

Optimal timing for
the application of Biologicals using
advanced models and
high resolution weather data.

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RIMpro

Biologicals

Short application time slot:

- Non-persistent (UV, rain etc.)
- Target specific stage in biology
- Specific application conditions (e.g: temp, wetness, RH)

This may limited efficacy compared to chemicals

- Optimal timing necessary for satisfying end-user results
- Pest-diseases models help to improve efficacy



ARMICARB®

A natural fungicide for disease and residue management

Mating disruption



Your pheromone traps are blinded.
You need a model to determine
timing of supporting applications.

Traditional warning models provide insufficient detail

Example Codling Moth:

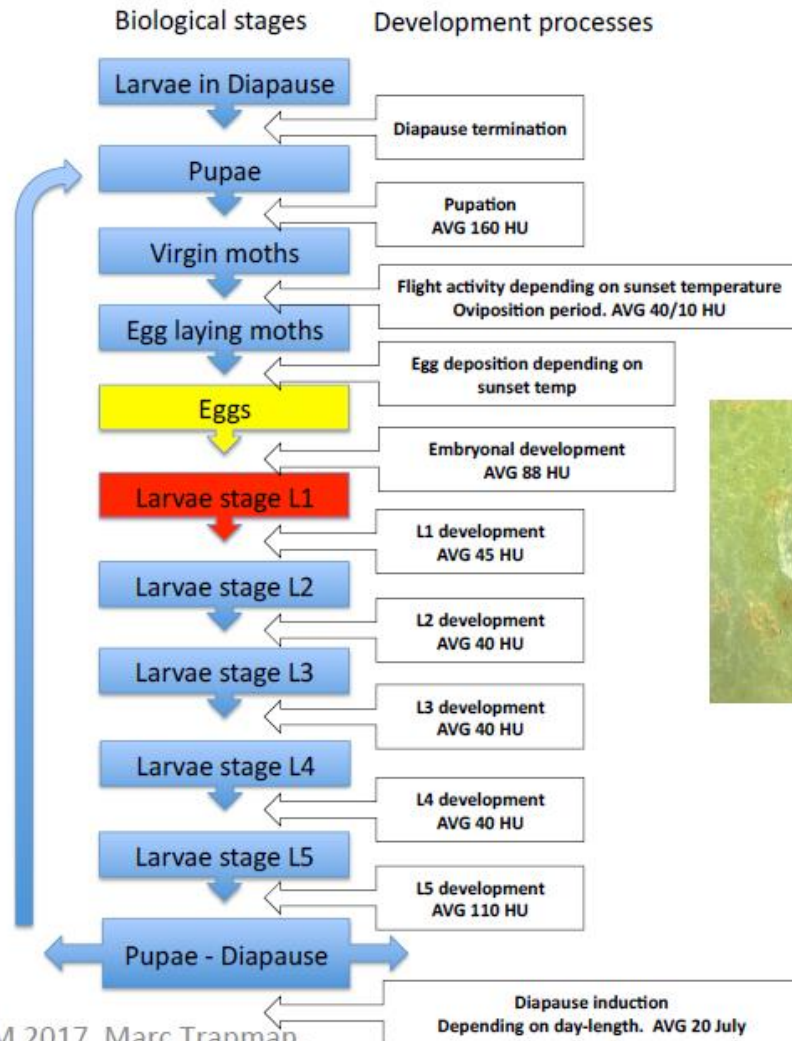
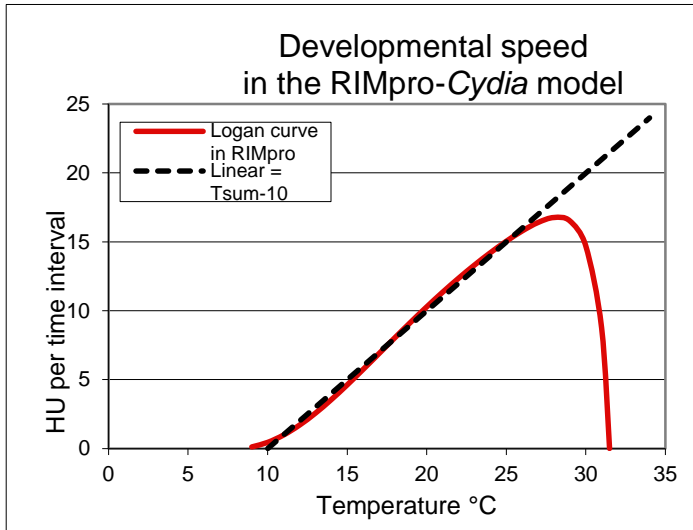
- All steps in the biology simplified to one process
- Linear relation to air temperature
- Crude estimation of events
- No quantitative information



Degree Day total (DD) After Jan 1 st	Predicted Event
100	Start emergence of mots form overwintering generation
150	Start egg laying
220	Start of egg hatch 1 st generation
575	Start emergence of mots form 2 nd generation
700	Start of egg hatch 2 nd generation

