

Multiplication and management of stingless bees for crop pollination and honey production



Cristiano Menezes



Meliponini: 240 species in Brazil



Wide Distribution

Tropical and subtropical areas



Meliponini: 600 species in the world



Honey



Pollen



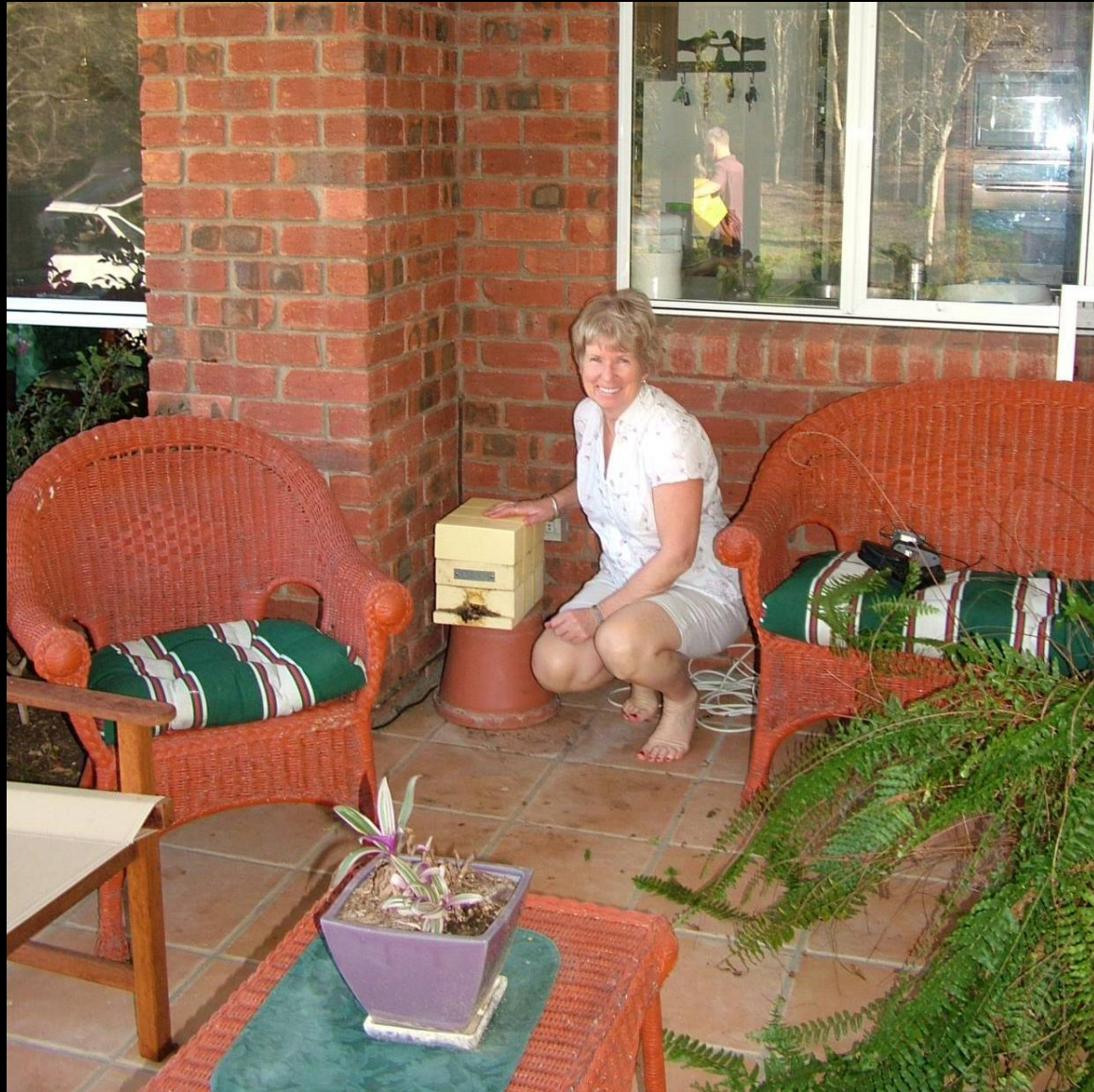
Propolis



Colonies



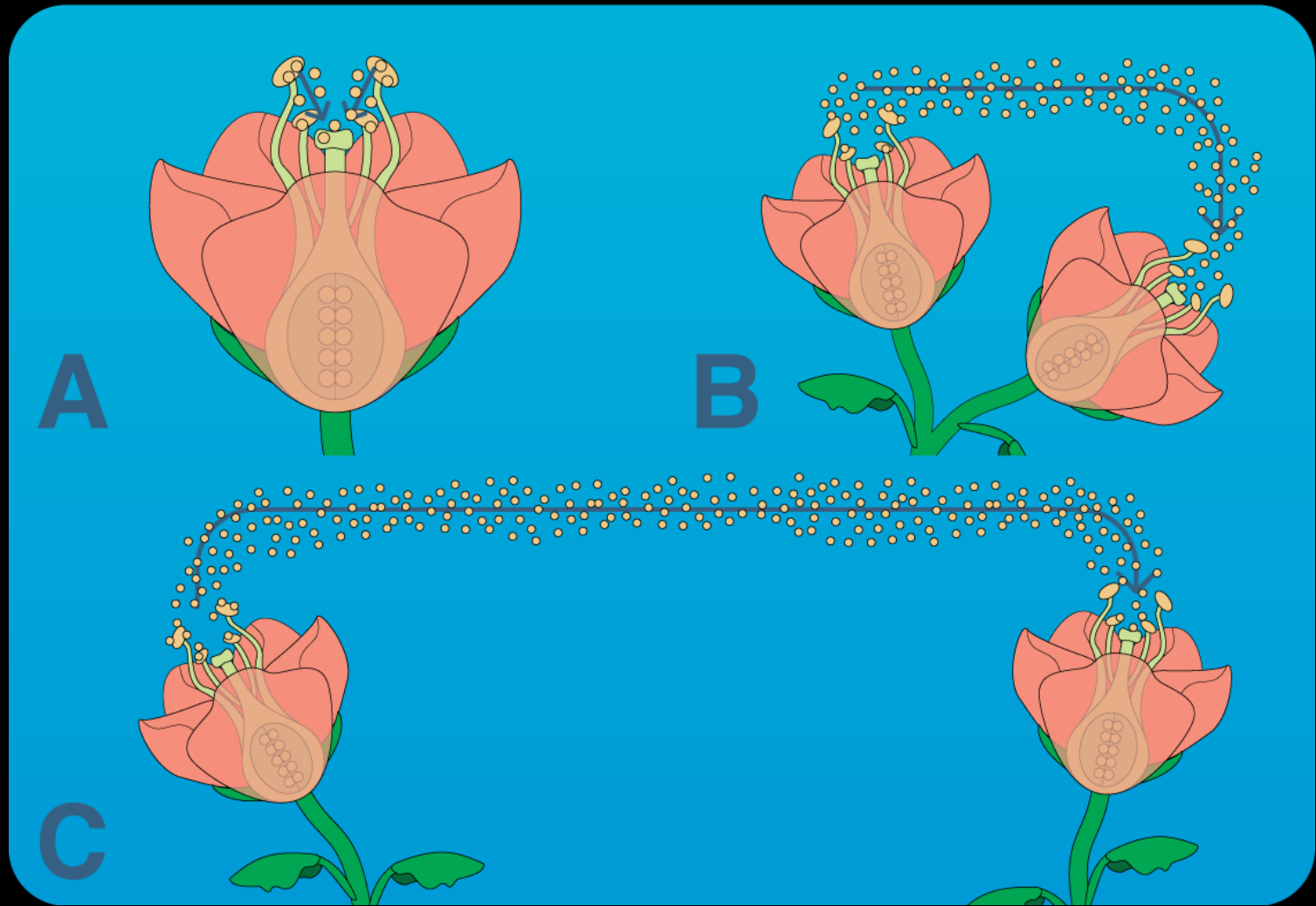
Hobby



Environmental education

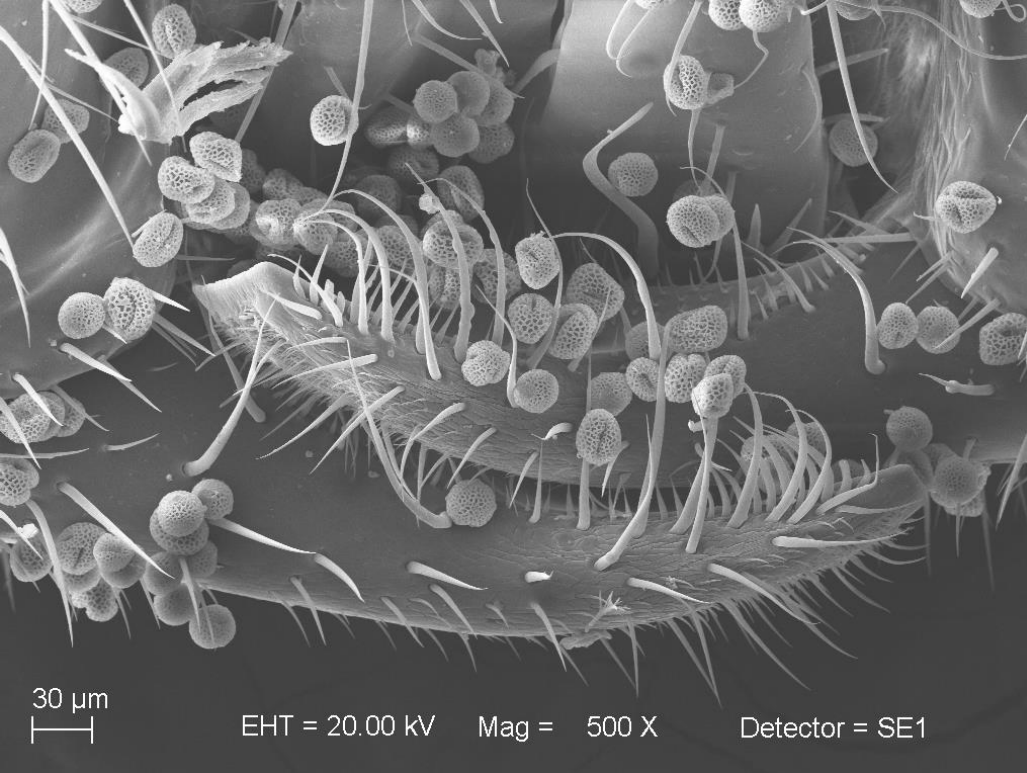


Pollination



Biotic Pollination











- Home
- Contact
- Honey & Care Products
- Package Bees
- Pollination Services
- Photo Gallery

Hansen Honey Farm Pollination Services

A great number of crops depend on insect pollination and honeybees are an excellent source of this pollination for large farms. Hansen Honey Farm honeybees currently pollinate apples, strawberries, and cranberries. Pricing to rent our hives is dependent on the crop. [Contact us](#) for more information about how to rent our pollinators.



www.google.com.br/imgres?imgurl=http://www.hansenhoneyfarm.com/images/pollination/pollination.jpg&imgrefurl=http://www.hansenhoneyfarm.com/pollination.html&usq=__11s72sr8AYXXLScaPHy7hIfFkts=&h=510&w=672&sz...



