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¹Bee Observatory

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Designed in response to the demands of various sectors of society, the Brazilian Bee Observatory aims to implement and support actions to mitigate bee mortality in the country, aligning with the United Nations' efforts to achieve the Sustainable Development Goals of the 2030 Agenda. The program is based at EMBRAPA Environment in Jaguariúna (SP) and operates in partnership with the Ministry of Agriculture and Livestock, collaborating institutions, and state agricultural defense agencies. Given the lack of standardized and reliable data on bee-related incidents, the Observatory has developed an information system for the systematic recording of occurrences, identification of possible causes of bee deaths, and consolidation of this data into an official national platform. The systematization of reports and the regional and temporal analysis of occurrences enable a technical and scientific interpretation of causal factors, providing public agents and other sectors of society with the necessary data to implement effective measures to reduce pollinator losses. One of the Observatory's main objectives is to establish a national database on bee mortality through the AgroTag System, which consists of an application and a WebGIS interface. AgroTag Bees is a tool designed for state agricultural technicians, facilitating the recording and monitoring of occurrences. Using tablets or mobile phones, incidents are identified, photographed, and georeferenced directly in the field. In areas without internet access, the data is stored on the device and transmitted to the database once the connection is restored. The information collected and verified by the Observatory team is made available to users through the WebGIS interface, ensuring transparency and accessibility to bee mortality records. The expectation is that hive monitoring will serve as an indicator of the sustainability of Brazilian agriculture.



Brazilian Bee Observatory

Hive monitoring as an indicator of the Sustainability of Brazilian Agriculture



Observatório
de abelhas



MINISTÉRIO DA
AGRICULTURA E
PECUÁRIA







Are bees dying in Brazil?

How many and what are the episodes of bee mortality in Brazil?

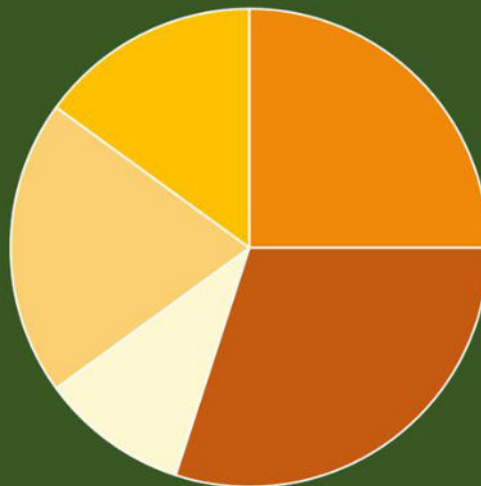
Are there any official records?

What are the main causes?





Hives mortality causes in Brazil



- Pesticides
- Climate disasters
- Pests and diseases
- Beekeeping mistakes
- Scarcity of food for bees

Hypothetical example



Current panorama

- Sensationalist news and inaccurate narratives
- Underreporting of occurrences
- Scattered and disorganized information or restricted to inspection agencies
- Non-standardized protocols between states and lack of knowledge of the inspectors
- Beekeepers not registered at regulatory agencies and agricultural properties



| Created in 2022

An initiative of Embrapa Environment, together with the Ministry of Agriculture and Livestock

| Main objectives

Gather and systematize **official data on** bee losses, identifying their **causes** and proposing **solutions**;



Execute and promote actions to **formalize** and **professionalize** beekeeping, and to **harmonize it with agriculture**.





Cristiano Menezes
General Coordinator



Betina Blochtein
Executive Coordinator



Jenifer Dias Ramos
Executive Advisor





MINISTRY OF AGRICULTURE AND LIVESTOCK

- Coordination and Planning of the initiative
 - Data collection and management
- Data Management AGROTAG Bees and Public Policies



Brazilian Bee
Observatory

EMBRAPA

- Coordination of the initiative
- Planning and articulation with partners
- Protocols and campaigns
- Training of technicians and use of AGROTAG
- Data Analysis
- Preparation of technical documents
- Dissemination of knowledge at events

INSTITUTIONAL PARTNERSHIPS

SENAR · SEBRAE · EMATER · BEEKEEPING ENTITIES

- Production of content and didactic material
 - Training support
- Campaign collaboration



A.B.E.L.H.A. SUPPORTERS AND PROMOTERS ·

CROPLife Brazil ·

Public Prosecutor's Office/RS

- Support for the implementation
- Troubleshooting
- Demands for new plans and actions