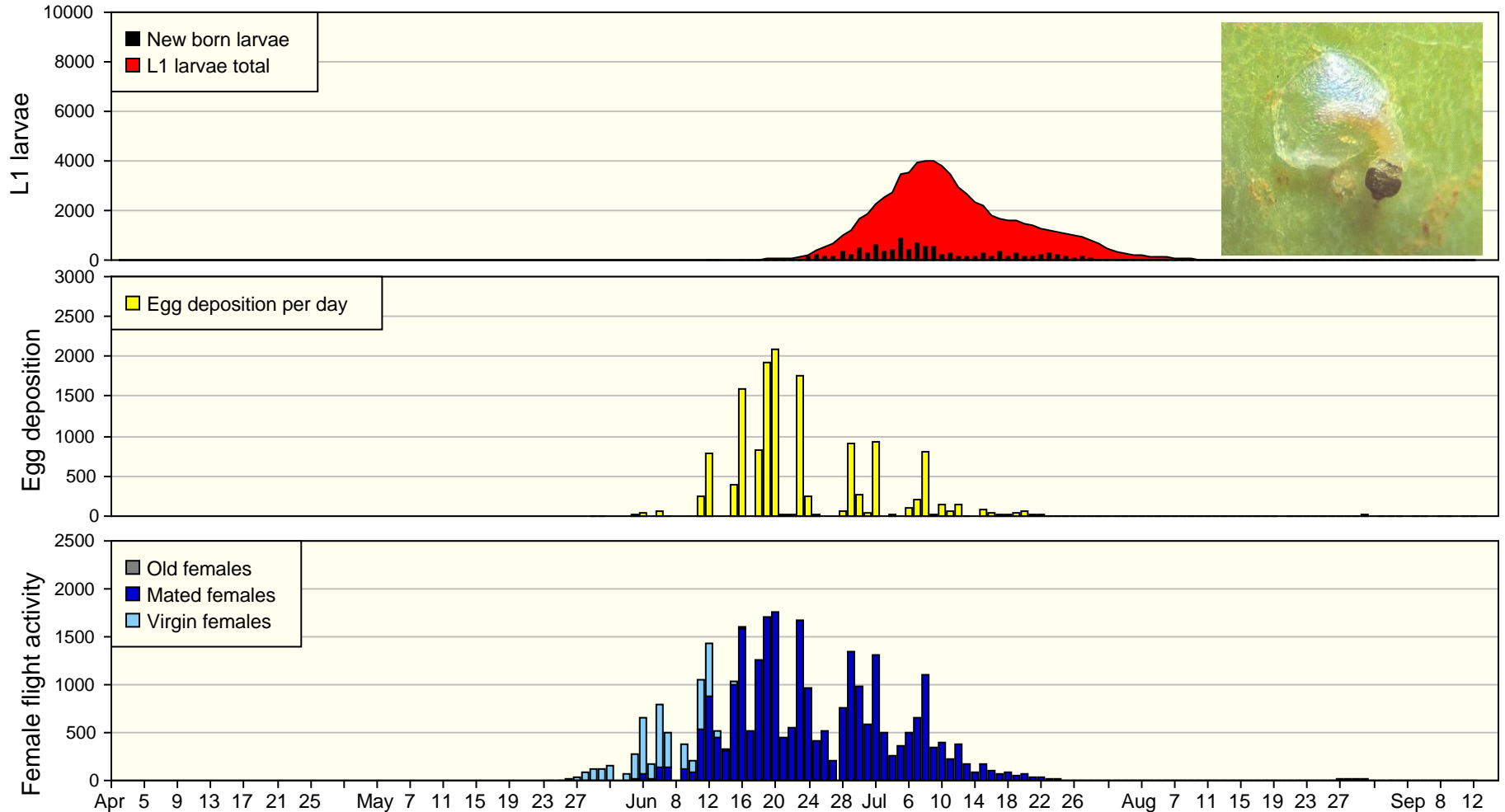
Advanced models provide quantitative information

