Abstract:

Field trials carried out in Portugal showed the penalty to be paid, both in terms of work rate and costs, whenever, due to tree geometry and size, trees had to be bough shaked rather than the normal trunk shaking. If an olive orchard with trees requiring two bough shakings could be adapted to an entirely trunk shaking orchard, simulation shows an increment between 9% and 33% in the work rate at harvesting and a reduction between 4% and 22% in harvesting cost per kilogram of olive, assuming a 4000 trees size orchard. The data collected is regarded to be very useful for decision support, particularly for those farmers owning less adapted olive orchards, aiming to adopt mechanized harvesting.