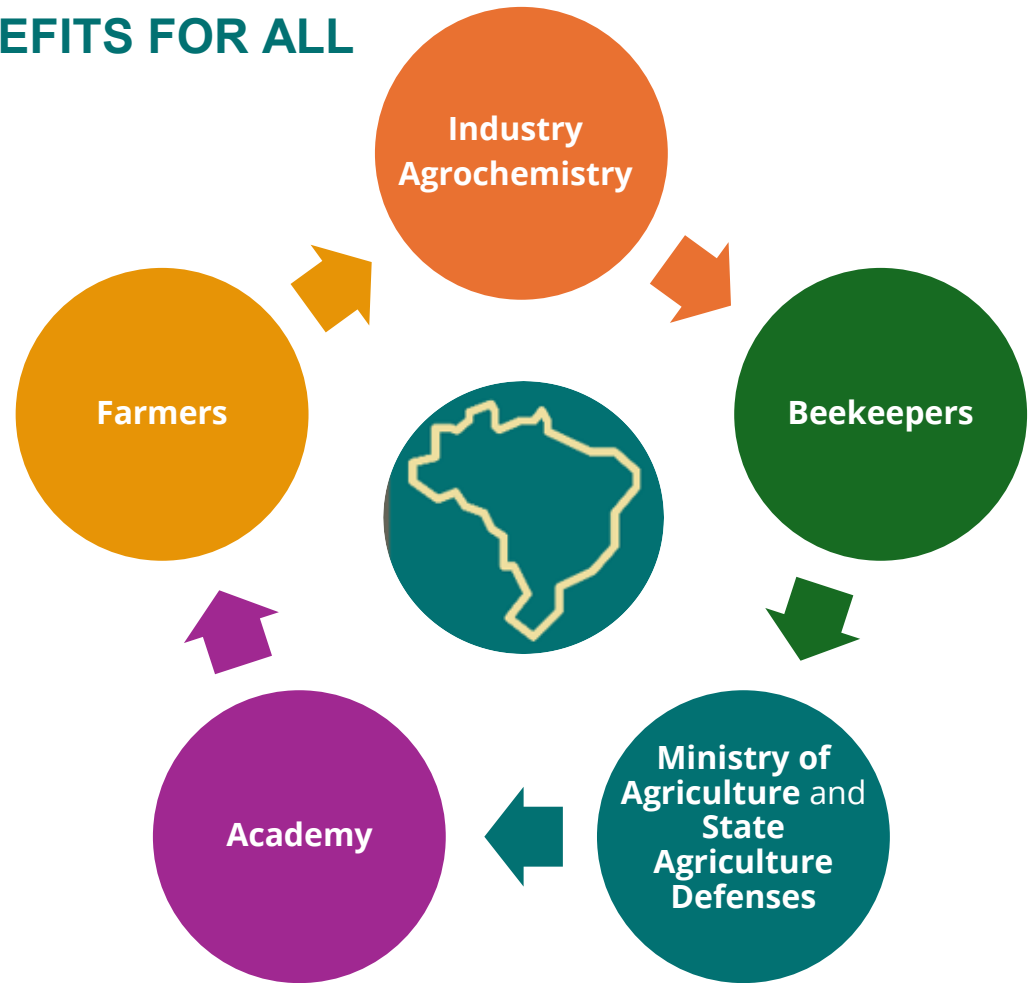
Bee Observatory Differential Opportunities and benefits

National initiative, with an official character, joint with Ministry of Agriculture:

- Generation and management of standardized data on bee losses
- Search for pesticide residues in official/accredited laboratories
- Continuous hive monitoring
- Dissemination of good beekeeping and agricultural practices based on consolidated information from the Database
- Technical basis for formulating public policies