Flow diagram RIMpro-Cydia



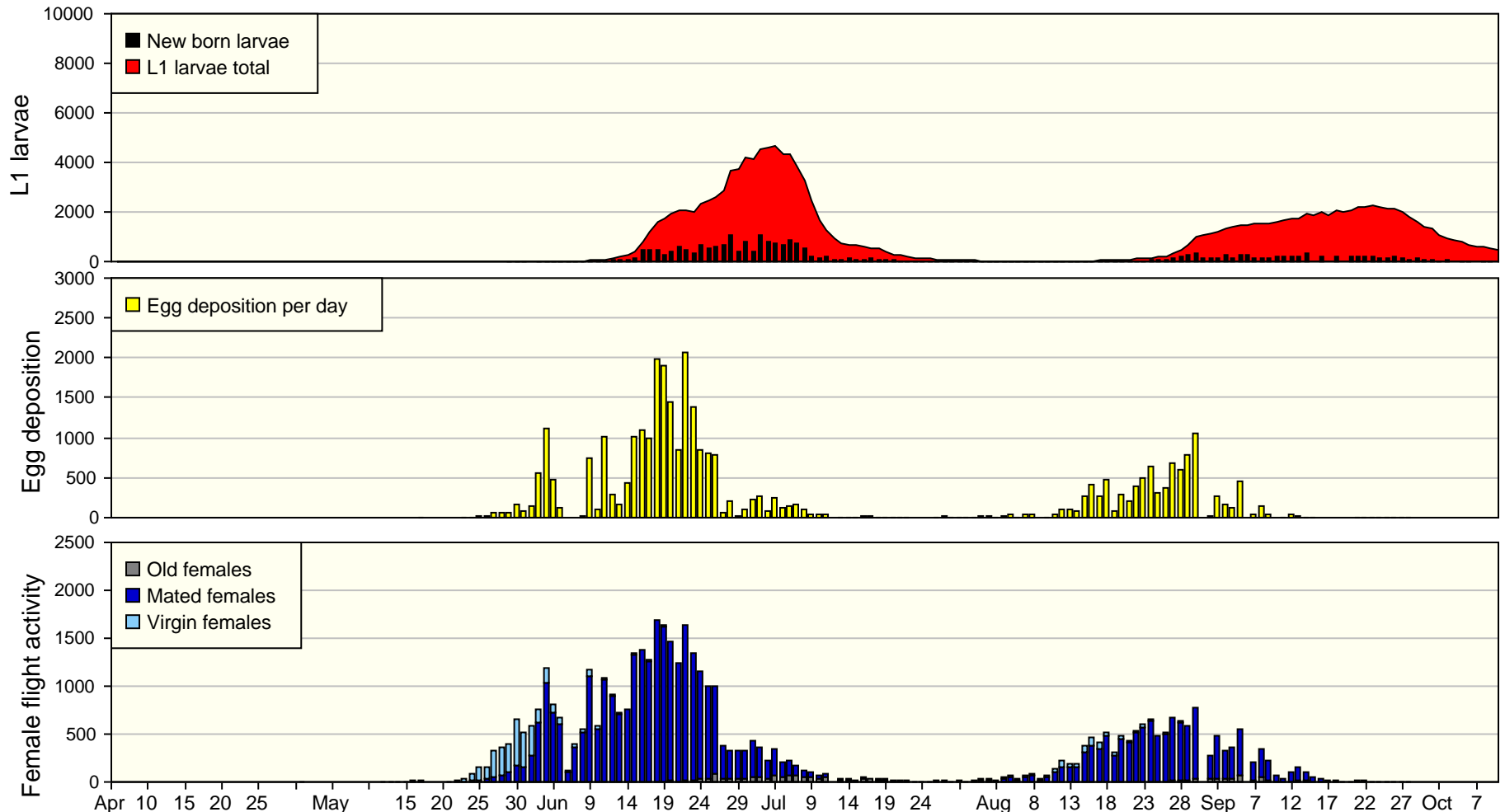
Denmark: only one generation

RIMpro-Cydia location Harndrup - 2017



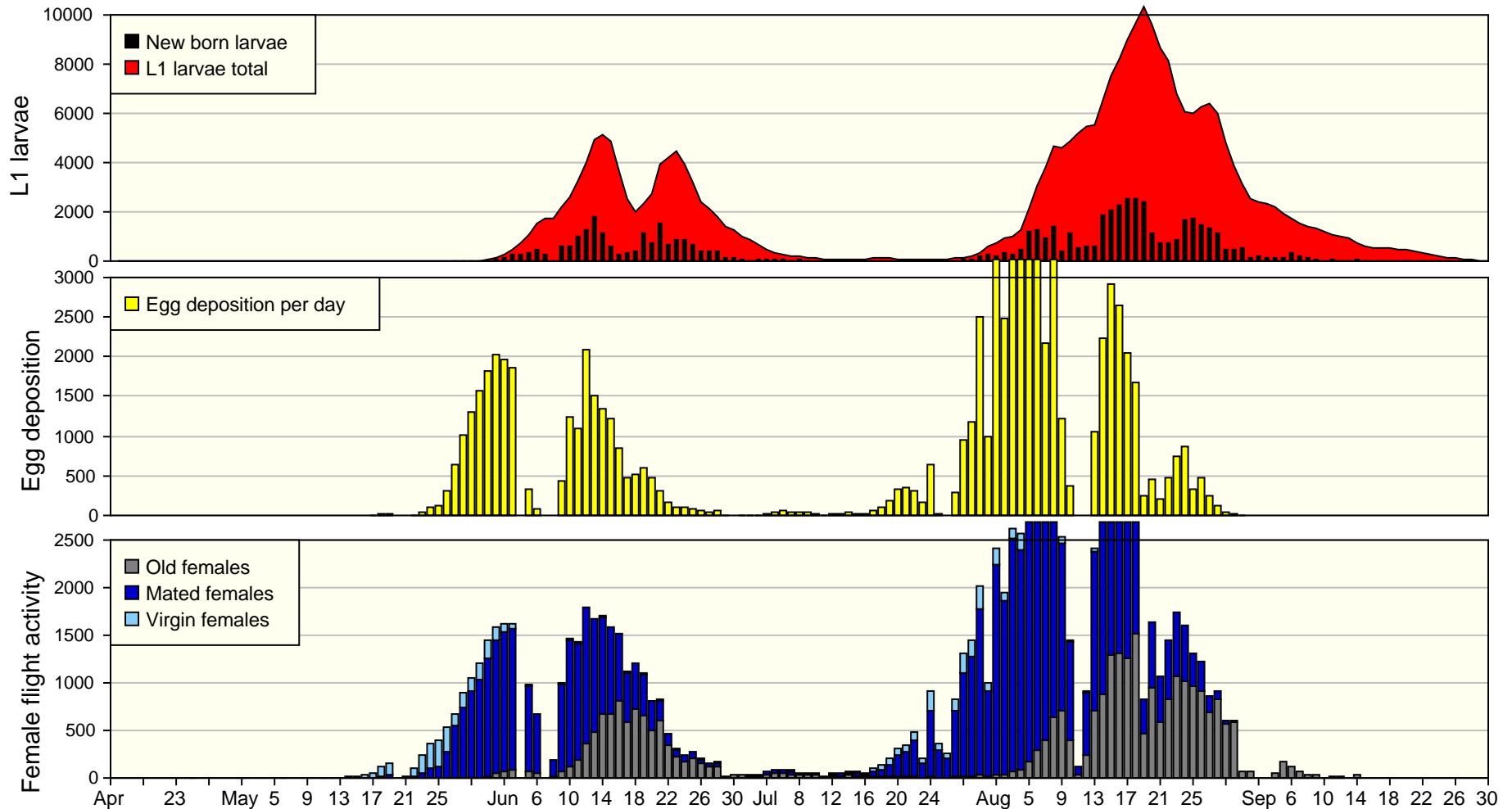
UK: Chance for a small second generation