1.400.000 hives in USA

Bumblebee industry

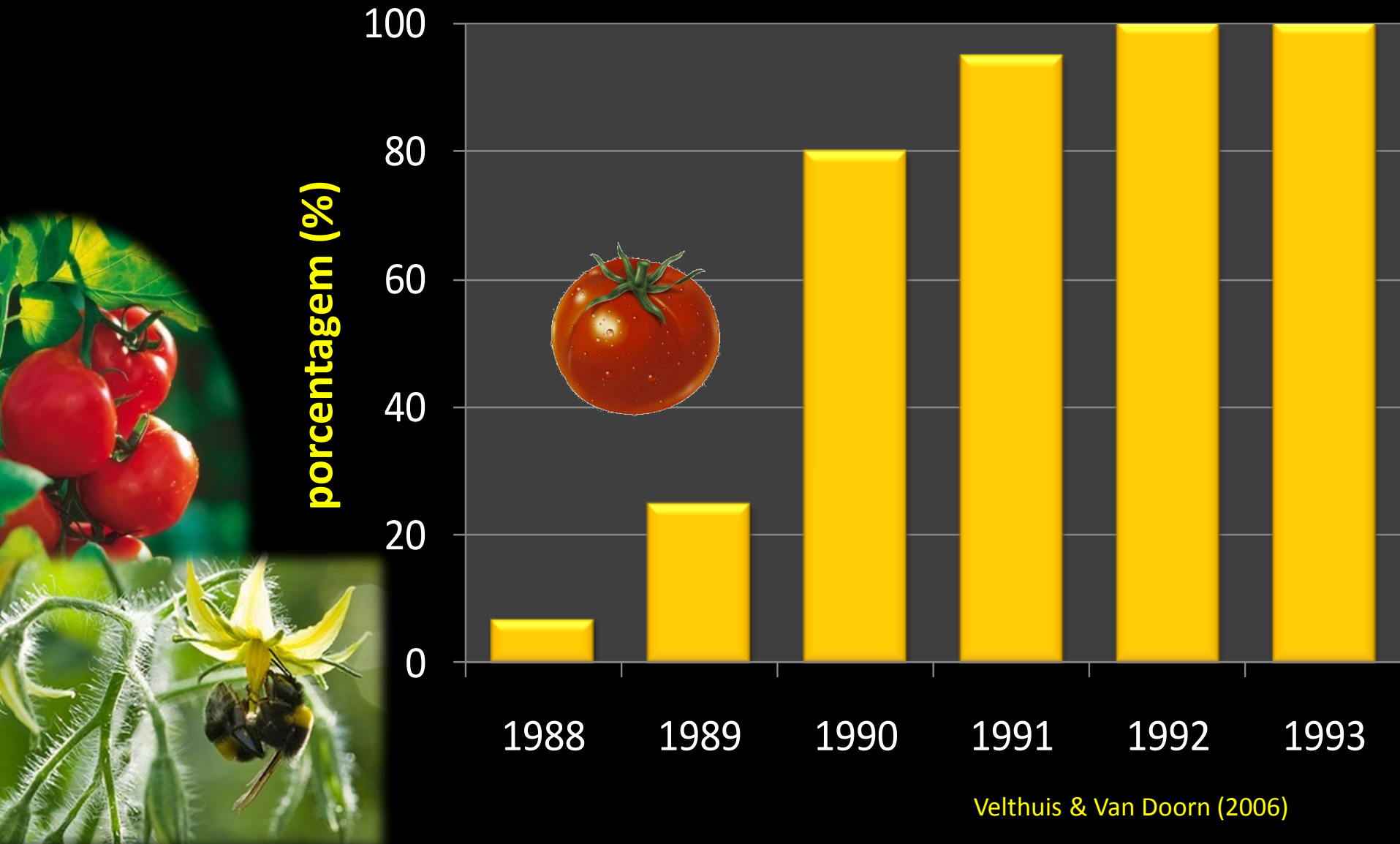


Bombus terrestris





Use of bumblebees in tomato greenhouses in Holland





L'Amuse, une sensation de goût

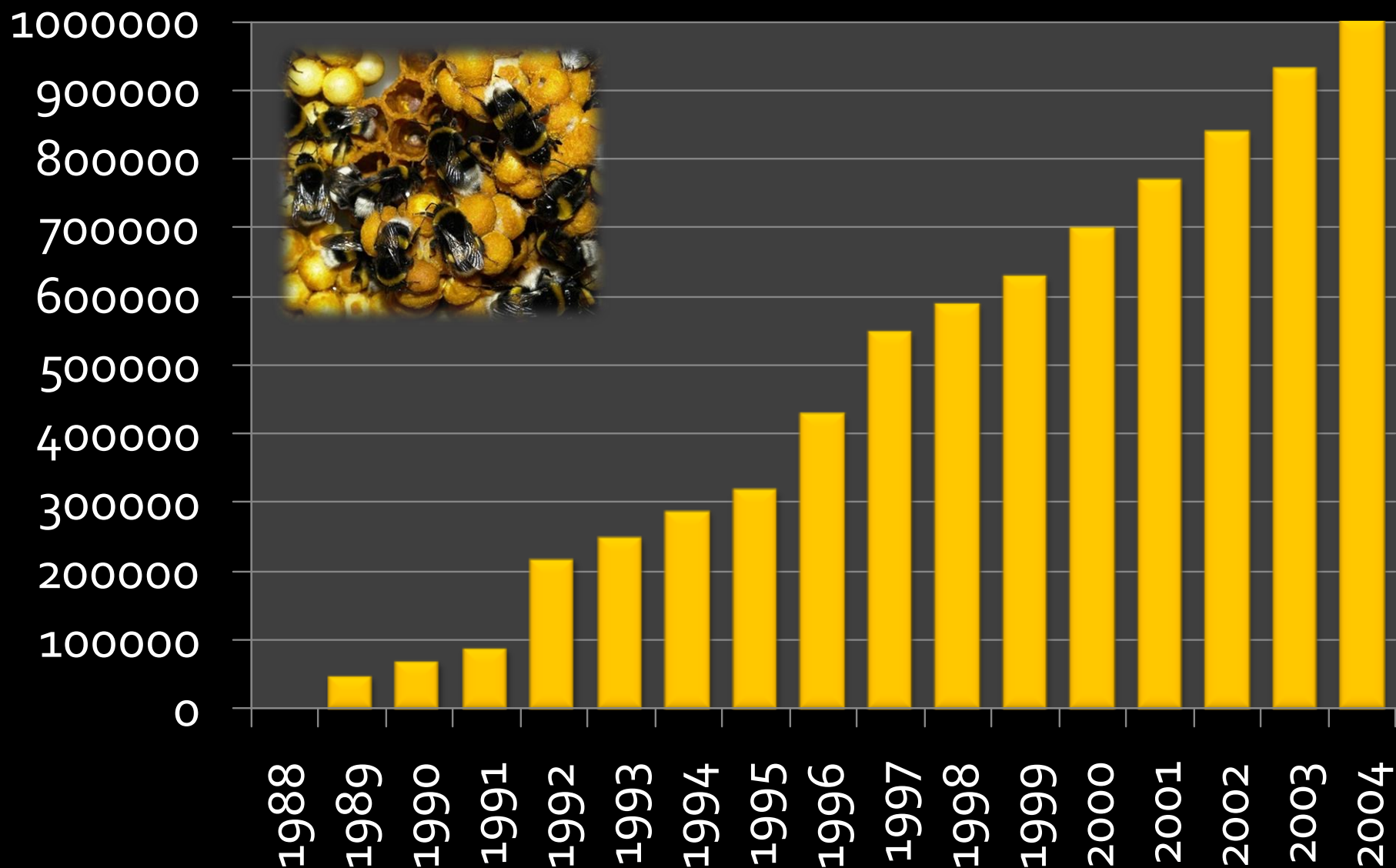
Amuse tomate cerise : idéal comme en-cas équilibré. A déguster sur le
travail ou encore en salade. Les grappes de tomates mûres sont
récoltées manuellement, afin d'obtenir le meilleur goût. Les tomates
sont élevées en respectant l'environnement. La fécondation est
assurée par des abeilles mâles (machons) réduites à l'état d'adulte
dans la nature. Ainsi, vous êtes assurés d'obtenir un produit
sain, issu d'une culture non traitée.







Number of bumblebee hives sold in the world



Velthuis & Van Doorn (2006)

In Brazil...