BENEFITS FOR ALL





Monitoring agricultural sustainability through bee hives

2.5 million hives spread around the country*

*Estimated number of hives in Brazil



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Actions carried out by the





ACTIONS TAKEN

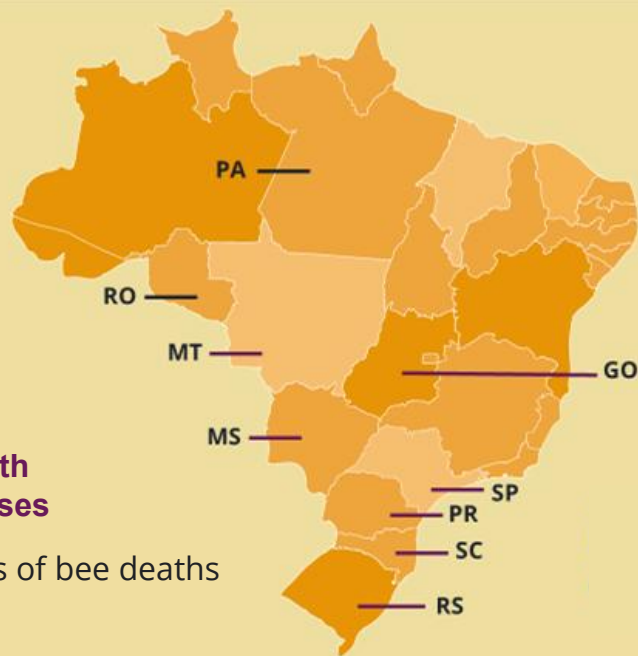


Diagnosis of state-level approaches to bee loss cases, beekeeper registration, and other sectoral issues



Dialogue with State Defenses

Assistance in cases of bee deaths



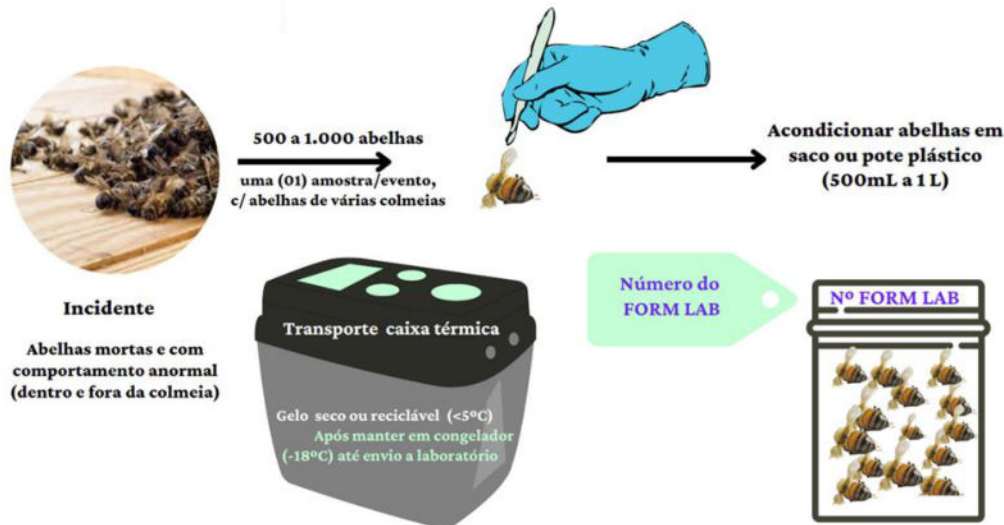


Use by the Agricultural Defense of the States



Illustrative video of the Collection
Guidance

Protocol FOR INSPECTION, COLLECTION AND SHIPMENT OF SAMPLES IN CASES WITH BEE DEATHS (Technical Note No. 2/2024/DICOEII/CDVIG/CGVSA/DAS/DAS/MAPA)





ACTIONS TAKEN

App for recording bee losses and official data platform



Security of georeferenced data and mandatory photos



Offline access (without network connection)



Data integration with Geographic Information Systems (e.g., land use, CAR, MapBiomas), enabling factor interactions



