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Improvement in the management of no-till in the central-southern-Brazil

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Introduction The soil performs important functions for the maintenance of life. The management practices based on the conservation of soil and water in no till system may improve environmental sustainability.

Material and Methods

The research project of Embrapa Soils called "SoloVivo" (*SoilAlive)* it comes case studies involving no-till cropping in twelve watersheds of six regions of central-southern Brazil, beginning in 2014. The project aims at improving the soil management at areas with no-till by developing indicators to assess soil and water management practices and its environmental effects, at both property's and watershed's scales. Its strategy includes: (i) participatory processes of self-evaluation, adjustment and certification by farmers; (ii) monitoring of farming systems and small watersheds parameters in 12 locations; (iii) long term experiments (around 15 years) in six locations; and (iv) technology transfer through distance education and reference areas for training in no-till systems. "Solo Vivo" should promote interaction among farmers, technicians and researchers in order to assess land management practices, in a participatory approach; and help to achieve the acknowledgement of farmers who manage soil and water considering the soil multifunctionality, in addition to help to preserve the ecosystem services to society.

Results and Conclusions

Between the preliminary results are selection of watersheds and the articulation to effective participation of farmers in the regions of Paranapanema-SP, Londrina-PR, Toledo-PR, Maracaju-MS, Rio Verde-GO and Passo Fundo-RS (Fig 1), as well as the establishment of a network of local and international institutions, which they started up the discussion to improve soil management in watersheds with no-tillage. Between the methods adopted there is the IQP (Participatory Quality Index), that involves several management indicators, and that it was applied in two study sites in 2014: Maracaju-MS and Paranapanema-SP.

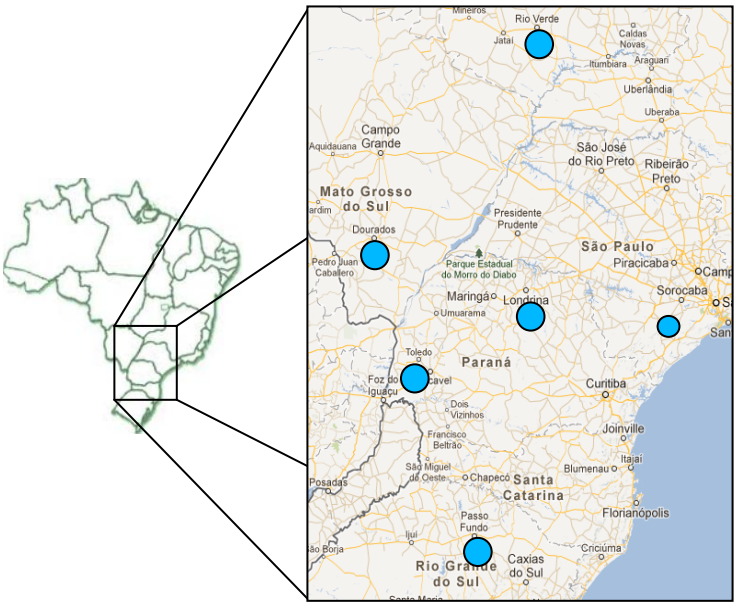

Figure 1. Twelve watersheds with no-till system of central-southern Brazil.

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Embrapa and Itaipu Binacional

References cited

D'AGOSTINI, L.R. (1999) Florianópolis: EDUFSC.