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Evaluation of the Construction of Terraces on a Family Farm in the Municipality of Jaboticabal (SP), Brazil

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Abstract : Soil and water conservation can be conceptualized as a combination of management and use methods, which have the function of protecting them against deterioration induced by anthropogenic or natural factors. Thus, the objective of this research was to evaluate the rural extension work in soil conservation carried out at Sítio do Alto in Jaboticabal-SP, through the analysis of planimetric data (latitude and longitude coordinates) and altimetric differences of the empirically constructed terraces by the rural producer and with technical guidance from CATI (Coordination of Integral Technical Assistance). A data collection procedure was carried out in the field, with GPS L1/L2, before the construction of five (5) terraces technically level and after their construction. The results showed that the greatest differences were found on terrace one (1), with a maximum latitude difference of 57 meters, the longitude of 23 m, and altitude of 2 m. These results corroborate the observations in the field, in which the presence of a great erosion caused by the incorrect construction of terrace 1 was verified rainwater to the side of the rural property, where the largest erosion furrows with the beginning of gully formation were found.

Keywords : GPS, mechanical pratice, surface runoff, erosion
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