RIMpro-Cydia location Harbledown - 2017



Codling Moth at FiBL, Zwitterland

RIMpro-Cydia location Frick - 2017

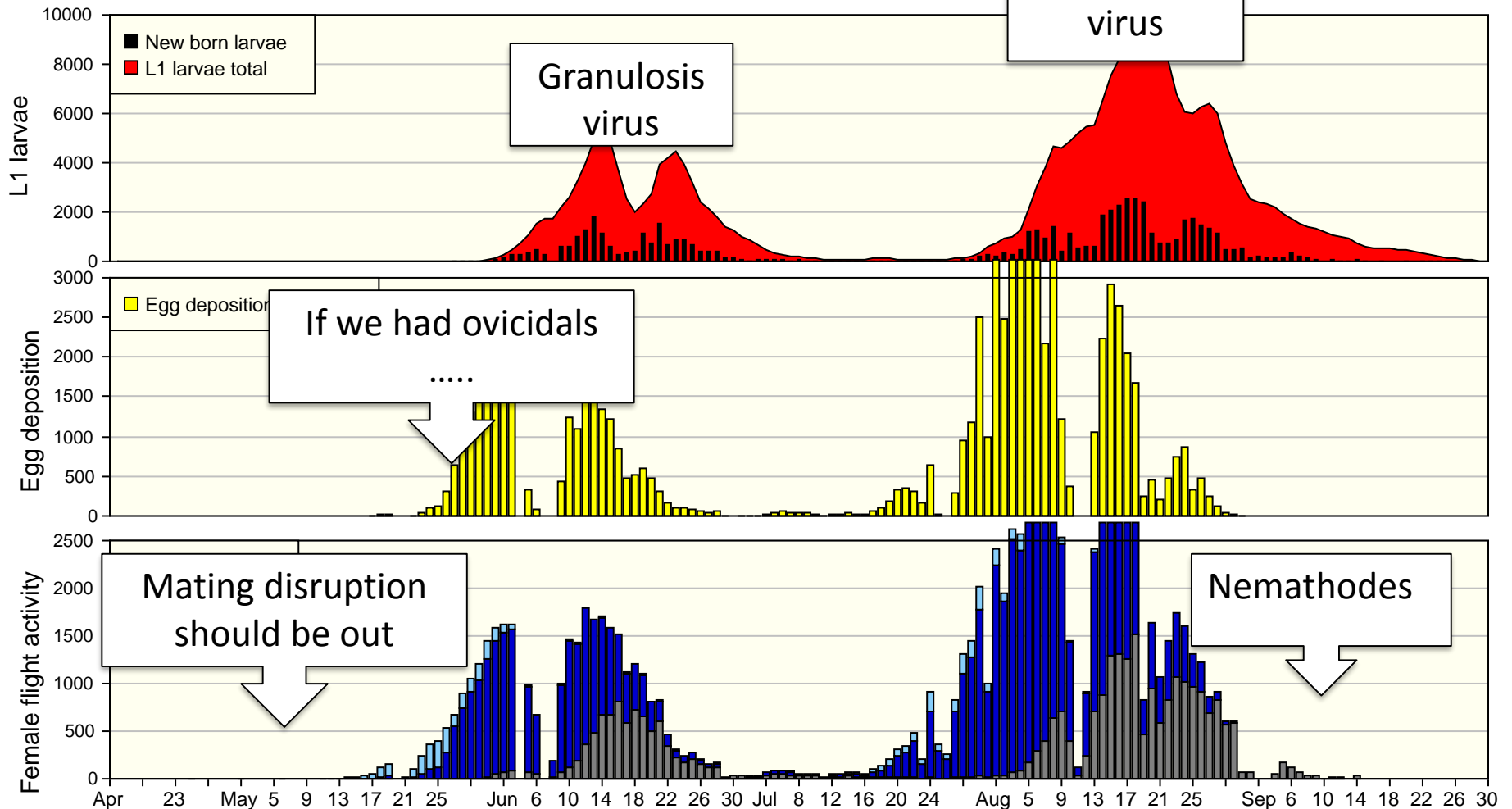


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Implement a strategy

RIMpro-Cydia location Frick - 2017

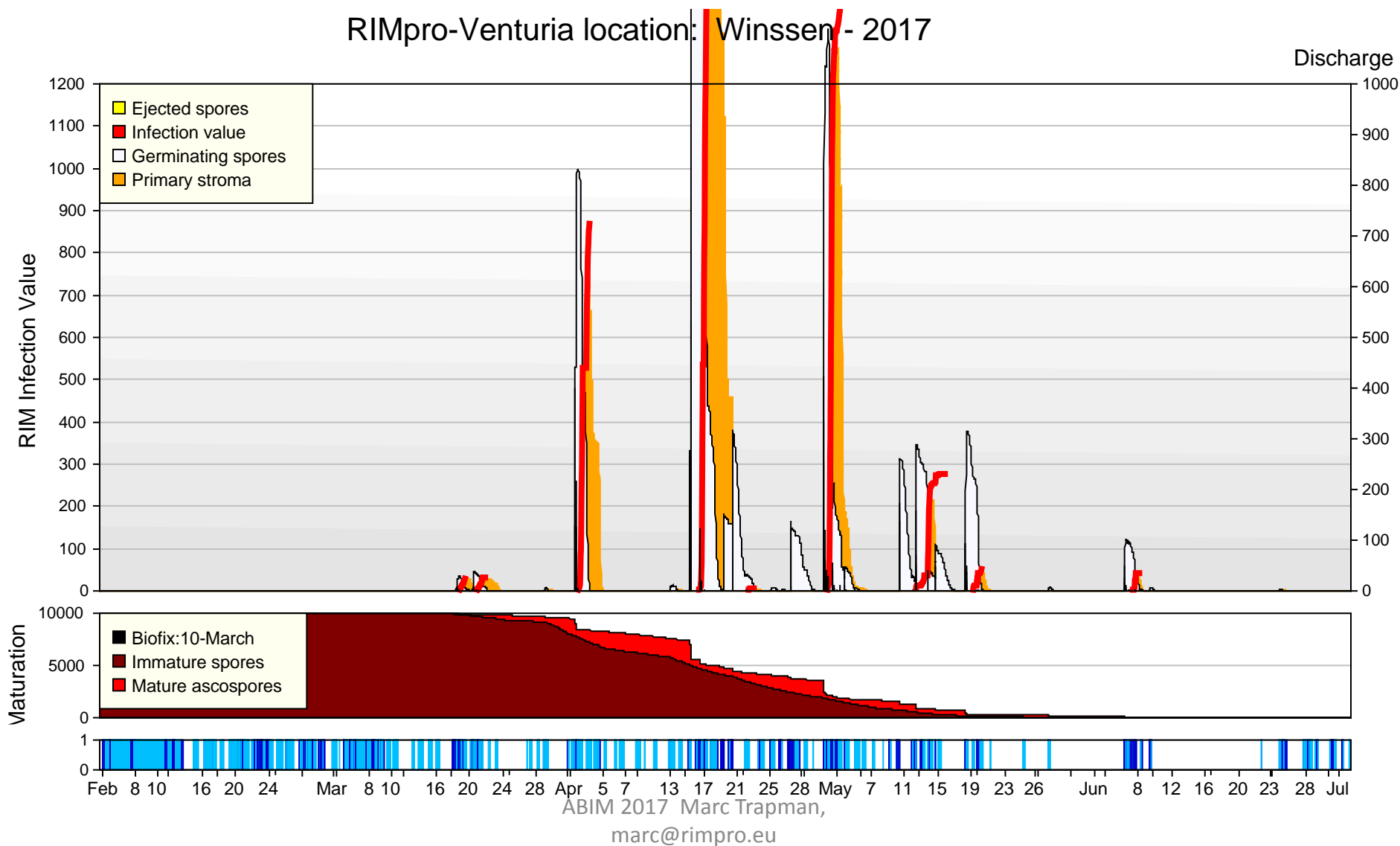


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Apple scab: 7 day schedules often disappointing

