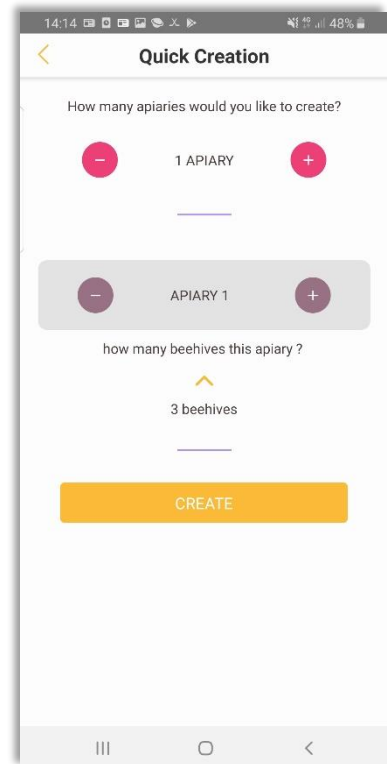# Instructions for use apizoom

(with use of an additional camera)

Step 1: initial configuration of the hives

- go to the main menu
- choose action "quick creation".
- indicate the number of hives and apiaries

Note :

personalization is possible later (names, comments, colors). It is possible to create the hives and the apiaries one by one with the button "create".
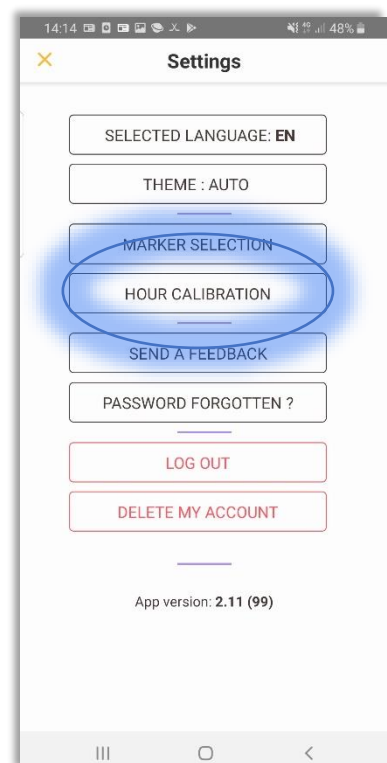
Step 2: Initial hour calibration

Time calibration is necessary to assign the results to the hive concerned.

- access to the app's settings
- take your additional camera
- start the function "hour calibration"
- take a picture with the additional at the end of the countdown
- download the photo taken on the apizoom.app website, page scan my photos

Note :

It is necessary to perform calibration every time the camera is changed, or after a summer/winter time changeover if the backup camera does not provide this function.

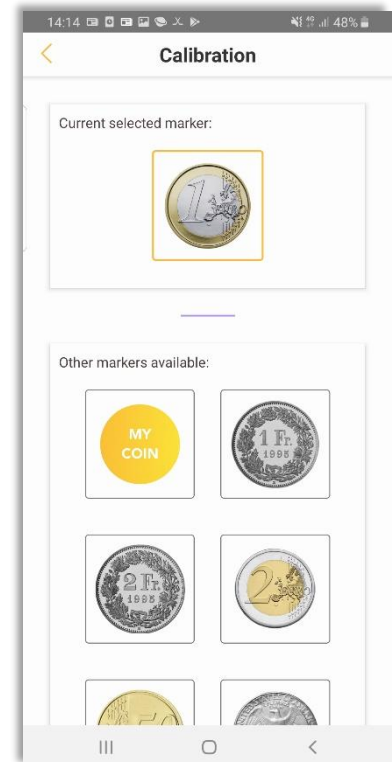**Caution: the calibration photo must be sent before the next steps**

Step 3: Choosing the marker

The marker is an indispensable aid for achieving optimal results. It must be placed on the board when taking a picture. A coin makes a good marker.
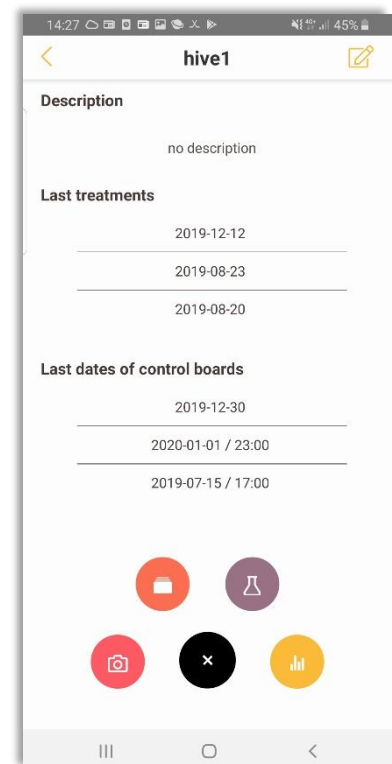
- Access the settings of the app
- Choose the marker selection function
- Select a predefined coin
- You can enter a personal part in which case its diameter must be entered

Notes: The configuration must be adapted to each marker change. The marker can also be selected when taking a picture.
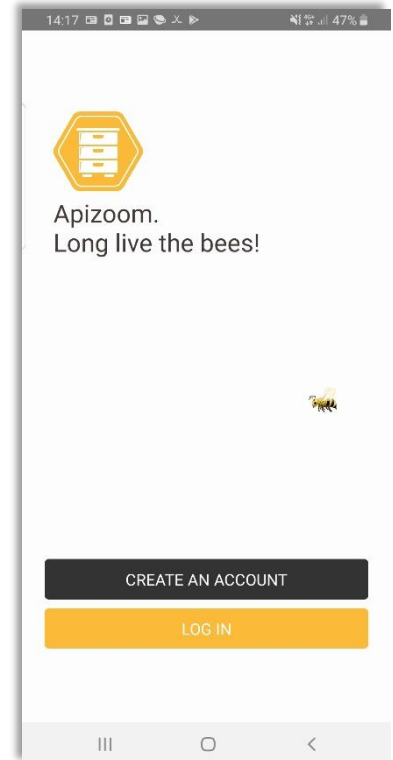
Step 4: Taking a photo

- Choosing a hive
- Place the control board on the ground
- Place the selected marker on this board
- Select the hive concerned in the application and enter in this hive the associated action "taking a picture" (camera button).
- Take the picture of the board with the additional camera. See the recommendations for taking pictures on our site and on the video instructions for use. A camera with at least 24 MP is recommended.
- Confirm photo shoot
- Proceed in a similar way for all hives
- Upload these photos from the website after entering your user code which is prominently displayed in profile
- The rest is automatic, the results will appear in the result menu.

Other useful functions

- By entering the date of installation of the boards, the daily average is directly calculated.
- By entering the date of a treatment, this information appears on the graphs and it is possible to interpret the results.
- In the result menu, it is possible to download the results in csv format.
- In the result menu, it is possible to select the result of each scan to delete the submitted photos, or upload them with the detected varroa mites. For each photo, it is possible to change the result of the model prediction by manual input.
- In the result menu (+ button on the top right), it is possible to submit photos from the application. See the next chapter for coordination possibilities.

Coordination possibilities between camera and smartphone

Technical possibilities exist to coordinate the additionnal camera with the smartphone. In these cases, the photos can be delivered directly from the application (results menu, + button on the top right).

wi-fi capability

Some cameras provide a WI-FI connection with the smarphone. The photos are thus duplicated on the smartphone.

External backup media

Some smartphones offer the possibility to use an external SD card reader. Simply transfer the SD card from the backup camera to this external drive connected to the smartphone. You can then select the external drive from within theapplication.