

# Weed seed bank on integrated crop-livestock system with eucalypts in subtropical Brazil

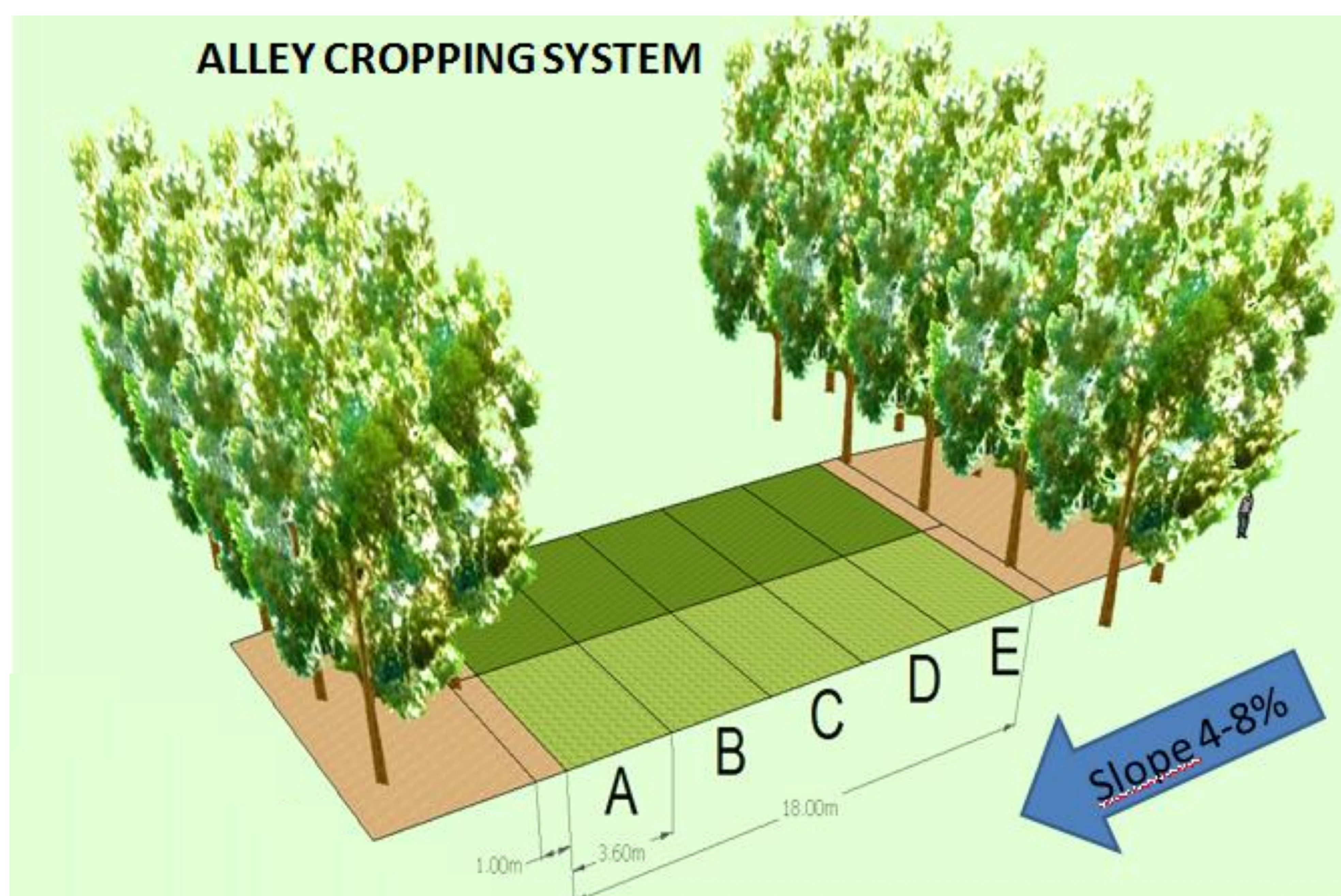
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## Objective

This study aimed to analyze more than four years effect of eucalyptus growth on the weed seed bank spatial distribution, functional traits abundance and botanic composition on integrated crop-livestock system in Subtropical Brazil.