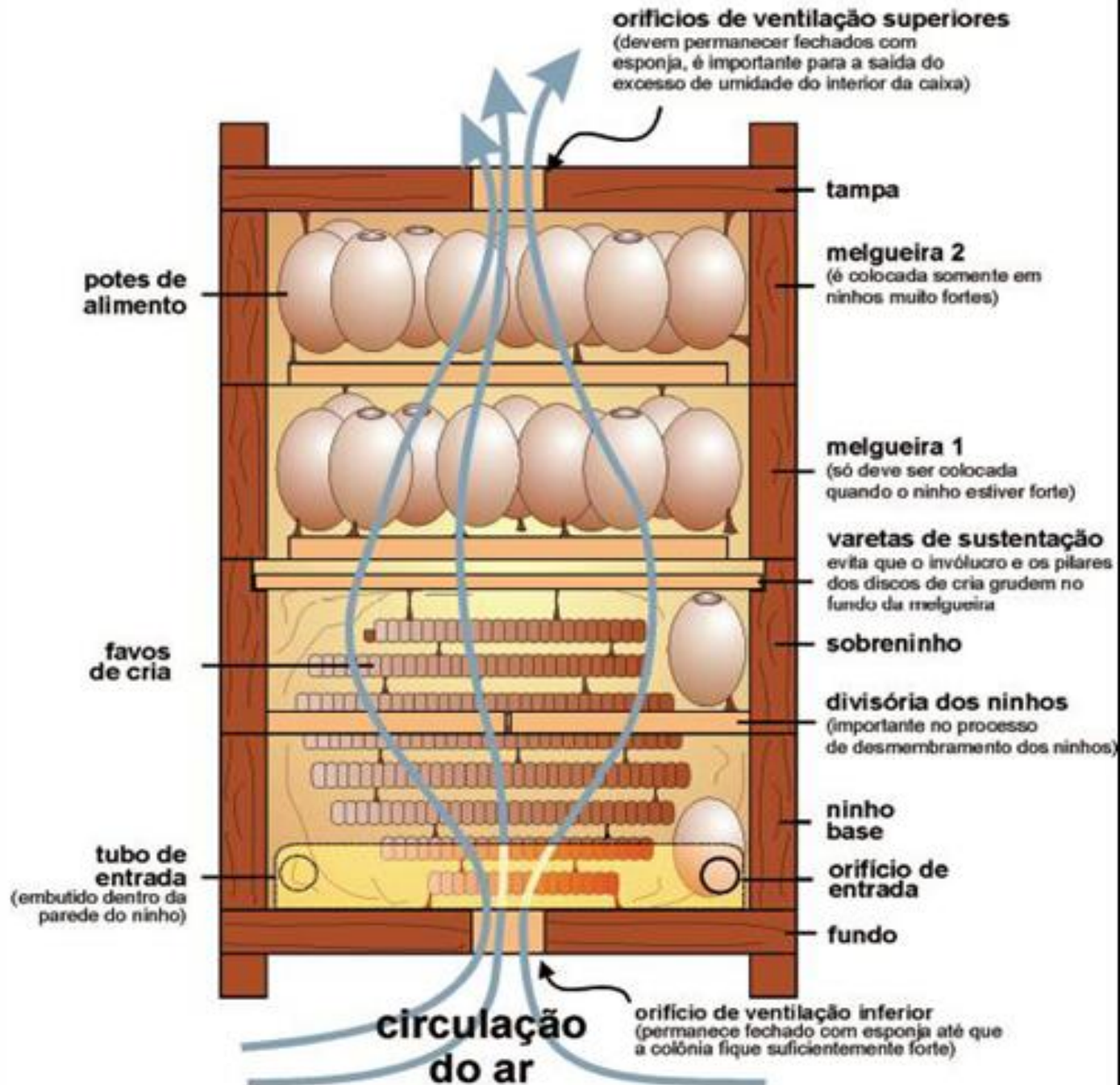


Meliponiculture: stingless bee keeping

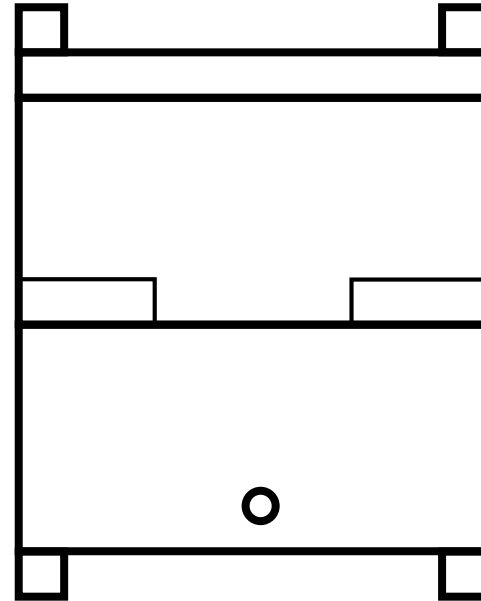
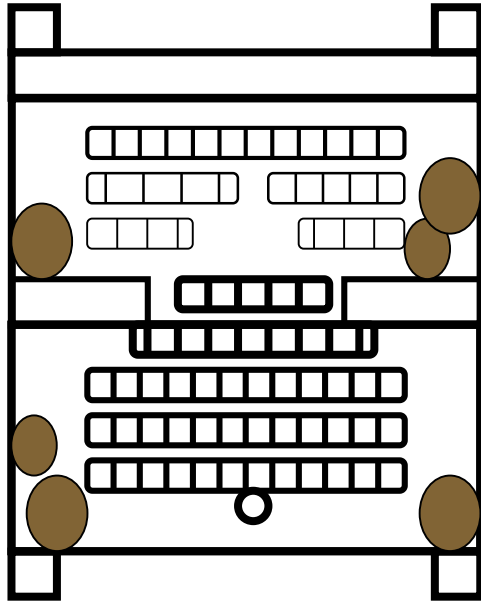


