



XXII FÓRUM NACIONAL
de
APICULTURA
04 NOV. 2023

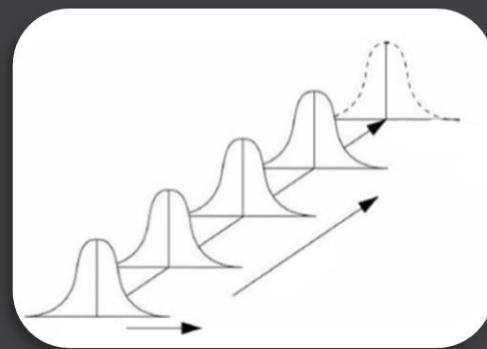


O processo de Normalização do Pólen Apícola

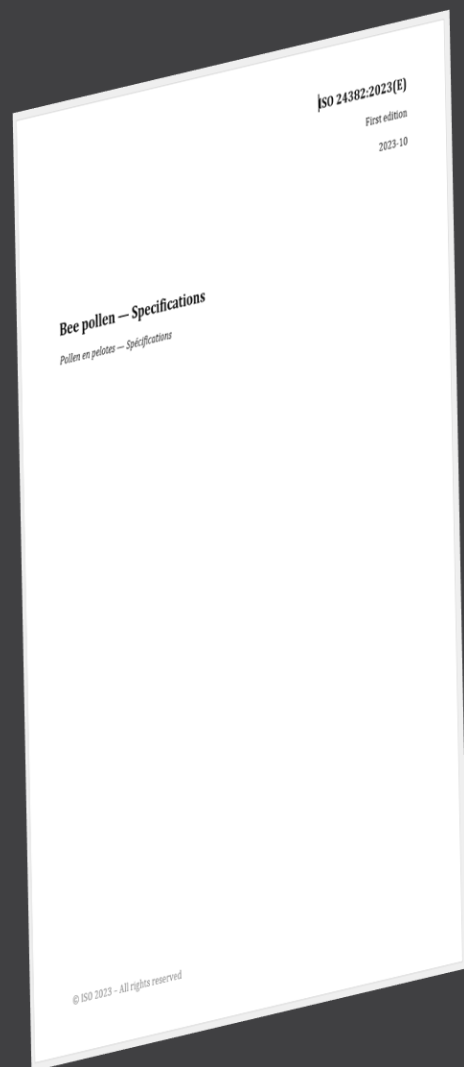
Ofélia Anjos



“what's the best way of doing this?”



Produtos são seguros,
fiáveis e de boa qualidade



FACULTATIVO

Qualidade

Âmbito

Normalização de todo o processo e circulação de produtos apícolas, incluindo, entre outras as seguintes: normas de produtos, normas básicas, normas de práticas apícolas, normas de qualidade, normas de métodos de ensaio e normas de armazenamento e transporte.

As normas de segurança alimentar estão excluídas (já abordadas no ISO/TC 34/SC 17)



← ISO/TC 34

ISO/TC 34/SC 19

Bee products

Scope

Standardization of the whole process and circulation of bee products, including but not limited to the following: products standards, basic standards, beekeeping practices, quality standards, testing method standards and storage and transportation standards.

Food safety standards are excluded (already covered in TC 34/SC 17).



Published



Under development



 **ISO 12824:2016**

Royal jelly — Specifications

 **ISO 24364:2023**

Royal jelly production

 **ISO 24382:2023**

Bee pollen — Specifications



 **ISO/AWI 13508**

Propolis extracts — Specification

 **ISO/AWI 13667**

Bee products — Palynology of honey — Specifications and test methods

 **ISO 24381**

Bee propolis — Specifications

 **ISO/CD 24607**

Honey — Specifications



1. ⇒ 1st reunião plenária do SC19 Nanjing, China, 2018, Maio.
2. ⇒ 2nd reunião plenária do SC19 Paris, France, 2019, June.
3. ⇒ Aprovado em setembro de 2019 - ISO/TC34/SC19/
4. ⇒ WG3 "Bee Pollen", in SC19-N120.
Ofélia Anjos aprovada como convenor [2019-2022].
6. ⇒ Ofélia Anjos nomeada como convenor para mais 3 anos [Outubro de 2022-2025].



Bee pollen—Specifications



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(Líder of 1st Projeto)

Membros WG3

Turkey 18

France 8

China 6

Spain 5

Romania 4

Portugal 4

Brazil 3

Hungary 3

Belgium 2

Sweden 2

Germany 2

India 1

Iran 1

New Zealand 1

Uganda 1

Italy 1

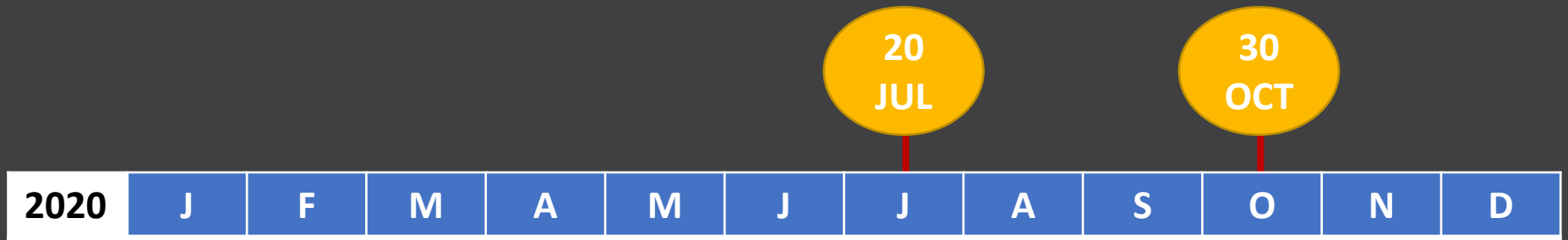
**-16 countries
-62 experts**

34 P-members

28 O-members

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31
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25
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Âmbito

⇒ Requisitos de qualidade, métodos analíticos, rotulagem, armazenamento e as condições de transporte.

⇒ pólen de abelha seco, congelado e liofilizado.

⇒ Não se aplica ao pólen de abelha em pó triturado e aos produtos fabricados a partir de pólen.



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Monofloral



Multifloral





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MÉTODOS ANALÍTICOS

Anexo A - polinica

Anexo B - Humidade

B1.
B2.

