

Black Soldier Fly Production at Hermetia in Germany



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Outline

- Back ground

- Production Units

 - Fly house

 - Egg collection & incubation

 - Larvae rearing

- Harvesting

- Processing and Marketing

Background

- Owned by 2 Katz Brothers
 - Heinrich and Peter
- Situated in Baruth, South of Berlin , Germany
- Founded in 2005 as a spin-off from Katz Biotech AG (KBAG)
- KBAG is the leading German company in rearing of beneficial insects and mites for biological pest control
 - Insect Technology Centre of the Katz Group at Berlin
- Has around 8 professional workers

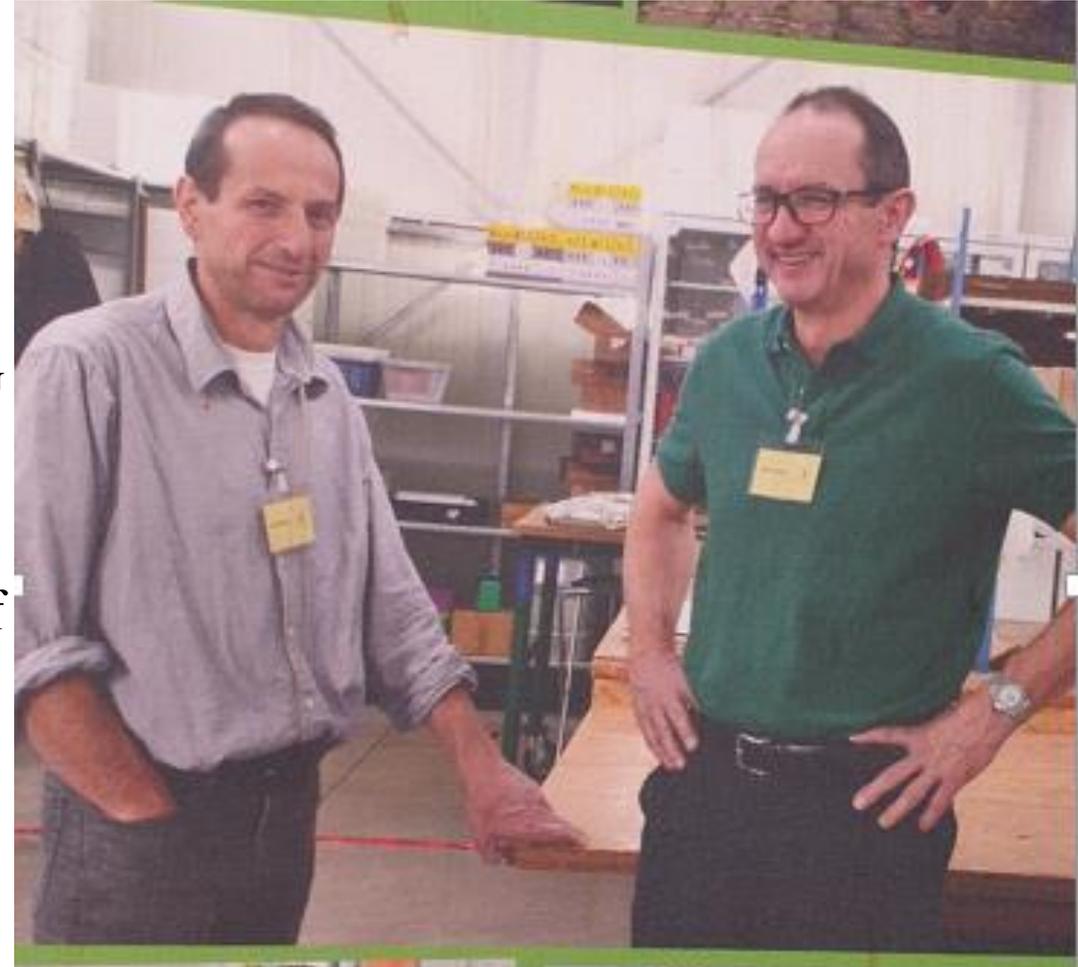


Figure 1: Heinrich (R) and Peter Katz

Production Units

- Fly house
- Egg incubation unit
- Larvae rearing unit
 - Bioreactors method
 - PVC boxes method
- Harvesting and Processing unit



Figure 2: Project team facility tour

Fly house : Pupa collection

- Pupa is sorted, weighed and then put into trays ready to be introduced into dark cages.



- **Figure 3:** Pupa ready to be introduced into the Fly House

Fly House Unit

- Controlled conditions
 - temperature, lighting and humidity
- Pupa hatching
- Setting up egg collection traps(cardboards)
- Egg collection