Applications should be concentrated on key infections

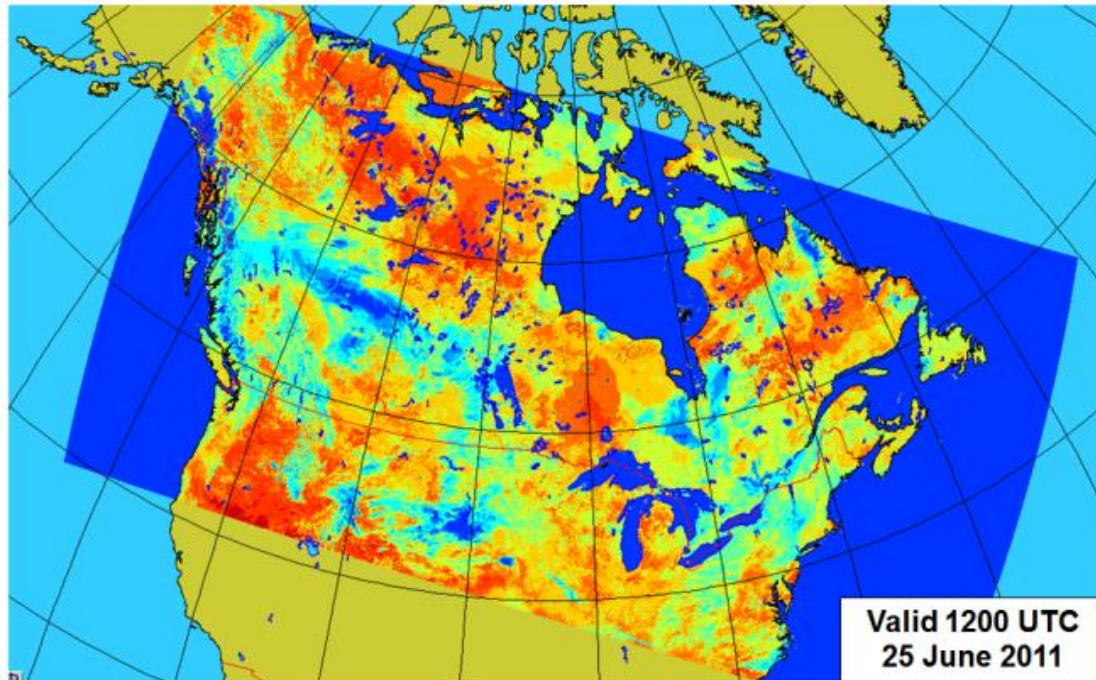


Until now: 'on-farm' weather station required



Nowcast is getting very accurate

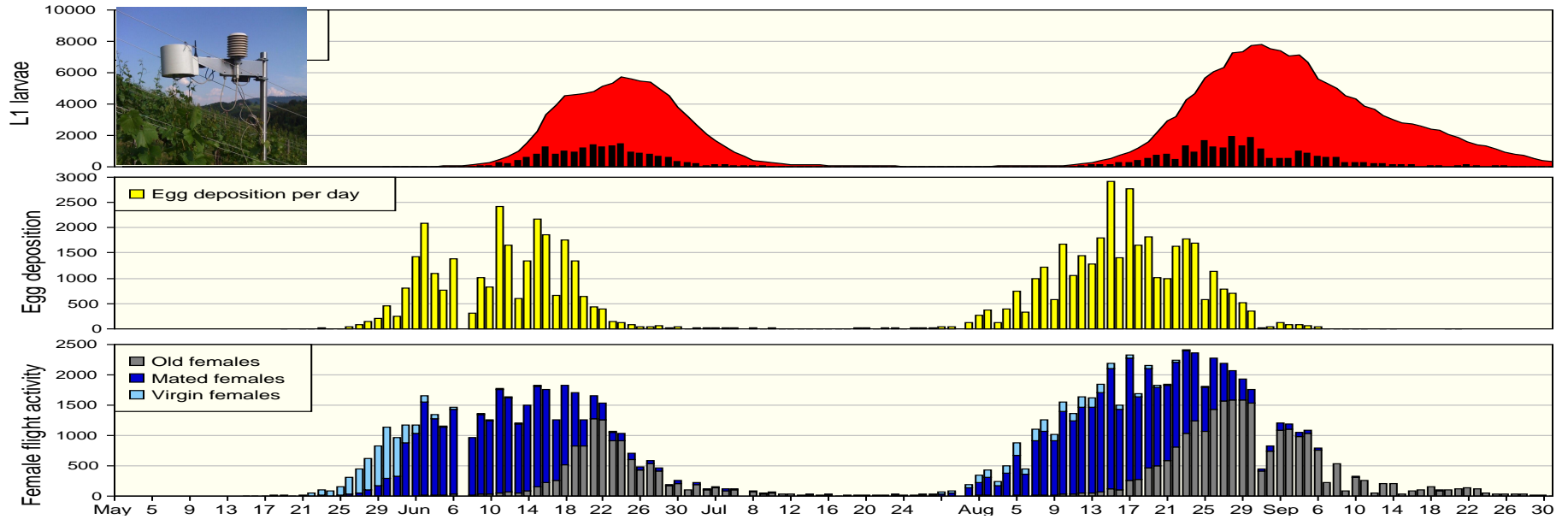
HRDPS : High Resolution Deterministic Prediction System