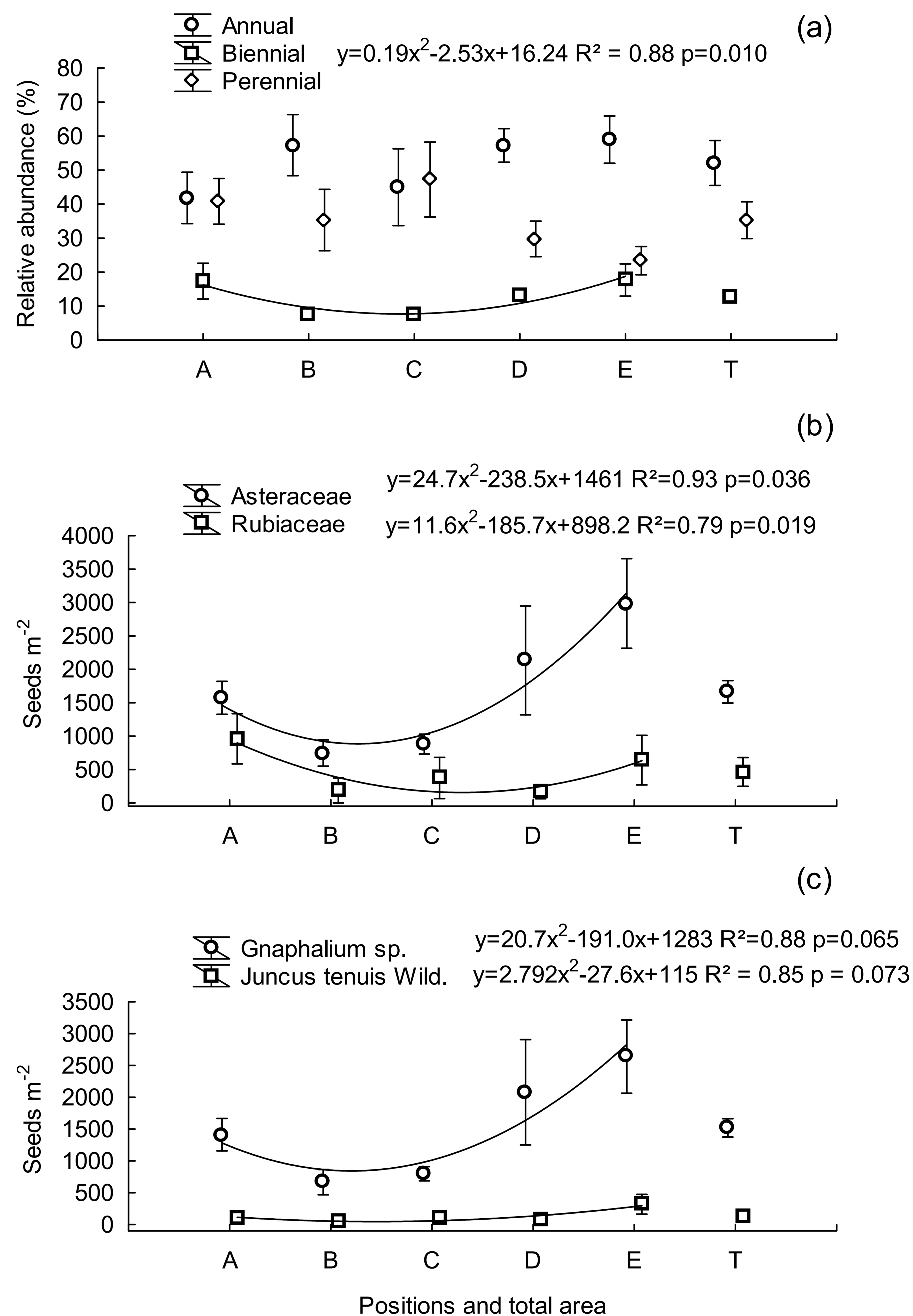
## Methods

Soil samplings (0-20cm) were done in five positions between *Eucalyptus dunnii* double rows [(4x3)x20m]. The experiment was a randomized block design with five replications and five distances between hedgerow trees. The method used for seeds quantification and identification in soil was the seedling emergence in trays inside the greenhouse. The weed life cycle abundance and seed densities (m<sup>-2</sup>) of monocots and dicots, families and species were evaluated.



**Figure 1.** Positions between adjacent hedgerows with double rows [20 m (4 m x 3 m)] of eucalypts (*Eucalyptus dunnii* Maiden) (A: 2.8 m, B: 6.4 m, C: 10.0 m, D: 13.6 m, and E: 17.2 m distant from tree hedgerows placed on slope's inferior position) in an integrated crop-livestock system, Ponta Grossa, PR, Brazil.

## Results



**Figure 2.** Life cycle type abundance (a), family seeds density (b) and of species (c) on weeds seed bank, on the first 20 cm of the soil profile, in positions between adjacent hedgerows with double rows [20 m (4 m x 3 m)] of eucalypts (*Eucalyptus dunnii* Maiden) (A: 2.8 m, B: 6.4 m, C: 10.0 m, D: 13.6 m, and E: 17.2 m distant from tree hedgerows placed on slope's inferior position), and in an integrated crop-livestock system (average of positions, T), Ponta Grossa, PR. The vertical bars indicate standard error.