INPA model



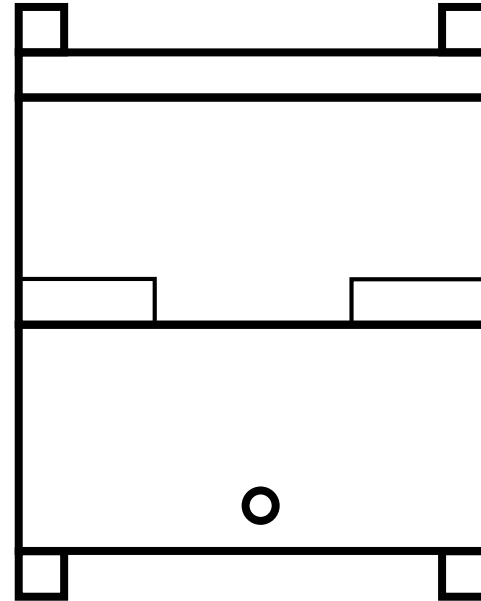
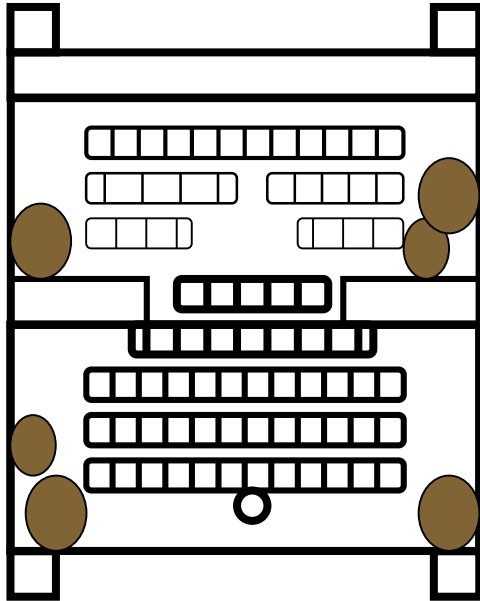


