FILE CODE	**SB2M**
METHOD	**ESTABLISHMENT OF TEST COLONY FROM NUCLEUS**

RECOMMENDED PERIODS

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
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CONDITIONS

- Late spring and early summer when newly mated queens are available
- Presence of nectar and pollen flow

REQUIRED MATERIALS & EQUIPMENT

- ✓ Strong and healthy donor colony
- ✓ Standard hive (single box) and frames with built comb and foundation
- ✓ Mated queen of known origin
- ✓ Food supply (honey and pollen frames or food supplement)

PROCEDURE

1. Prepare the new hive and add frames with built combs and foundations. Leave free space for frames with bees, brood and food

2. Check the strength and health condition of the donor colony and select 3 frames with solid sealed brood and 2 frames with food (honey and pollen)

3. Select frames with a minimum covering of 70% of bees, take care to not transfer the queen from the donor colony

4. Transfer the frames to the new hive and add the queen in a cage closed with sugar fondant

PROCEDURE

5. If necessary add more bees to ensure that 70% of all frames will be covered with bees. Standardize the size of all colonies

6. If necessary add bee food (food supplement) to enhanced the start up of the nucleus

NOTES & SUGGESTIONS

- Set up all test colonies on the same day
- If possible set up each test colony from a single donor colony
- If possible set up the test colonies from an apiary distanced more than 3 km from the testing station. If the test colony cannot be distanced from the donor colonies, add additional bees brushed off from two brood combs
- Ensure that queen cage is appropriately positioned to enable queen release by the bees
- Prevent colonies robbing each other by avoiding spillage of sugar solution and keeping flight entrances small

ADDITIONAL INFORMATION

- Standard methods for rearing and selection of *Apis mellifera* queens (Büchler *et al.*, 2013)
- Standard methods for estimating strength parameters of *Apis mellifera* colonies (Delaplane *et al.*, 2013)

AGT Methodenhandbuch (www.toleranzzucht.de/zuchtprogramm/methodenhandbuch/)

Virtual testing apiary (www.smartbees-fp7.eu/extension)

Selektion der Honigbiene (IWF Wissen und Medien gGmbH, Nonnenstieg 72 D- 37075 Göttingen) Video material