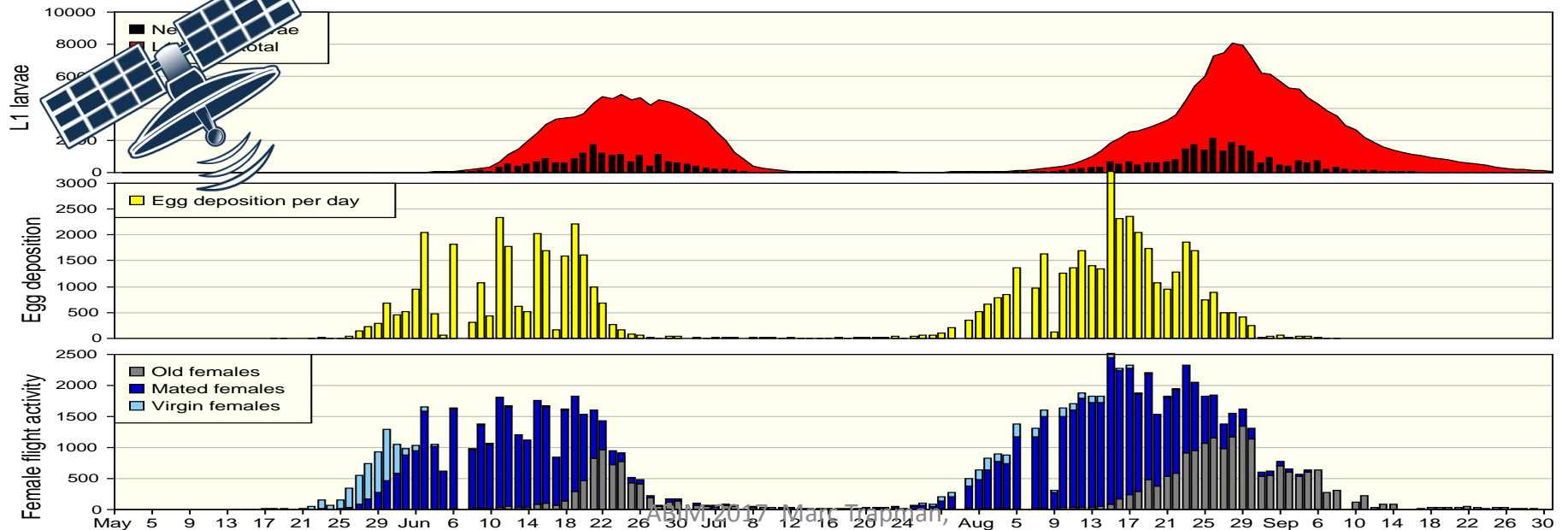
- Data every **30 minutes**
- **2.5 km** mesh grid spacing

Other providers: MeteoBlue, MeteoFrance, Iteris, SkyBit.....

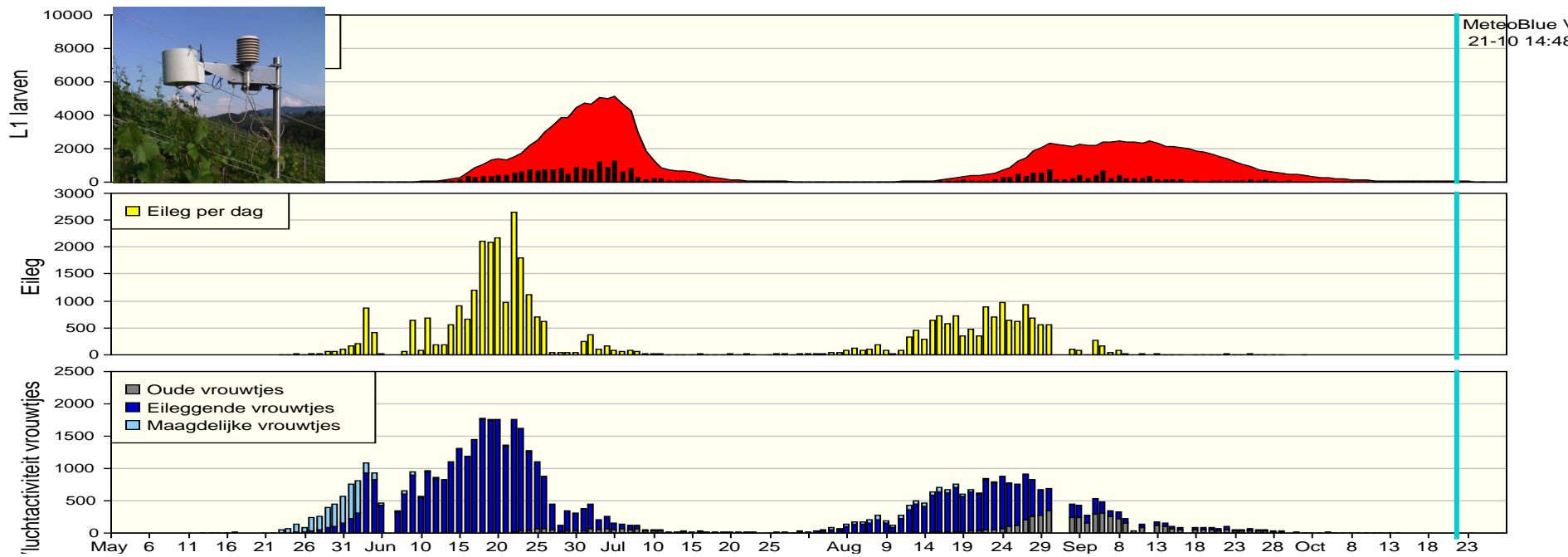
RIMpro-Cydia location Konijn Davis - 2017



