

Meliponiculture development in Brazil



Cristiano Menezes



Meliponini: 240 species in Brazil





Honey

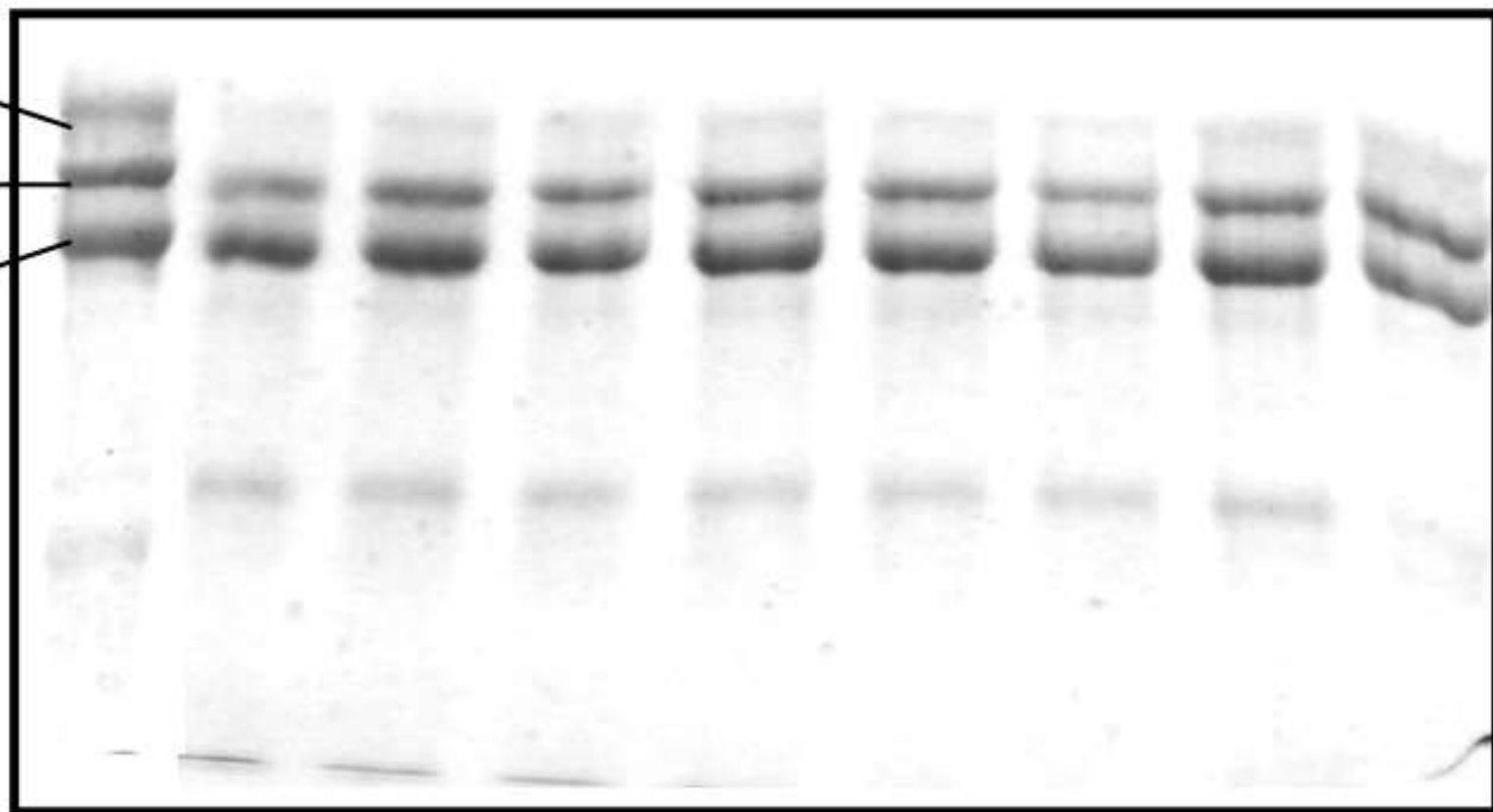


1 2 3 4 5 6 7 8 9

A α

B β

γ



Pollen



Propolis



Colonies



Hobby





Environmental education











Crop pollination

















Embrapa

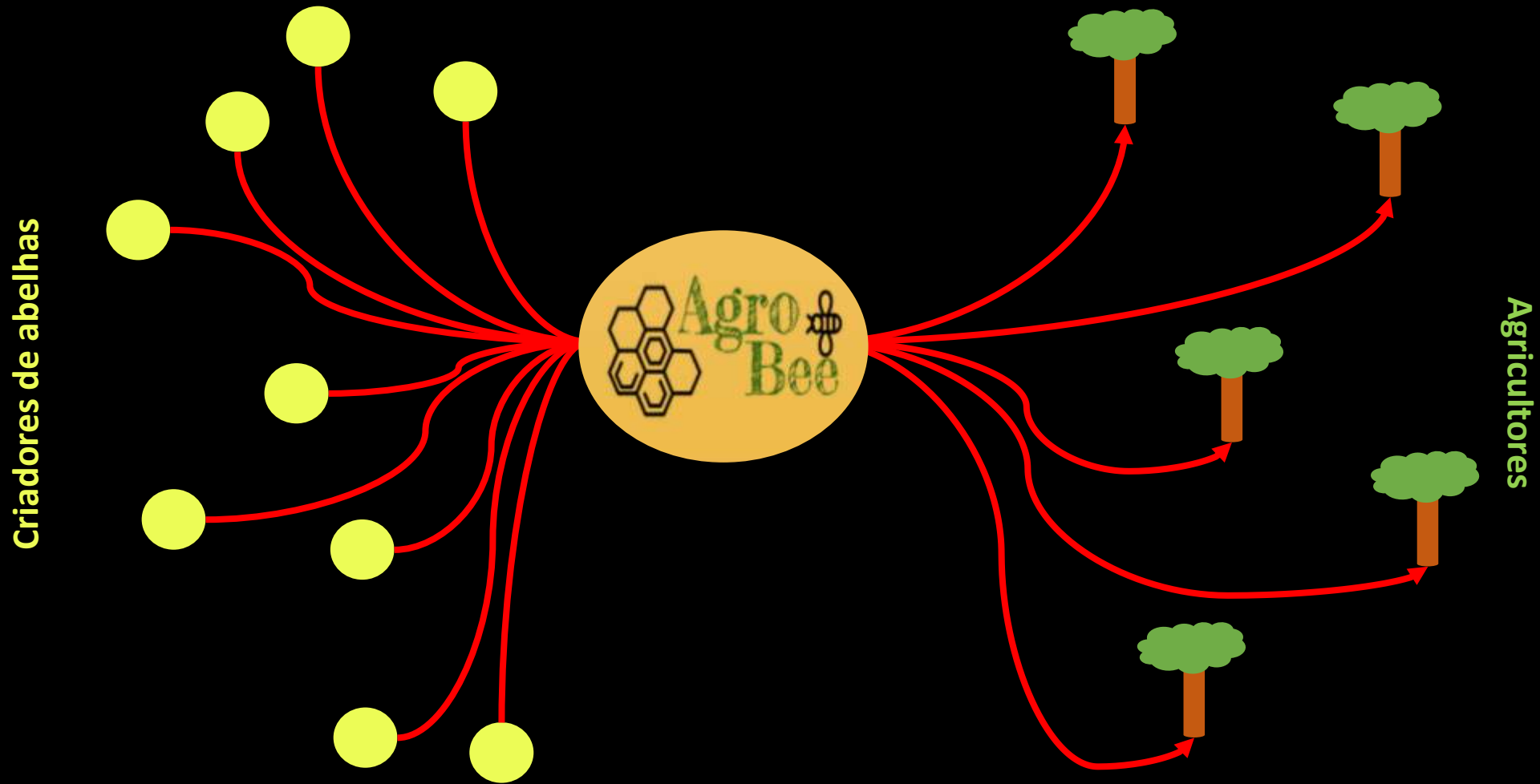


