Crop cover selection to improve weed control in multi-species agrosystems in Reunion Island

Context:
- Cover crops are increasingly used for weed management in tropical regions as an alternative to herbicide.
- Selecting the most suitable species of cover crop to be associated with a main crop requires long-term trials.

Objectives: to assess the ability of various cover crops to limit weed growth in Reunion Island

Collection experiments: to assess the life cycle of cover crops
- 4 trials: 55 species and varieties
- 2 years: 2016, 2017
- 3 sites in Reunion Island: La Mare, Bassin Plat, Colimaçons

Pennisetum Glaucum (millet)
Cajanus Cajan (pigeon pea)

Large plot & association experiments: to limit weed growth
- 4 trials: 10 espèces or mixture
- 2 years: 2016, 2017
- 2 sites: La Mare & Bassin Plat
- Coverage after 60 days of growth

Guizotia abyssinica (oil crop)
Weeds

Conclusion & Discussion
- The more crop cover produce biomass, the more effective they are in controlling weeds:
- Different potentials among cover crops:

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