), distributed as indicated in the following Table. Chairman has proposed some questions (see next Table) to open discussion.

Subject and topics	Questions for discussion
<u>Composting (17)</u> : Study of the process (microbiology; biochemistry; nitrogen dynamics; optimal conditions; effect of aeration, of raw material, of inoculum; evolution of some parameters); Co-composting; Isolation of microorganisms; Phytotoxicity of end products; Studies on specific substrates (olive oil mill waste; pig manure,...)	Is overcome the old discussion about which of these treatment is the best?
<u>Anaerobic digestion (10)</u> : Pre-treatments; Thermophilic processes; Co-digestion; - Industrial scale facilities; Agricultural use of digested products	
<u>Additives (5)</u> : Zeolites; Chemical additives to composting; Effect of different <u>black box</u> additives ("magic powders") to composting	Many commercial products in the market. What to do?
<u>Pathogens reduction (3)</u> : Composting versus chemical processes; Physical processes; Thermal processes	Standardization of methods? Or standardization of requirements?
<u>Modeling (3)</u> : Nitrification-denitrification system (NDN); Composting systems	Is more work needed? Are these developments useful?
<u>Combined systems (2)</u> : Solid/liquid phase separation (S/L) + NDN + Phosphorous precipitation; Anaerobic digestion + S/L + pH control + concentration by evaporation/condensation	These complex facilities are producing new products, substrates and services. Is a new view necessary?
<u>Bioremediation (2)</u> : Phytotoxicity removal	What about xenobiotic compounds? Is a more intensive work required?
<u>Mixtures of organic wastes for soil application (2)</u>	Is the organic waste application to soil a treatment or an end use? Studies about soils as a biochemical reactor are required