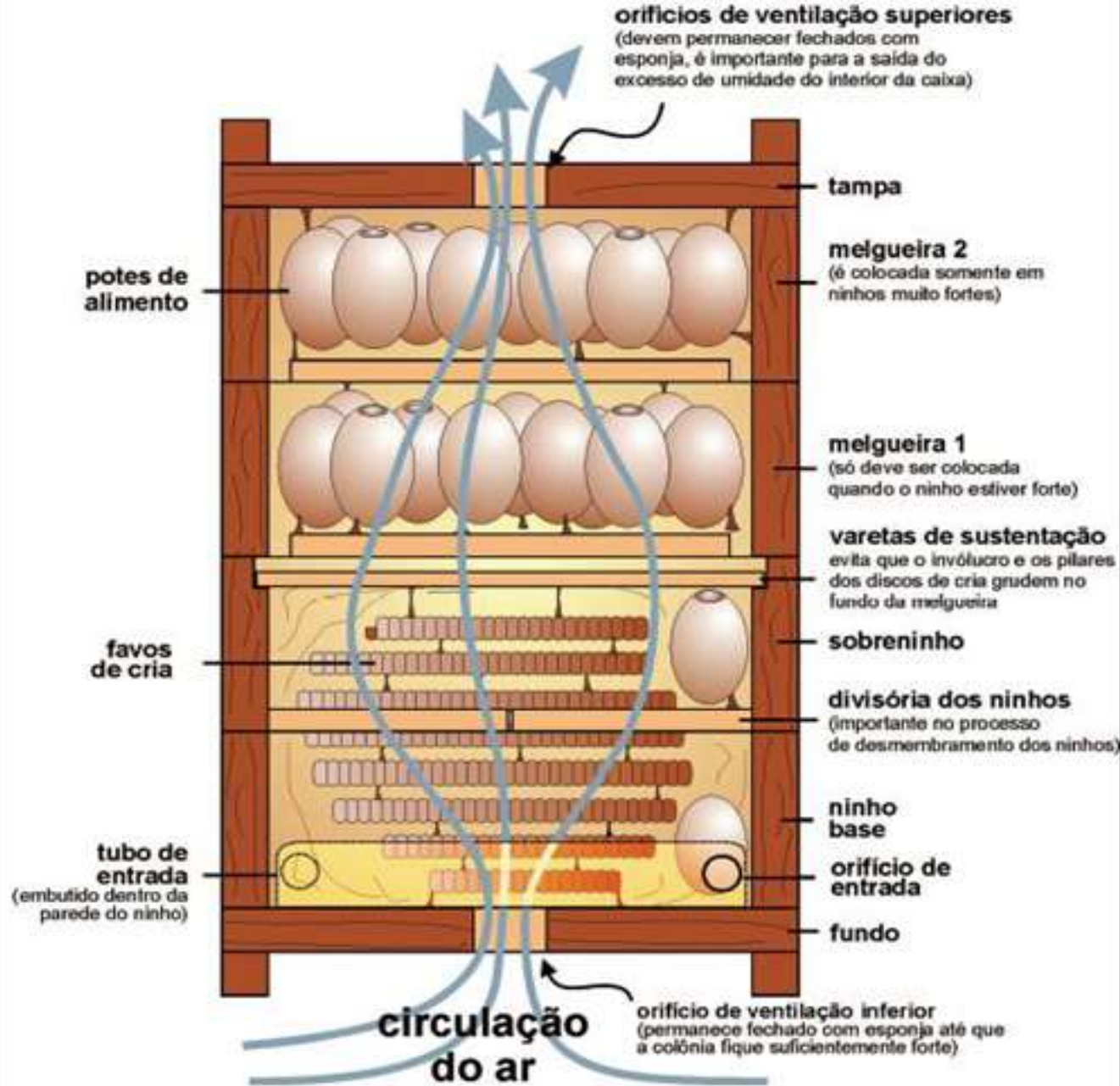
Embrapa



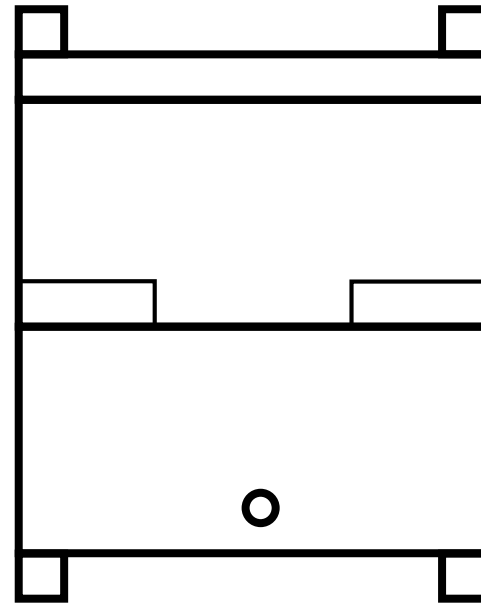
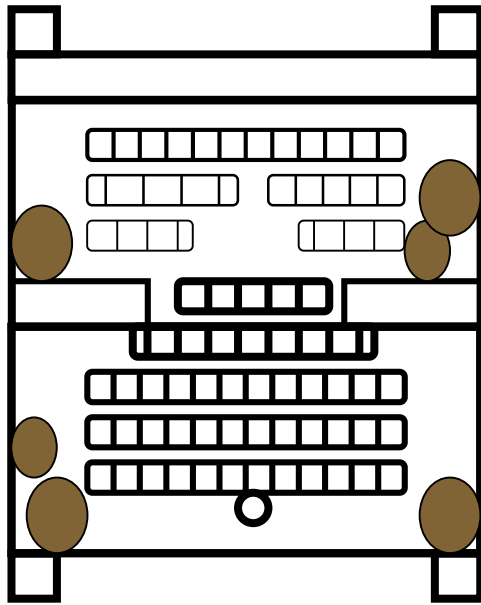


www.agrobee.net





Traditional methods of multiplication

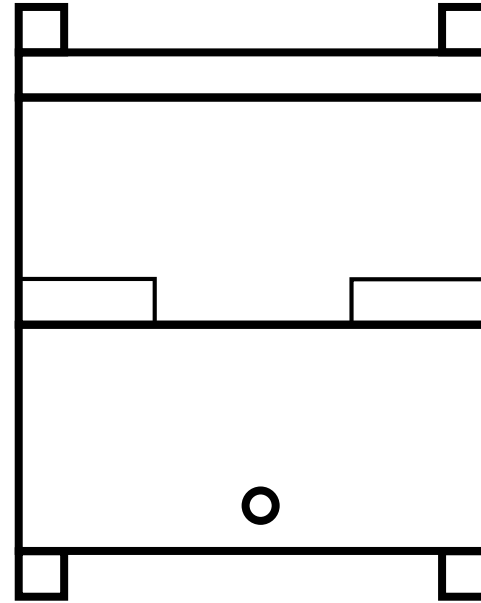
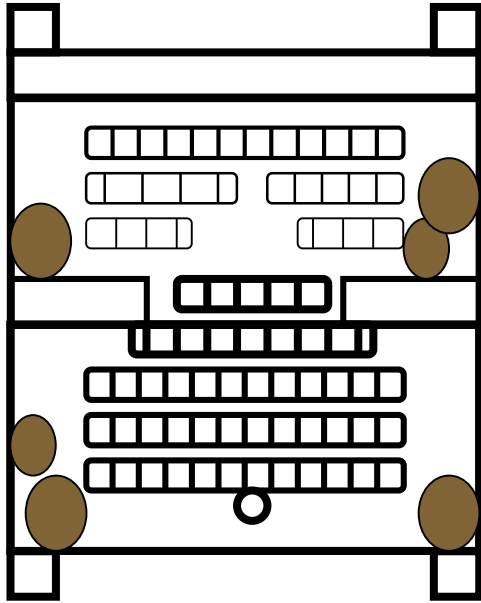


Use of 30 to 50% of biological material from a mother nest

Joãozinho meliponary (Belterra-PA-Brazil)



New technologies for colony multiplication



Use of 5 to 10% of biological material from a mother nest

Biofactories: large scale colony production



Biofactories: large scale colony production



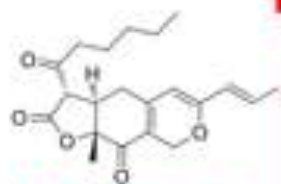


Monascus ruber





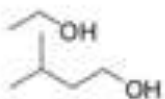
Fungo estimulatório
Candida sp.



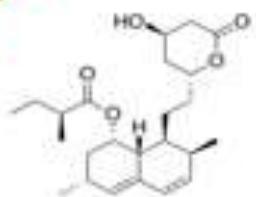
Monascina



Fungo inibitório
Monascus ruber



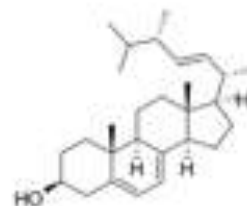
Voláteis



Lovastatina



Fungo-alimento
Zygosaccharomyces sp.



Esteróide



Pupa de
Scaptotrigona depilis





Embrapa



Thank you for your attention!



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