



### Physic nut yield in different spacing planting and intercropping models

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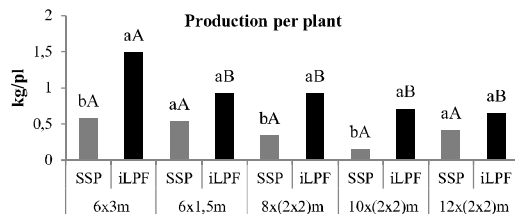
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**Introduction** Physic nut is being considered as a potential alternative for biofuel feedstock production due to its high oil content, high yield potential and environmental adaptation. It is also an alternative for agroforestry systems as it can be intercropped with other activities. Then, the objective of this research was to evaluate the effect of different spacing plantings and intercropping models on physic nut trees yield in two harvest seasons.

**Material and Methods** The experiment was set up in 2009, in Coronel Pacheco-MG. The yield of physic nut trees established in two types of integrated systems (crop-livestock-forestry – iLPF, and livestock-forestry - SSP) and different spacing planting (6x3m; 12x(2x2)m; 10x(2x2)m; 8x(2x2)m; 6x1,5m), was evaluated. For this evaluation was accounted the number of branches with fruit, the number of curls in each branch, number of fruits per curls and number of seeds per fruit of a sample of 10 trees.

#### Results and Conclusions

Fig. 1. Scrolling effect of consortium type within each spacing yield (kg plant<sup>-1</sup>) of physic nut located in different spacing and types of systems. Lowercase letters: differences between spacings. Uppercase letters: differences between systems



Plants established in iLPF system showed significantly higher production values compared to those established in SSP system, which can be attributed to use of residual fertilizer from maize crop by tree component. Plants established in greater spacing (6x3m and 6x1.5m) had higher yields which shows that the production per plant increases significantly with spacing between plants, compensating thus the lowest population density. Therefore, we conclude that physic nut production is higher in iLPF systems and systems with fewer trees per area compared to SSP systems and denser (Müller et al., 2015).

#### References cited

Müller et al. (2015). *Ciência Rural*, in press.




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