

Online Resources 1

Article title:

Preliminary report on honeybee physiological changes pre- and post-hybrid lavender season in high and low weight-gain colonies

Journal name:

APIDOLOGIE

Authors names:

Claudia Dussaubat^{1,2,3,4}, Alban Maisonnasse^{1,3,5}, Luc P. Belzunces^{1,3}, Jean-Luc Brunet^{1,3}, André Kretzschmar^{2,3}

Affiliations :

¹INRAE, UR 406 Abeilles et environnement, 84914, Avignon, France.

²INRAE, UR 546 Biostatistique et Processus Spatiaux, 84914, Avignon, France.

³UMT PrADE, Site Agroparc, CS 40509, Avignon, France.

⁴Independent Consultant, 84140, Avignon, France & Valdivia, Chile.

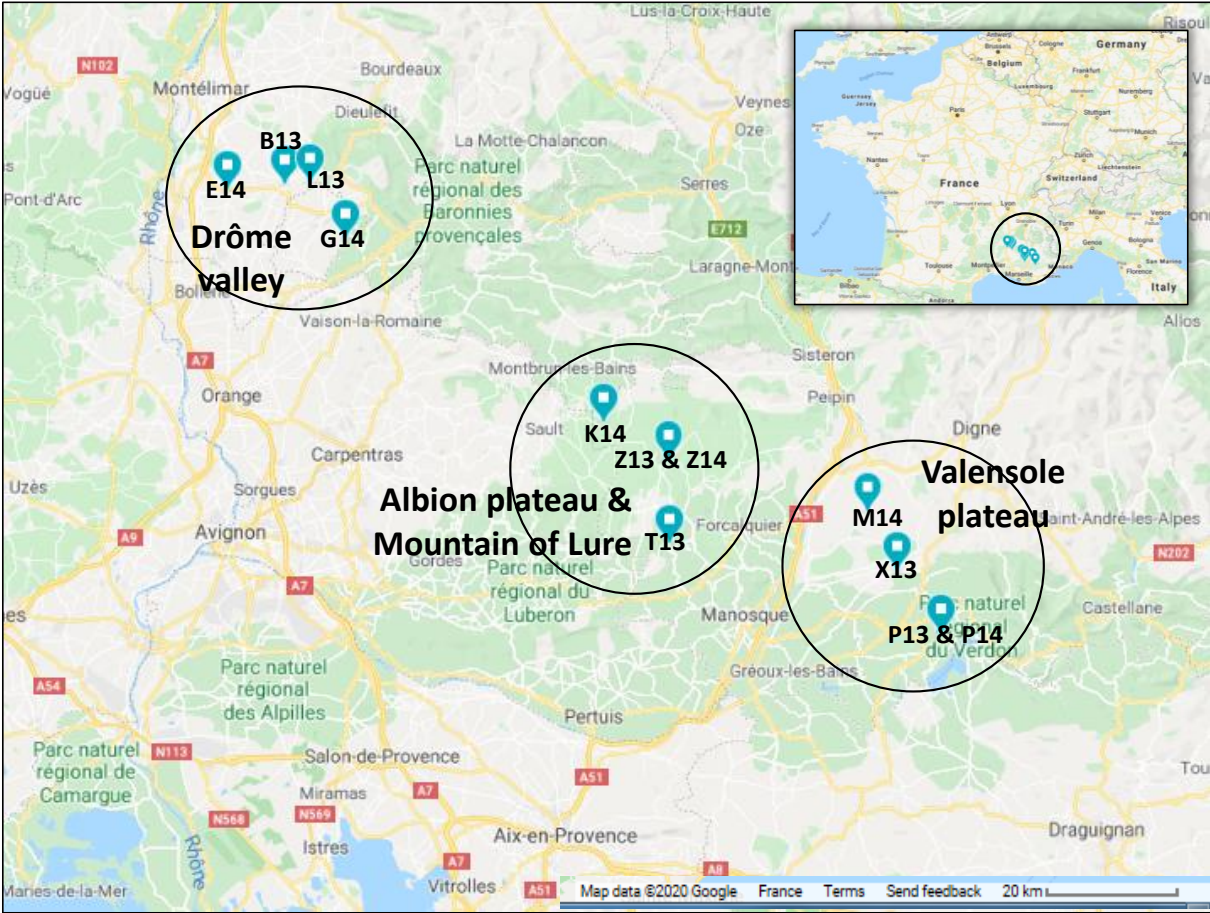
⁵ADAPI (Association pour le développement de l'Apiculture), 22, Avenue Henri Pontier, 13326, Aix en Provence Cedex 1, France.

