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Microclimate of an intercropped system of *C. canephora* and *C. papaya*

S3-P-15

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Aiming

Assess the microclimate close to trees of conilon coffee (*Coffea canephora*) under full sun exposure and intercropped with papaya trees (*Carica papaya*).

Methods

The two *Coffea canephora* farming systems studied (Figure 1) were both from the same farm, located in northern Espírito Santo State, Brazil. Irradiance, temperature and relative humidity were assessed with external data loggers (HOBO U12, Onset HOBO Data Loggers).

Figure 1: Intercropped system of *C. canephora* and *C. papaya* (A) and monoculture system of *C. canephora* grown under full sun exposure (B).

Results: In relation to the conilon coffee grown under full sun exposure, the coffee plants under the intercropped system accounted for:

- **Lower irradiance** (up to 42%);
- **Lower temperature** (up to 8.3ºC);
- **Higher relative humidity**.

Conclusion/Perspectives: The intercropped management system provided better environmental conditions for the development of coffee trees, and it showed a potential to be used as a preferential farming system to mitigate climate change and global warming impacts.

Acknowledgements: