



UNIVERSIDADE ESTADUAL DE MARINGÁ  
CENTRO DE CIÊNCIAS AGRÁRIAS  
PROGRAMA DE PÓS-GRADUAÇÃO EM ZOOTECNIA

DISCIPLINA	COMPORTAMENTO E PRODUÇÃO EM <i>Apis mellifera</i>				
CÓDIGO	DZO 4053				
NÍVEL M ou D ou M/D	M/D				
CARGA HORÁRIA	45 horas				
NÚMERO DE CRÉDITOS	<b>Teóricos:</b>	3	<b>Práticos:</b>	0	<b>Total:</b> 3

#### EMENTA

Aspectos comportamentais e adaptativos que determinam a produção. Técnicas de produção de mel, geleia real, própolis, cera, rainhas e apitoxina.

#### PROGRAMA

##### Parte Teórica:

Aspectos comparativos entre abelhas africanizadas e europeias.

Biologia comparativa (Morfologia e Fisiologia).

Técnicas de produção dos produtos apícolas (mel, geleia real, própolis, cera, rainhas e apitoxina).

Aspectos comportamentais e adaptativos que determinam a produção.

Inimigos e doenças.

Nutrição e manejos de colônias para a produção apícola.

MRJP3 na produção apícola.

#### 4. REFERÊNCIAS

##### 4.1- Básicas (Disponibilizadas na Biblioteca ou aquisições recomendadas)

BROWN, R. **A simple two-queen system**. Torquay: Venture Press. 1980.

CAMARGO, J. M. F. **Manual de apicultura**. São Paulo: Ceres. 1972.

DOOLITTLE, G. M. **Scientific queen rearing**. Reprint of 1901, Mytholmroyd: Northern Bee Books. 2010.

DADE, H. A. **Anatomy and dissection of the honeybee**. 4<sup>th</sup>, Cardiff: International Bee Research Association. 1994.

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DOOLITTLE, G. M. **Queen rearing – as practically applied**. Chicago: Thomas G. Newman & Son. 1889.

FERNANDEZ, N.; COINEAU, Y. **Varroa – the serial bee killer mite**. Paris: Atlantica. 2006.

FERT, G. **Apicultura: criação de rainhas**. Apimondia. 2011.

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- WOODWARD, D. R. **Queen bee – biology, rearing and breeding**. 2<sup>nd</sup> ed., Balclutha: D. R. Woodward. 2009.

#### 4.2- Complementares

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- FERT, G. **Breeding queens**. Échauffour – France: OPIDA. 1997.
- GOODMAN, L. **Form and function in the honey bee**. Cardiff: IBRA. 2003.
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SNELGROVE, L. E. **Swarming: it's control & prevention.** 13<sup>rd</sup>, Pleasant View: Snelgrove & Smith. 1981.

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WINSTON, M. **The biology of the honeybee.** 5<sup>th</sup> ed., Cambridge: Harvard University Press. 1995.

WINSTON, M. **Killer bees: the Africanized honey bee in the Americas.** London: Harvard University Press. 1992.

#### **CRITÉRIO DE AVALIAÇÃO:**

Estudo dirigido: peso 2.

Seminários semanais: peso 2.

#### **PERIÓDICOS:**

Acta Scientiarum

American Bee Journal

Anais de: - encontros sobre abelhas Ribeirão Preto

- Congressos Brasileiros de Apicultura

- Congressos Internacionais de Apicultura

- Encontros, Congressos e Simpósios Estaduais de Apicultura

Animal Behaviour

Annals of the Entomological Society of America

Annals of the Brazilian Academy of Sciences

Annual Review of Entomology

Apiacta

Apidologie

Bee World

Bee Culture

Behavioral Ecology and Sociobiology

Boletim da Indústria Animal

Brazilian Journal of Animal Science

Brazilian Journal of Biology

Brazilian Journal of Genetics

Ciência e Cultura

Ciência Hoje

Ciência Rural

Científica

Gleanings in Bee Culture

Insectes Sociaux

Insects

Journal of Apicultural Research

Journal of Apicultural Science

Journal of Economic Entomology

Journal of Insect Physiology

Journal of the Kansas Entomological Society

Molecular Ecology

Nature

PLOs one

Science