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Quality assessment of *Eucalyptus* manual planting in the district of José Félix López, Concepción, Paraguay

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The operational effectiveness of manual planting of *Eucalyptus* sp. directly affects the survival of individuals, and therefore, the success of the project. The objective of the present study was to evaluate and compare the operational quality of manual planting in the district of José Félix López, Concepción, Paraguay. The work was carried out by 20 workers distributed in two teams of 10, belonging to the same company but coming from two different sites, under equivalent work and income conditions, with a minimum daily wage of US\$14.15 each worker. A total of 2,820 seedlings of Eucalyptus spp. were evaluated. Five sampling units were randomly distributed for each of the six evaluated stands; 100 seedlings were studied for each sampling unit, taking into account the irrigating pit, stem direction, foliar health, exposed substrate, sunken stem, fallen stem, dead apical bud and the number of correctly planted individuals. The data collected were subjected to descriptive statistics and the number of errors found in the field and the percentage they represent individually for each case. Of the 2,820 seedling units, 1,658 were planted by team 1, 895 by team 2, and the remaining 267 by both teams together. Team 1 managed to correctly plant 32.4% of the established amount; team 2 30.5%, and together they planted only 60 of the remaining 276, thus decreasing to 22.5% when working together. In general, only 30.9% of the total was planted correctly, and 69.1% presented errors. The variables with the highest counts were "sunken stem" and "irrigating pit" with a value of 827 and 731 units out of 2,820 individuals studied, representing 29.3% and 25.9% of the total number of plants; the remaining errors did not exceed 5%. These results showed that the number of correctly planted seedlings decreased when the work was carried out as a whole. Although the operators receive the same daily wage, the possibility that different incomes among workers is an element that influences their effectiveness is disregarded; therefore, we say that the dissimilarity in quality may be due to different strategies applied during the operation.



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