

Brazilian stingless beekeeping diagnostic

Researcher / technician metadata

1. Name *

2. Professional affiliation *

3. Email *

4. Data collection date (date of interview) *

Beekeeper and property

5. Full name (and nickname) *

6. State *

7. County, city or place where the bees are kept *

8. Contact info (telephone / email)

9. Gender: M F

10. Age:

11. Education level

- no education
- literate
- elementary
- middle
- high
- graduation

12. Main job

13. Property type

- rural
- urban

14. Property size

15. Do you own the property?

- yes no

16. Where do you keep the bees?

- backyard
- rural property
- diferente places

17. Is there livestock in the property where the bees are kept (cattle, goats, poultry, fish, etc.)?

- yes no

18. Are there crops in the property where the bees are kept (corn, beans, manioc, sugarcane, etc.)?

- yes no

19. Are there flowering plants in the property where the bees are kept (fruit trees or other plants)?

- yes no

20. Is there native vegetation in the property where the bees are kept (or within 3 Km)?

- yes no

21. What is the main water source in the property where the bees are kept?

- River or lake
 pound or tank
 pipe water

22. Are pesticides used in the property where the bees are kept (insecticides or herbicides)?

- yes no

23. How long have you been keeping stingless bees?

24. Why do you keep stingless bees?

- to earn money selling honey or colonies
 to consume their honey
 to help preserve the bees
 as a hobby
 other:

25. Someone else keeps bees in the family?

- yes no

26. How did you learn to keep bees?

- alone
 with another beekeeper
 with a technician / extension officer

27. Did you participate in a stingless beekeeping course?

- yes no

28. Do you know any website about stingless beekeeping?

- yes no

29. How many stingless beekeepers do you know?

30. In addition to keeping stingless bees, do you keep honeybees (*Apis mellifera*)?

- yes no

31. If you do keep honeybees (*Apis mellifera*), how many honeybee colonies do you have?

32. In your opinion, what is the main problem of keeping stingless bees?

- dry season/winter
 lack of technical skills
 deforestation
 lack of money to invest
 legislation
 other:

33. In your opinion, today there are more or less stingless bees in the wild than 50 years ago?

- today there are more bees
 today there are less bees

Stingless bee management

34. What is the main species you keep? *

Common name (scientific name)	Mark with an X
Jataí (<i>Tetragonisca angustula</i>)	
Mandaçaia (<i>Melipona quadrifasciata</i>)	
Tujuba (<i>Melipona rufiventris</i>)	
Uruçu Nordestina (<i>Melipona scutellaris</i>)	
Jandaíra (<i>Melipona subnitida</i>)	
Mirim, Mosquito, Jatí (<i>Plebeia</i> sp.)	
Manduri (<i>Melipona marginata</i>)	
Mandaguari, Canudo (<i>Scaptotrigona</i> sp.)	
Rajada (<i>Melipona asilvae</i>)	
Guaraipo (<i>Melipona bicolor</i>)	
Mandaçaia Nordestina (<i>Melipona mandacaia</i>)	
Cupira (<i>Partamona</i> sp.)	
Moça branca, Marmelada (<i>Frieseomellita</i> sp.)	
Uruçu Amarela (<i>Melipona flavolineata</i>)	
Uruçu Cinzenta (<i>Melipona fasciculata</i>)	
Uruçu boca de renda (<i>Melipona seminigra</i>)	
Other:	

35. How many colonies of this species do you have (only from the main species kept)?

36. How many colonies do you have overall, including all stingless bee species kept?

37. How many stingless be species do you keep?

38. What is the main type of box you employ?

- modular INPA / EMBRAPA
- modular Paulo Nogueira Neto
- horizontal long box (Nordestina)
- vertical long box
- tree branch or Calabash fruit
- other:

39. From what kind of wood are most of your boxes made?

40. Do you buy empty boxes?

- yes no

41. If you do buy empty boxes, how much do you pay for one?

R\$ _____

42. Do you check/inspect your bees?

- yes no

43. If you do check your bees, how frequently?

- daily
- weekly
- biweekly
- monthly
- trimonthly
- half-yearly
- yearly

44. Do you feed your bees with sugar syrup or honey?

- yes
- no

45. If you do feed your bees, how frequently?

- daily
- biweekly
- trimonthly
- yearly
- weekly
- monthly
- half-yearly

46. If you do feed your bees, where do you provide the food?

- inside the boxes
- outside the boxes

47. Have you lost any colony due to pests or predators?

- yes
- no

48. Do you use vinegar against parasitic flies (phorid flies)?

- yes
- no

49. Do you use grease/oil/poison against ants?

- yes
- no

50. Do you use any protection against lizards, frogs or birds (kills, has a cat, protection on nest entrances)?

- yes
- no

51. Did you lose any colony due to the insecticide sprayed by the dengue-fever car?

- yes
- no

52. How many colonies did you lose last year due to death or swarming?

53. How much money do you spend per year keeping stingless bees (buying boxes, new nests, food, etc.)?

R\$ _____

Multiplication

54. Do you multiply stingless bee nests? *

- yes
- no

55. How do you multiply nests?

- using a single brood disc
- using two or more brood discs from the same nest
- using two or more brood discs from different nests

56. Do you feed newly multiplied (daughter) colonies?

- yes
- no

57. How many new (daughter) colonies did you produce last year?

58. Which colonies do you select for multiplying?

- only the strongest/more productive
- any colony, even the weak ones

Honey sales

59. Do you sell stingless bee honey? *

- yes
- no

60. How do you harvest honey?

- piercing honey-pots and "fipping the box"
- using a syringe
- using an electric pump connected to a plastic hose

61. Do you use any honey conservation method?

- I do not use any method
- pasteurization
- maturation
- dehumidification / dehydration
- freezing
- I leave honey in the refrigerator

62. On average, how many liters of honey are produced by a single colony in a year? (from the main species kept)

63. How many liters of honey did you sell last year?

64. How much do you charge for one liter of honey of your main species kept?

R\$ _____

65. Who normally buys the honey?

- particular client
- merchant or store

66. How do you sale the honey?

- in labeled containers
- in unlabeled containers

67. Where do you sale the honey?

- at home
- in a road post or store
- in a supermarket

68. Do you participate in a cooperative/local organization selling honey?

- yes no

Colony sales

69. Do you sell stigless bee colonies? *

- yes no

70. How do you normally sale the colonies?

- in boxes
- in tree branches or Calabash fruits

71. How much do you charge for one colony of the main species kept?

R\$ _____

72. How many colonies did you sale last year?

73. Who normally buys the colonies?

- hobbyists/amateurs
- other stingless beekeepers
- research/development institutes

Additional observations

74. Do you sell any other stingless bee product?

- I do not sell any other product
- polen
- propolis (geopropolis)
- wax
- other:

75. Additional observations (any relevant comments)

Informed Participation Consent

Herewith I agree to participate in the Project "Brazilian stingless beekeeping diagnostic", and I understand that private information such as the names and addresses of participants will not be disclosed to protect their privacy.

(signature of the interviewed beekeeper)

Please send to:

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Questions and suggestions:

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