Anexo C - Proteína

Anexo D - Açúcares

D1
D2

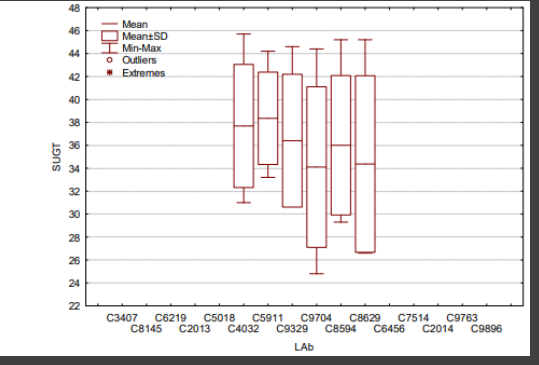
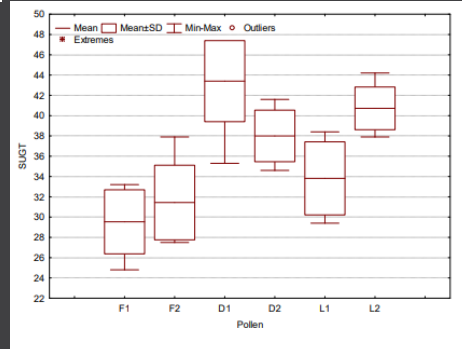
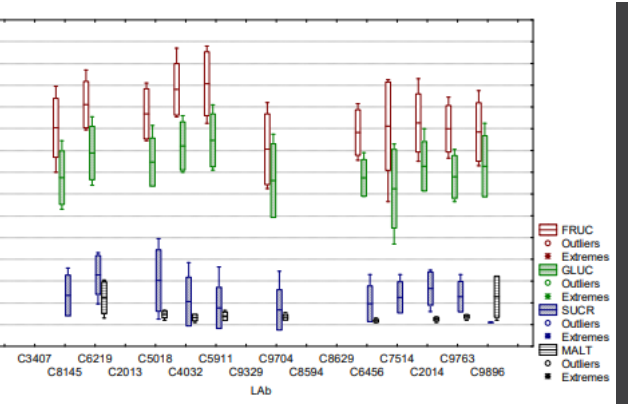
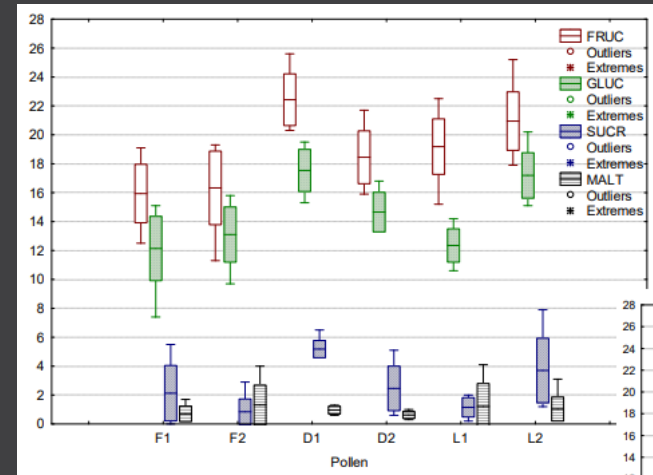
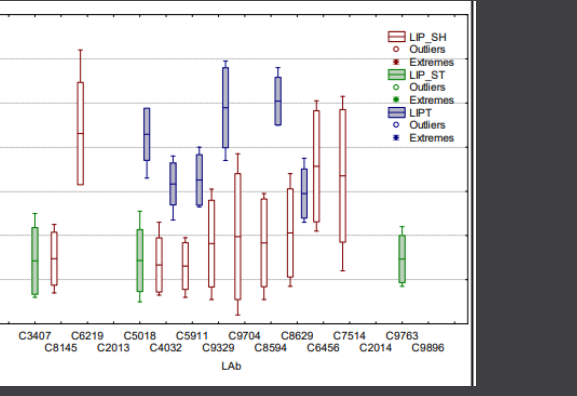
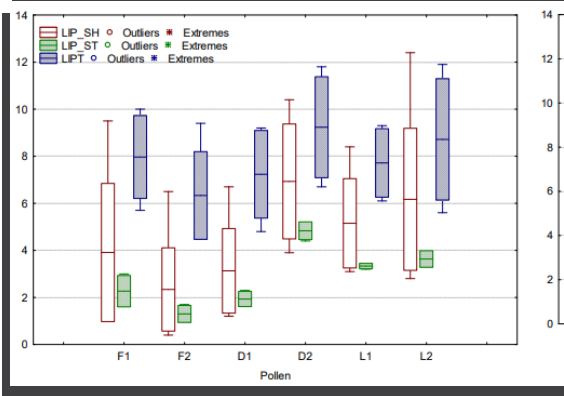
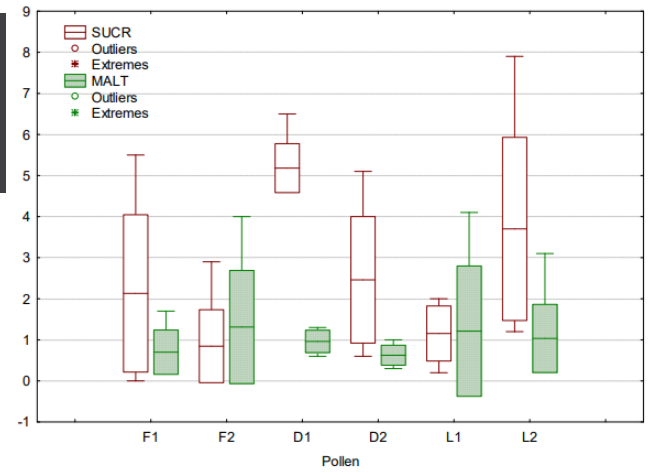
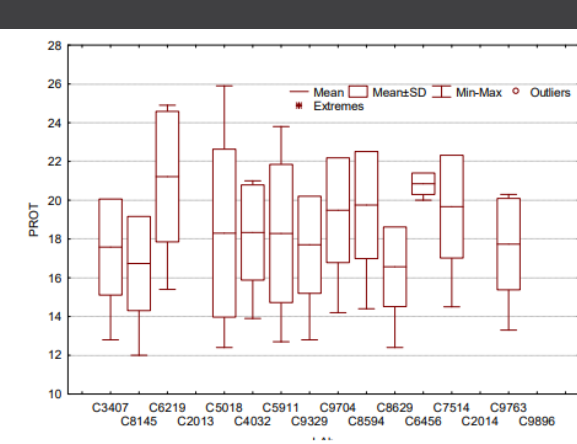
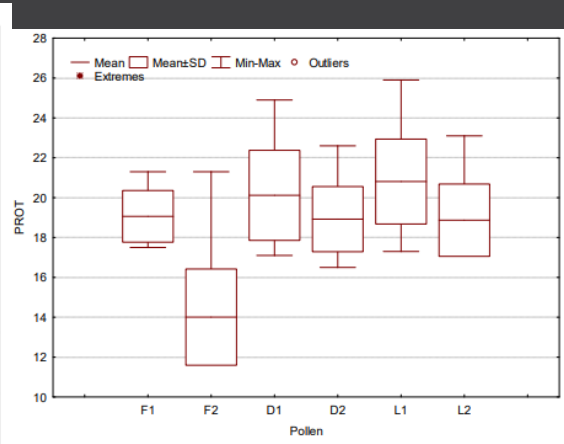
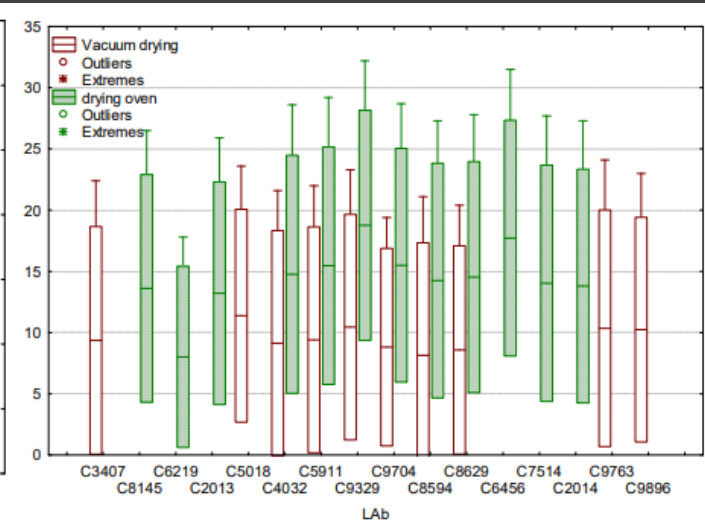
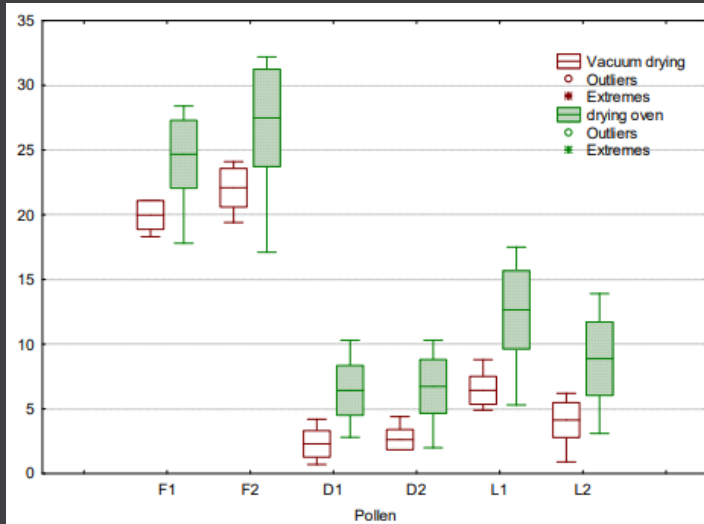
Anexo E - Lípidos