SUPPORT FOR THE INSPECTORS IN THE FIELD





ACTIONS TAKEN

Training of State Defense technicians to inspect hives and use the AGROTAG Bees



TRAINING SEAPI/ RS – October 2024

2 days of training/class

2 classes Beekeeping Health Surveillance

2 classes of the Agrotag-Abelhas APP and the Webgis Platform

15 trained regionals

+40 inspectors trained/certified by Embrapa Environment



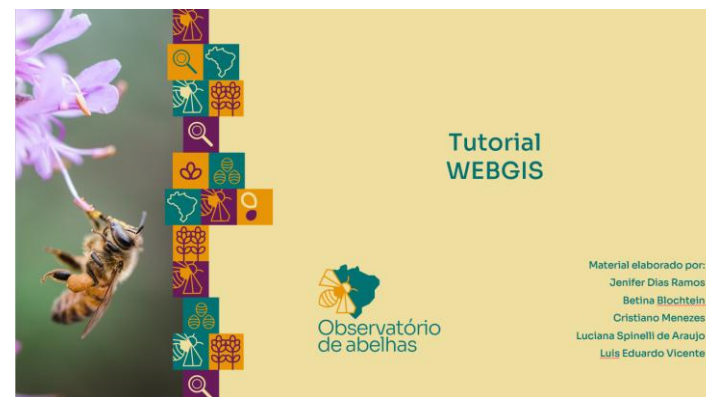


ACTIONS TAKEN



ONLINE TRAINING WITH IAGRO/MS (June 2025) AGROTAG Bees

- 4 classes of the Agrotag-Abelhas APP
- 4 Webgis classes
- 11 trained regionals
- +70 trained/certified inspectors (Embrapa Environment)





APICULTOR E MELIPONICULTOR: O QUE FAZER EM CASO DE SURTO DE MORTALIDADE DE ABELHAS?

Comunique a situação à Inspetoria de
Defesa Agropecuária (IDA) do seu
município para que inicie o processo de
investigação da causa provável

*Os telefones e endereços das IDAs
estão disponíveis no site da SEAPI:
agricultura.rs.gov.br*



PARA MAIS
INFORMAÇÕES
ACESSE O QR CODE



Observatório
de abelhas
do Brasil com foco no Rio Grande do Sul

SECRETARIA DE AGRICULTURA, PECUÁRIA,
PROTEÇÃO SANEAMENTO E AMBIENTAL
RIO GRANDE DO SUL

VOCÊ PODE CONTRIBUIR PARA PREVENIR DOENÇAS DE ABELHAS!

- ✓ Cadastre seu apiário/meliponário junto a
IDA do seu município
(cadastro obrigatório e gratuito)
- ✓ Declare anualmente o seu rebanho
- ✓ Transporte colmeias e rainhas
acompanhadas da
Guia de Trânsito Animal - GTA
(solicitar senha para emissão da sua GTA online)

Informe qualquer
anormalidade em sua
criação de abelhas a
IDA de seu município

Coordenação
Departamento de Vigilância e Defesa Sanitária Animal - DDA/SEAPI
Programa Nacional de Sanidade Apícola RS (PNSAp/RS)
Tel: (51) 3288-6303
E-mail: apicola@agricultura.rs.gov.br e/ou gustavo-diehl@agricultura.rs.gov.br



PARA MAIS INFORMAÇÕES

Observatório
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SECRETARIA DE AGRICULTURA, PECUÁRIA,
PROTEÇÃO SANEAMENTO E AMBIENTAL
RIO GRANDE DO SUL



CADASTRE SEU APIÁRIO E MELIPONÁRIO PROTEJA SUAS ABELHAS!

REPRODUTORES: DE ALMEIDA/2019





VOCÊ SABIA?

O cadastro é necessário para monitorar e prevenir doenças nas colmeias.

O cadastramento dos empreendimentos com abelhas fortalece a cadeia produtiva da Api-meliponicultura gaúcha.

VANTAGENS:

- ✓ Controle sanitário eficiente
- ✓ Participação em programas de incentivo
- ✓ Valorização dos produtos das abelhas

Cadastramento obrigatório e gratuito!

Dúvidas? Entre em contato: apicola@agricultura.rs.gov.br
[agricultura.rs.gov.br](https://api.rsgov.br)
 WhatsApp (51) 984452033
 SEAPI (51) 3286200

Observatório de abelhas do Brasil com foco no Rio Grande do Sul

SECRETARIA DA AGRICULTURA, PECUÁRIA, PRODUÇÃO AGROPECUÁRIA E IRRIGAÇÃO

GOVERNO DO RIO GRANDE DO SUL

CADASTRE SEU APIÁRIO E MELIPONÁRIO

Como fazer?