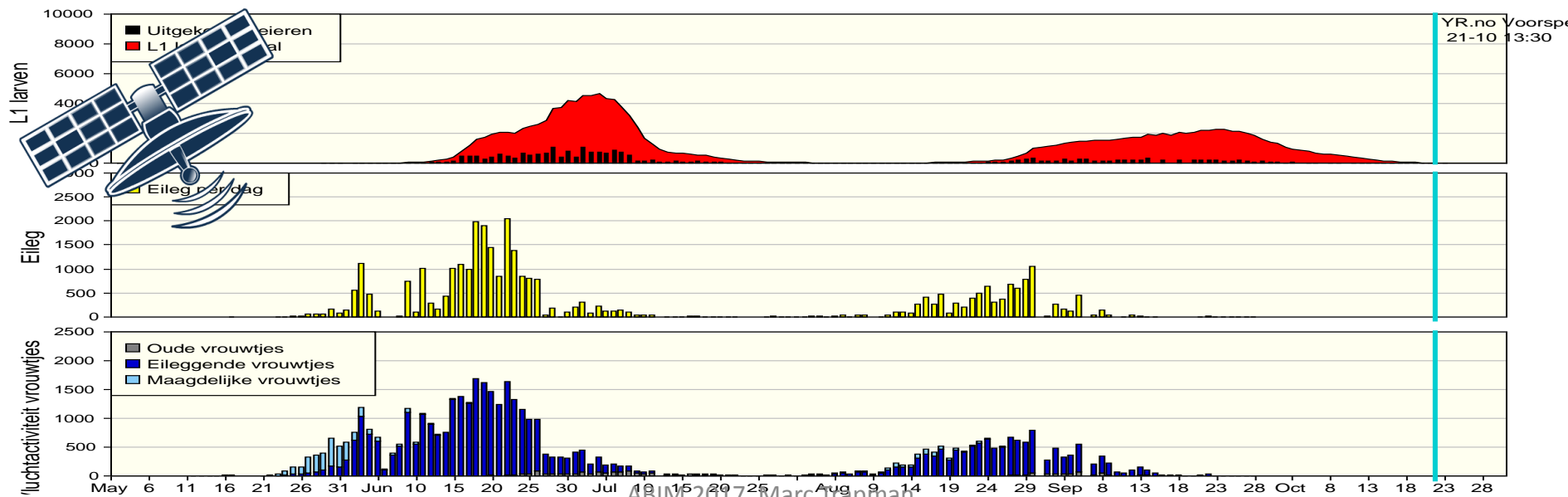
RIMpro-Cydia location Konijn MBVirtueel - 2017



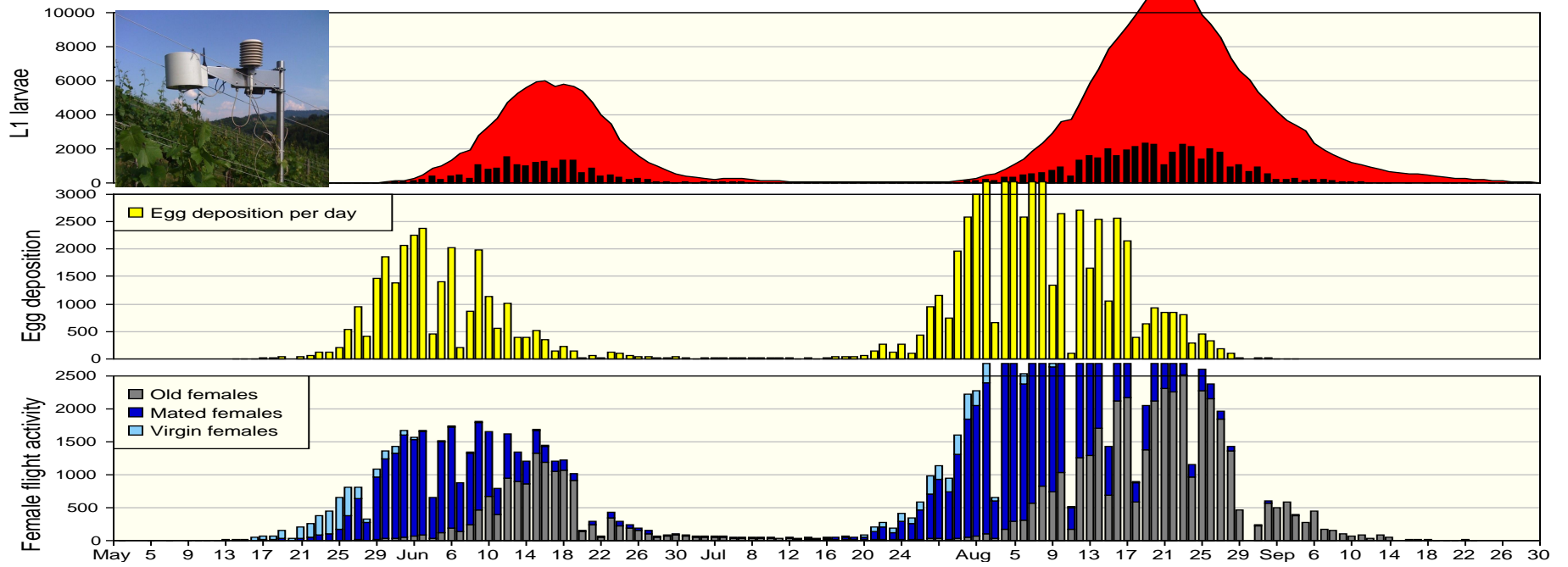
RIMpro-Cydia locatie Harbledown MeteoBlue - 2017