E.1.
E.2.

E1.1.
E1.2

Anexo F - pH

Anexo G - Cinzas.



ISO 24382:2023 (E)

Bee pollen — Specifications

Pollen en pelotes — Spécifications

Table 1 — Chemical requirements for bee pollen and test methods for each characteristic

Characteristic	Min. or max.	Requirements			Test method	
		Type 1	Type 2	Type 3		
Determination method of pollen taxa at bee pollen	—	Limits only for monofloral bee pollen			Annex A	
Moisture content with % vacuum drying oven method, in % mass fraction	min.	2	No upper and lower limits defined	2	Clause B.1	
	max.	8		8		
Loss on drying content with drying oven method, in % mass fraction	min.	5		5	9	Clause B.2
	max.	9				
Halogen loss on drying analyser	min.	3		3	9	Clause B.3
	max.	9				
Protein content, in % mass fraction	min.	10	7,5	10	Annex C	
Sugar content, in % mass fraction	—	No lower and upper limits were defined			Clause D.1	
Total sugar, in % mass fraction	min.	15	12	15	Clause D.2	
Lipid, in % mass fraction	min.	1,3	1	1,3	Annex E	
Determination of pH	min.	3,3			Annex F	
	max.	6,30				
Ash, in % mass fraction, by gravimetry	min.	1	0,7	1	Annex G	
Key						
Type 1 – Dried bee pollen; Type 2 – Frozen bee pollen; Type 3 – Lyophilized bee pollen.						

Divulgação 2022



OP-054 [Beekeeping Technology and Quality]

Advances in ISO standardization of bee pollen

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OP-128 [Beekeeping Technology and Quality]

Advances in palynological analysis of bee pollen loads

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1) ISO standard draft for bee pollen production

Âmbito

Esta norma especifica as condições ambientais adequadas à produção de pólen de abelha e os requisitos técnicos de apicultura necessários para garantir que o pólen de abelha colhido e embalado é de qualidade suficiente para ser vendido nos mercados nacionais e internacionais. Especifica igualmente o controlo dos processos e as exigências técnicas de acondicionamento, marcação, armazenagem e transporte do pólen de abelha.



2) ISO standard for beebread



Agosto/setembro 2024

Reunião presencial WG3: Pollen

Cluj-Napoca
Roménia



OU

Caparica
Portugal