Figure 4: Inside the fly house

Fly House unit: Pupa hatching and egg trap setting

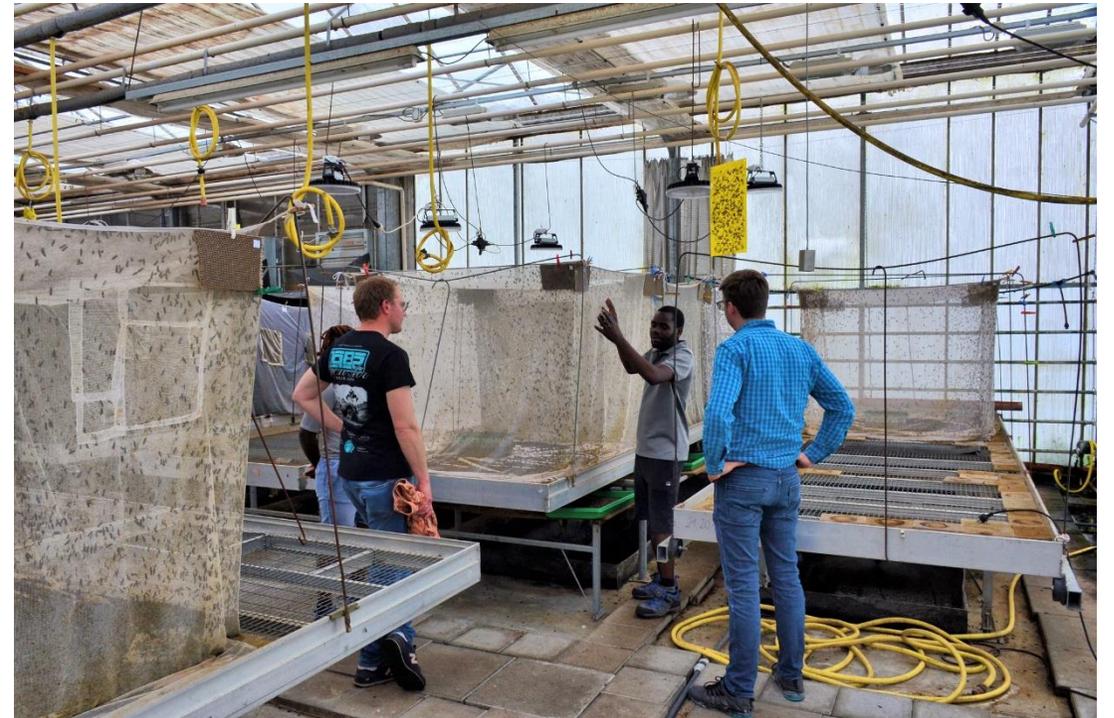


Figure 5: Fly moving from dark to light cages

Egg Incubation Pre-Larvae Rearing Unit

- Egg collection is done every 2 days , morning
- Weighed and well recorded
- A leaf is put in the container to enhance humidity



Figure 6: Egg weighing

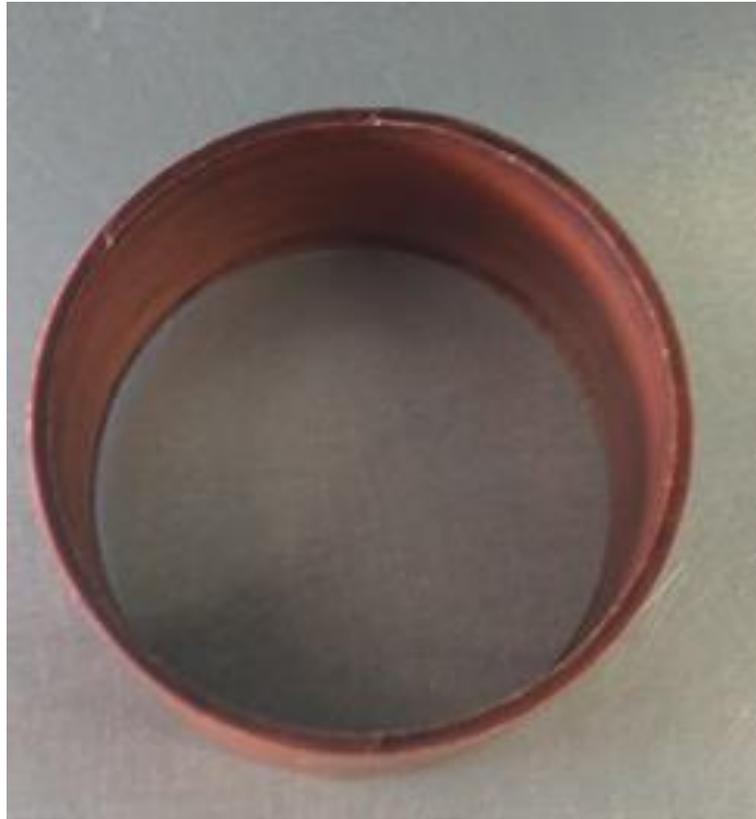


Figure 7: PVC ring (L) and egg incubation

Larvae Rearing

Grading



Larvae rearing



Figure 8: Larvae grading machine (L) and larvae rearing in bioreactors

Larvae Feeding

Processed Wheat bran



Larvae feed administration



Figure 9: Feed being administered to larvae

Proximate Composition

Table 1: nutrition composition for a sample larvae feed

Weizenkleie	Wheat bran	
Inhalt	Content	%
Rohprotein	Raw protein	18.20
Rohfett	Raw fat	4.30
Rohfaser	Raw fiber	11.40
Rohasche	Raw ash	6.51
L-Lysin	L-Lysine	0.73
Methionin	Methionine	0.27
Calcium	Calcium	0.18
Phosphor	Phosphorus	1.30
Natrium	Sodium	0.05
Wassergehalt	Water content	12.00
ME/kg	12.8	

Harvesting

Larvae harvesting



Pupa harvesting



Figure 10: Harvesting machine (L) and a rotating sieve

Processing and Marketing

Fresh larvae



Oven dried and Processed



Figure 11: Fresh packed larvae (L) and processed high protein BSF meal



Thank You