Corresponding author: Claudia Dussaubat, e-mail: cdussaubat@yahoo.com.

(a) GPS coordinates of apiary sites

| Year | Productive area | Lat. North | Long. Est | Apiary Code |
|------|---------------------------------|-------------|------------|-------------|
| 2013 | Drôme valley | 44°25'40" | 4°54'35" | B13 |
| | | 44°25'44" | 4°57'30" | L13 |
| | Valensole plateau | 43°48'34.1" | 6°10'00.4" | P13 |
| | | 43°53'50.6" | 6°04'54.7" | X13 |
| | Albion plateau/Mountain of Lure | 43°55'59.2" | 5°38'43.6" | T13 |
| | | 44°02'56.9" | 5°38'37.7" | Z13 |
| 2014 | Drôme valley | 44°25'15.5" | 4°47'59.0" | E14 |
| | | 44°21'09.4" | 5°01'34.9" | G14 |
| | Valensole plateau | 43°58'44" | 6°01'33" | M14 |
| | | 43°48'34.1" | 6°10'00.4" | P14 |
| | Albion plateau/Mountain of Lure | 44°06'04.5" | 5°31'10.9" | K14 |
| | | 44°02'56.9" | 5°38'37.7" | Z14 |

(b) Sites positions



Note : see table “GPS coordinates of apiary sites” page 2 for apiary codes and years.

(c) Picture 1: Scale used for weight gain measures.



Pallet lifter with electronic scale

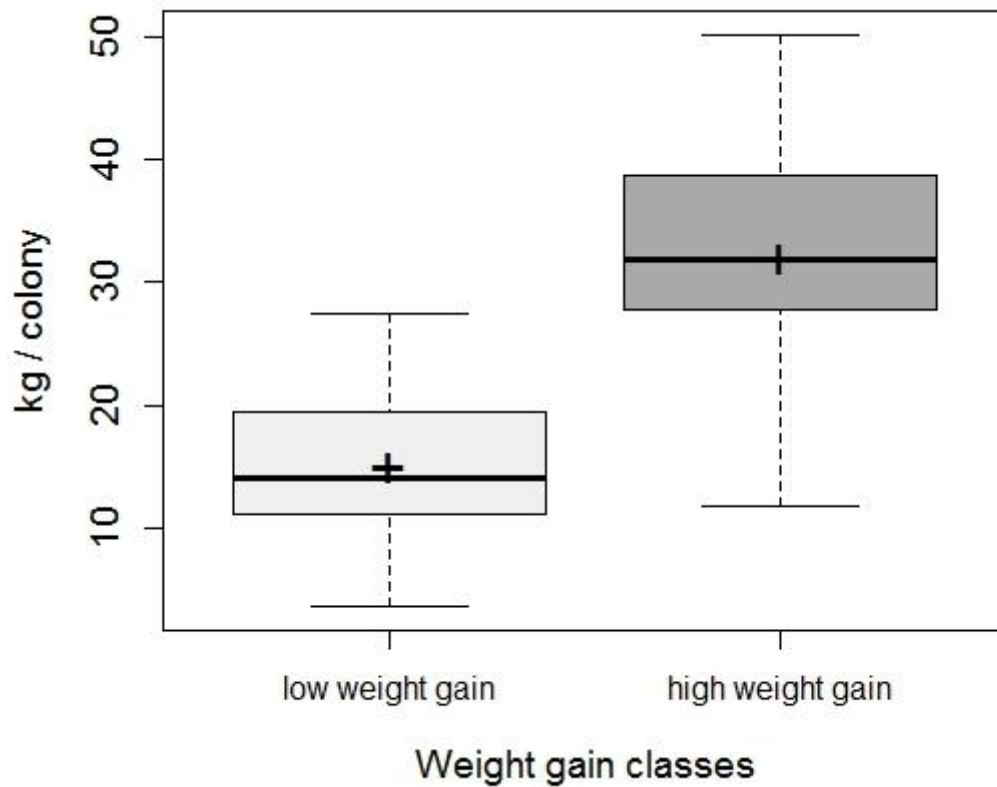
Individual pallet

(d) Picture 2: Colonies on pallets.



Individual pallet

(e) Dispersion of colony weight gain (kg) in weight gain classes



Boxplots show 1st and 3rd interquartile range with line denoting median and plus sign denoting mean, whiskers encompass 90% of 120 colonies beyond which outliers are represented by circles.