Traditional methods of multiplication

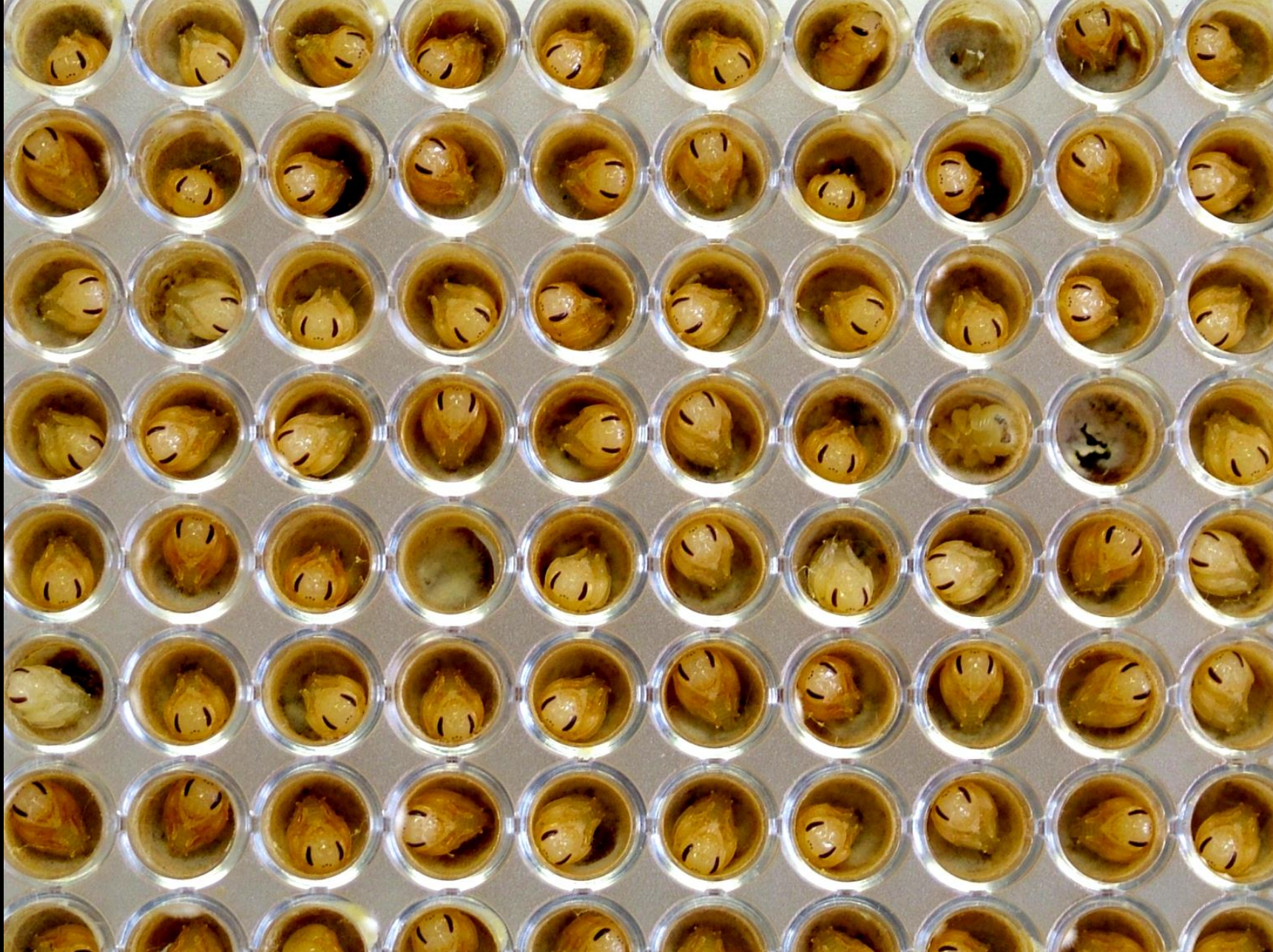


Use of 30 to 50% of biological material from a mother nest

Modern multiplication methods



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











Large scale colony production



















Lychee





Macadamia





Coffee





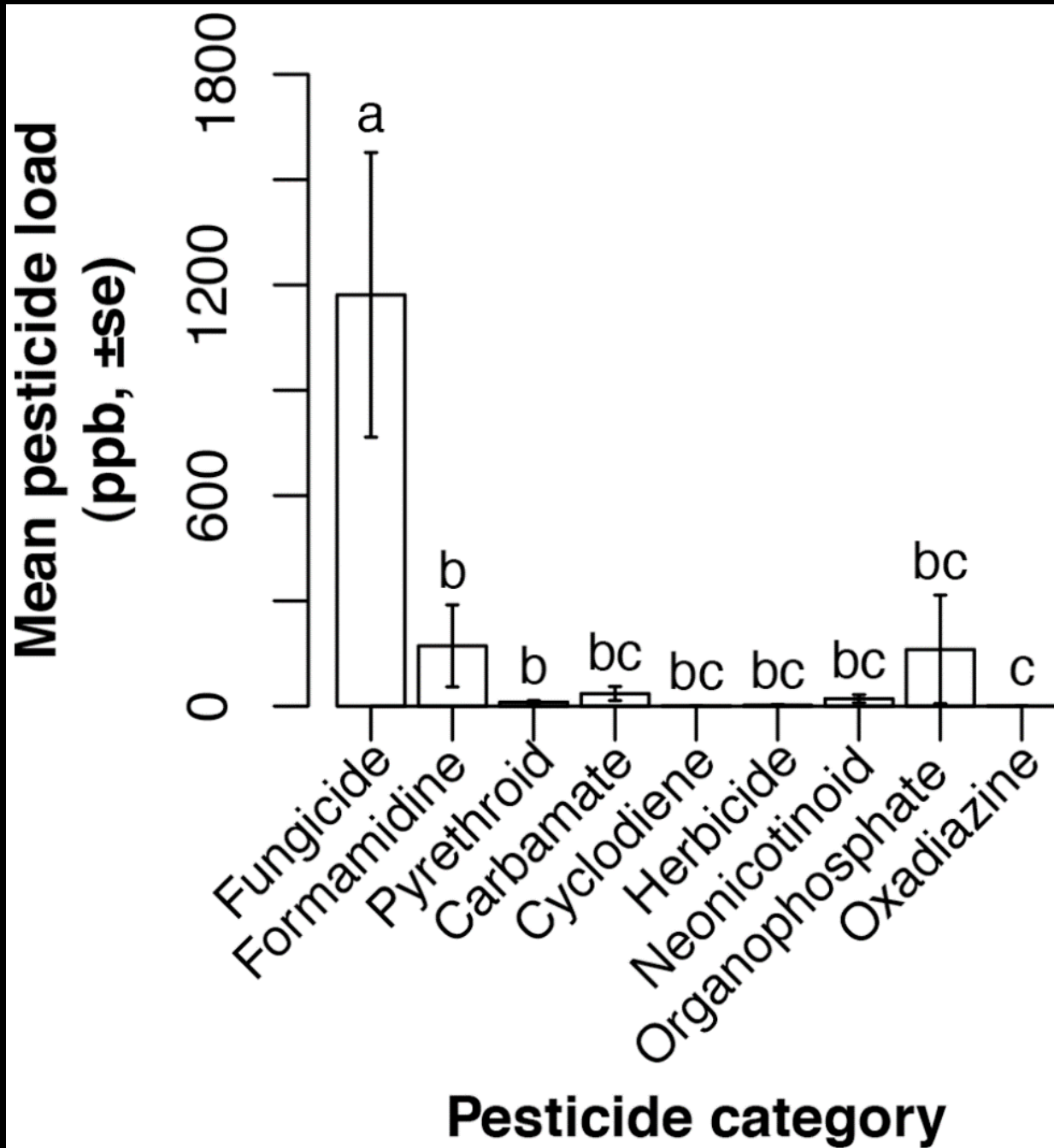
Açaí Berry



Compatibility with pesticides









Monascus fungus









