



RECOMMENDATIONS of the 4th Mediterranean Meetings on No Tillage

Sétif (Algeria), 3-5 May 2010)

The participants to the 4th Mediterranean Meetings on No Tillage (4th MMNT) expressed the conviction that the future of sustainable agriculture for the Mediterranean countries is through the conservation agriculture (CA) route involving minimum soil disturbance (i.e., no tillage and direct seeding), soil organic cover from residues and cover crops, and crop diversification. This conviction evolved through presentations of concepts and field evidence of the performance of CA in several Mediterranean countries and elsewhere in other regions with similar environments that set the stage for discussions on the relevance of conservation agriculture to sustainable production intensification and management of ecosystem services. These presentations and the workshop discussions in the working groups and in the plenary clearly described the emergence of CA as an alternative practice to address the negative consequences of conventional tillage-based agriculture.

The following are the recommendations that emerged from the two-day meeting:

- ✓ The Mediterranean agriculture sector needs to be developed to become more competitive and productive, and to assure food security and environmental sustainability against the background of declining natural resources and climate change impact, and of increase food, energy and input prices.
- ✓ Here is a need for continuous sensitization of the scientific, extension and education community, policy makers, private and public sectors and farmers and their organizations to further guide, promote and continuously adapt the conservation agriculture implementation process in order to mainstream CA systems in the Mediterranean region as a whole.
- ✓ Widespread adoption of CA system must first benefit the farmers. The applicability, acceptability and adaptability of the CA practices and technologies should be the result of combined efforts between leading grass root farmers' organizations, development actors and scientists working together, in a participatory research and dissemination mode.
- ✓ As CA is based on minimum or no mechanical soil disturbance, development of soil organic cover through residue retention and growing cover crops in a diversified cropping system, there is a need to develop, standardize and adopt specific farm machinery that is able to seed and harvest under such management systems. There is also a need to develop and promote integrated approaches to controlling weeds, insects and diseases in CA systems in which plowing to reduce weed infestation is no longer used.

- ✓ As cereal crop production and sheep rearing represent the main farming system components, mainly in the southern and eastern Mediterranean countries, it is important to explore issues related to farmer's decision related to optimal retention of crop residues on the soil surface and its usage for livestock feed. There is a need to develop alternative solutions (e.g., stubble management, cover crops, rotations, varieties, livestock husbandry, species composition and grazing management...) to improve the *in situ* production of functional biomass within diversified cropping systems to solve the current constraints related to the use of most of the crop residues for livestock.
- ✓ To enhance discussion and exchange of information on CA equipment and machinery, crops varieties, cover crops, stubble and residue management, and on the promising CA-based management systems in the Mediterranean region, there is a need to establish a regional network of CA 'community of practice' involving all stakeholders. This regional network, for which the RCM (Mediterranean Large Scale Crops network) can be a starting point, should develop an internet communication forum as a link between members, and for organizing knowledge on priority topics such as CA with tree crops and shrubs, weed management, irrigated CA systems, fallow and grazing management, economics of CA, environmental services, dissemination and scaling support mechanisms.
- ✓ The extension of the RCM network to associations of farmers from eastern Mediterranean Sea (Syria and Lebanon) offers this movement a larger geographical dimension, suggesting the possibility of developing RCM into a more formal network, and sharing more responsibilities across members in different countries.
- ✓ As far as the 5th MMNT is concerned, Portugal and Syria volunteered to host the meeting. A working session will be held in the near future, during the course of the 2010, between the groups of farmers, member of the RCM, and the new partners, to discuss the organization of future meetings and the networking mechanism and tasks.

The Technical and Scientific Committee of the 4th MMNT
ATU-PAM, Sétif, 10/07/2010