

# “16 and Bee”



PCR genetic testing for African hybrid bees (AHB)

- Distinguish between *Apis m. scutellata* (African) v. *Apis mellifera* (European)
- Maternal mitochondrial DNA polymorphism (PCR → cytochrome b mitotype)
- Additional polymorphism tests to distinguish between Western honeybee races and paternal Africanized bees coming soon.
- Science fair project (Anton Grün) to determine (A) the frequency of AHB in feral and managed colonies in Orange County, CA, and (B) what impact do drones from managed colonies have on local frequency of AHB colonies ?

## Bee Sample Submission Form

Provide 1-3 bees from a colony (either workers or drones) in numbered microfuge tubes or individual Ziploc bags (labelled with bag ID or <date\_initials\_#> e.g. 01/16/24\_AG\_1). Mail or deliver specimens within 1-2 days to:

787 Allegheny Ave,  
Costa Mesa, CA 92626  
Tel. (714) 566-5223

Email: [antonkgrun@icloud.com](mailto:antonkgrun@icloud.com)  
[grunfelix@att.net](mailto:grunfelix@att.net)

**Date Bee Collected:**

**Colony Location/Address** (cross-streets or latitude/longitude):

**Tube/Bag ID Number or Label:**

### Colony type

Managed hive:

Feral hive:

### Hive type

Hive box:

Tree/stump:

Utility box:

Wall:

Ground:

Other (describe):

**Defensive behavior** (on scale 1-5 with 1 = docile and 5 = very defensive)

1      2      3      4      5

### Age of colony

Recent arrival (<1 month):

Old (>1 year):

Unknown:

If managed hive, does colony have a marked queen ?

Yes

No

Date that colony last requeened:

**Any additional comments/observations ?**

**Name:**

**Email Address** (if you would like notification of results):