Postharvest Handling

1. Cooling
2. Pasteurization
3. Dehumidification
4. Maturation



Cooling



Pasteurization



Options:

65°C for 30 minutes

or

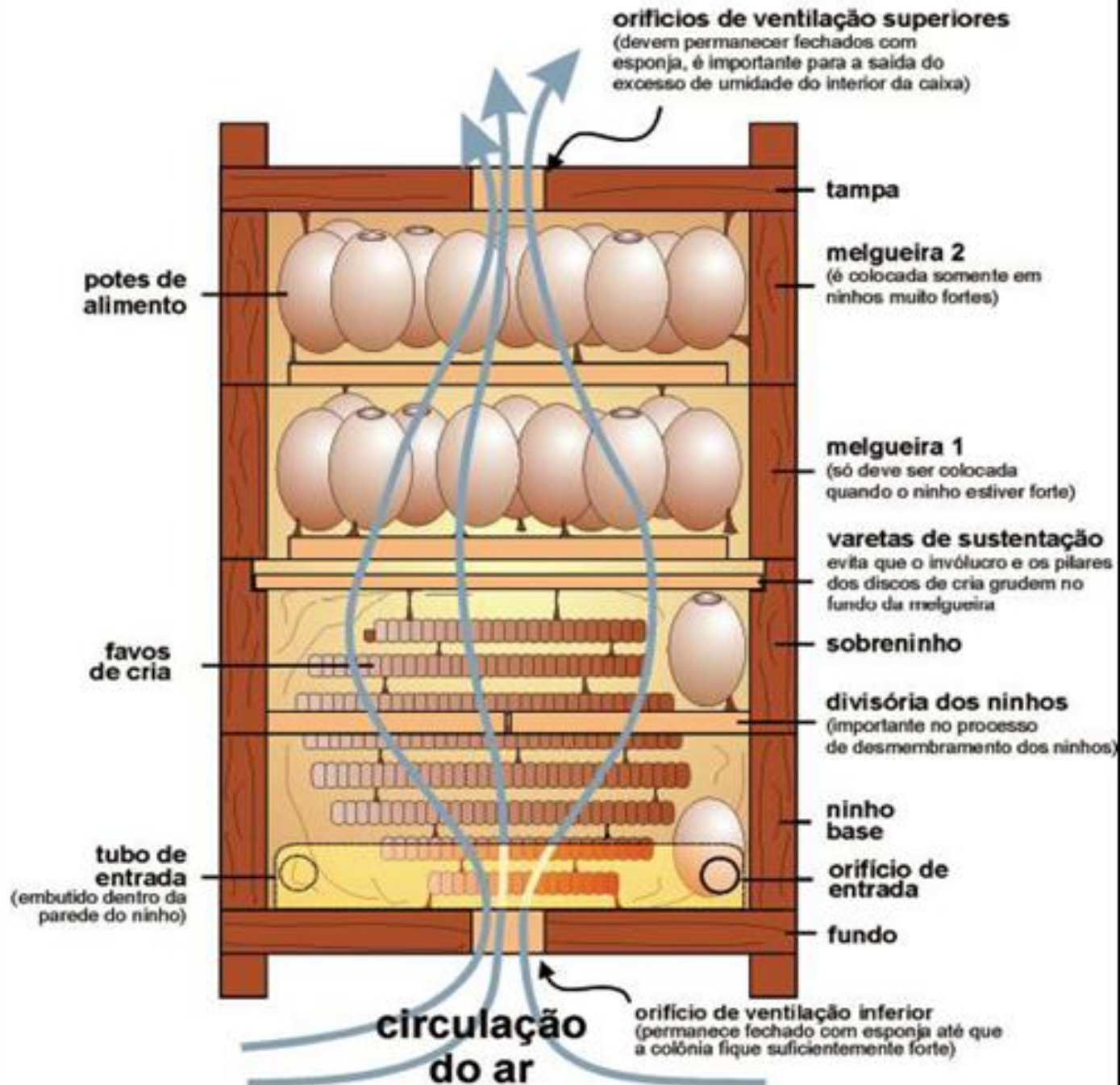
72°C for 15 seconds

Dehumidification



Maturation



























*If you go alone, you go faster
You go in groups, you go further*

Thank you for your attention



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Fototeca Cristiano Menezes / Specieslink