- Acesse agricultura.rs.gov.br e localize a Inspetoria de Defesa Agropecuária do seu município
- Apresente os documentos necessários: RG, comprovante de residência, documentação de propriedade e inscrição estadual (se tiver)
- Preencha o formulário e Assine o Termo de Compromisso Sanitário
- Receba seu registro e solicite senha para emissão de GTA online, sem sair de casa
- Atualize seu cadastro anualmente





Observatório de abelhas do Brasil com foco no Rio Grande do Sul

SECRETARIA DA AGRICULTURA, PECUÁRIA, PRODUÇÃO AGROPECUÁRIA E IRRIGAÇÃO

GOVERNO DO RIO GRANDE DO SUL



ACTIONS TAKEN

Brazilian Bee Observatory website

www.agrotag.cnpma.embrapa.br/abelhas/#!

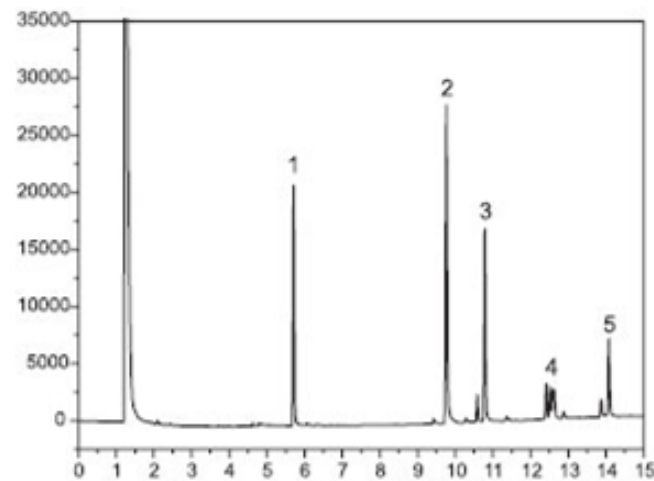




ACTIONS TAKEN



Actions for the execution and **standardization of laboratory analyses** in Oficial Laboratories for the detection of pesticide multiresidues in bees **(AT NO COST TO THE STATES)**



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PECUÁRIA

GOVERNO FEDERAL
BRASIL
UNIÃO E RECONSTRUÇÃO

BEE OBSERVATORY OF BRAZIL Project with FOCUS on Rio Grande do Sul



SEAPI/RS receives equipment to benefit the beekeeping chain:
E.P.I.S; field material; cell phones - June/2024



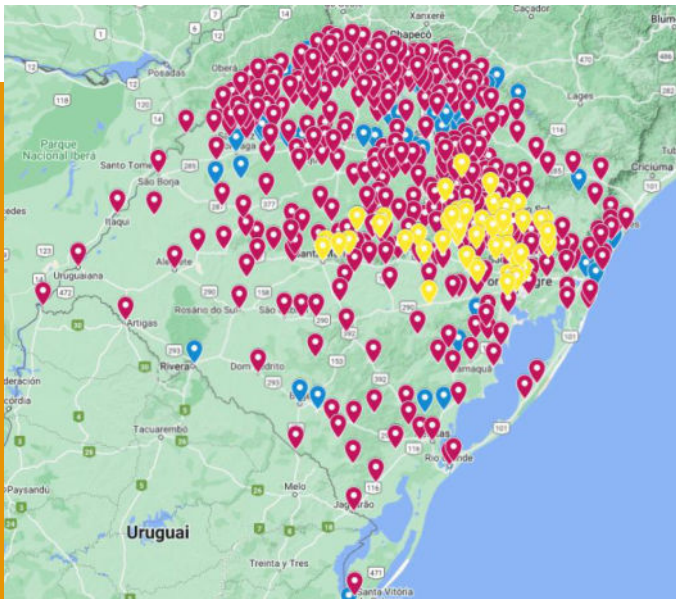
Training qualifies Agriculture teams

1. Beekeeping health surveillance;
2. AGROTAG App – October/2024



Expointer Panel: Beekeeping on the Agenda
- August/2024

BEE OBSERVATORY OF BRAZIL Project with FOCUS on Rio Grande do Sul



Integrated Assessment of Hive Losses Caused by the May-June 2024 Climate Disaster in Rio Grande do Sul:

About 19.000 hives lost by beekeepers and focused help actions to recover their losses



NEXT STEPS OF THE BEE OBSERVATORY 2025/2026



Definition of data governance and result sharing



Expanding partnerships and search for resources



Expansion of Observatory's operational network across the states



Communication & Education



Capacity Building & Training





Thank you for your attention!

Questions?

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