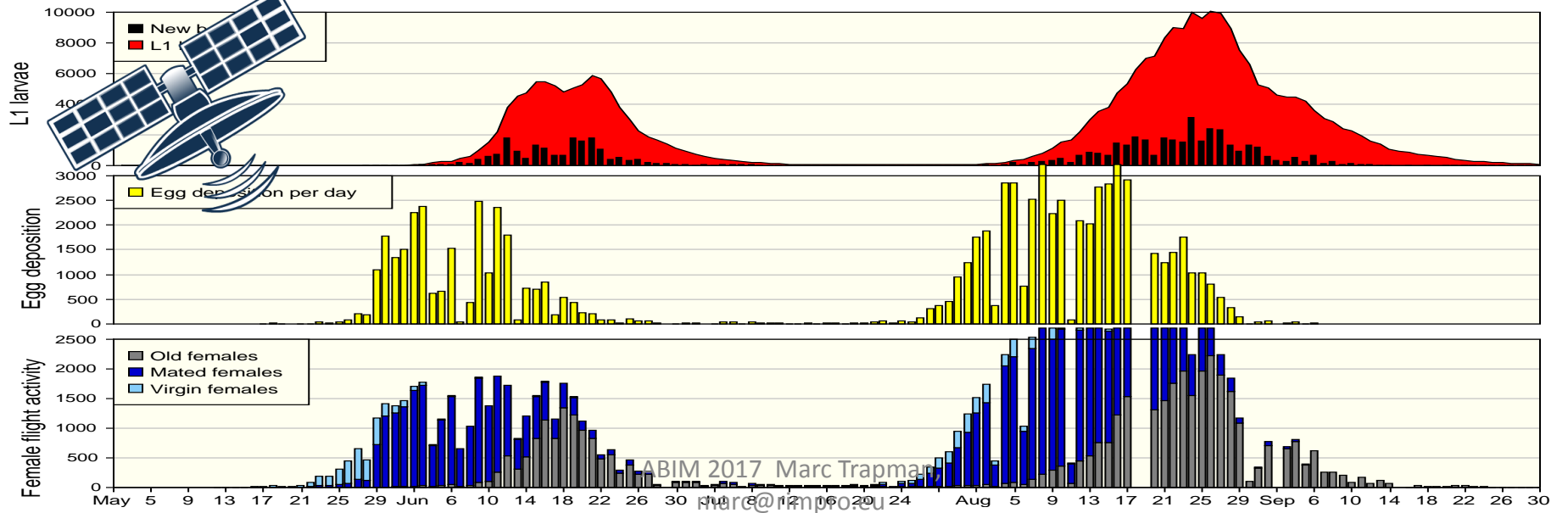
RIMpro-Cydia locatie Harbledown - 2017



RIMpro-Cydia location Verhemeldonck Davis - 2017

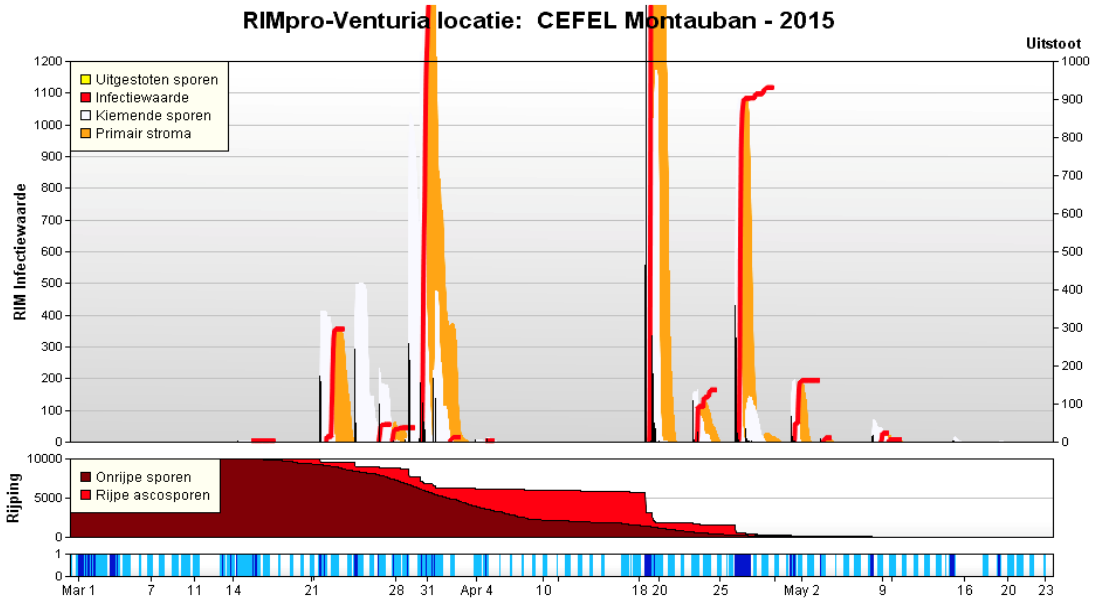


RIMpro-Cydia location Verhemeldonck MBvirtueel - 2017

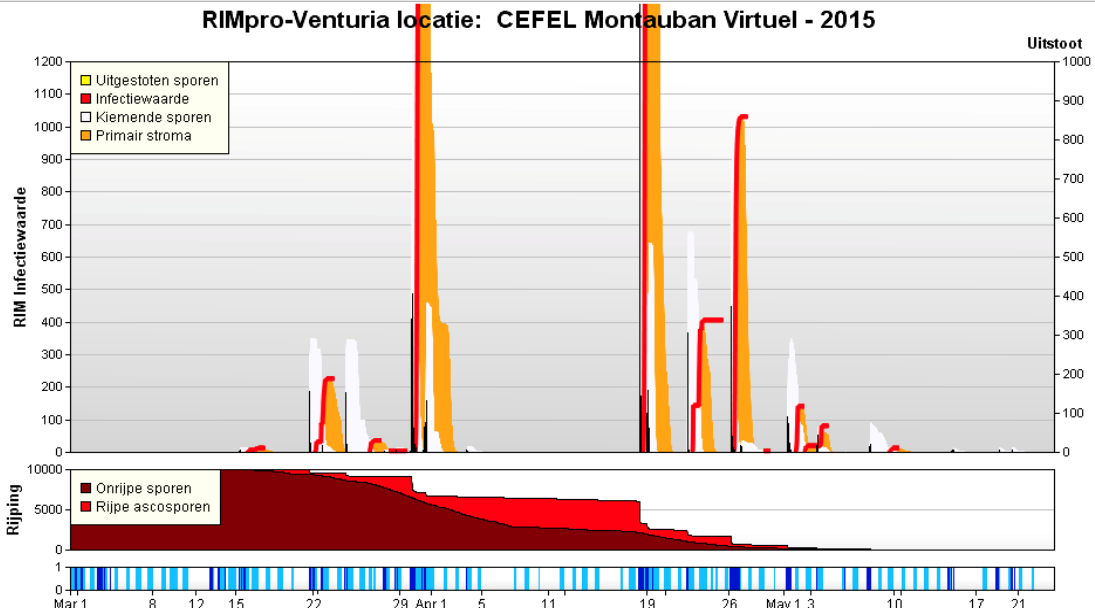




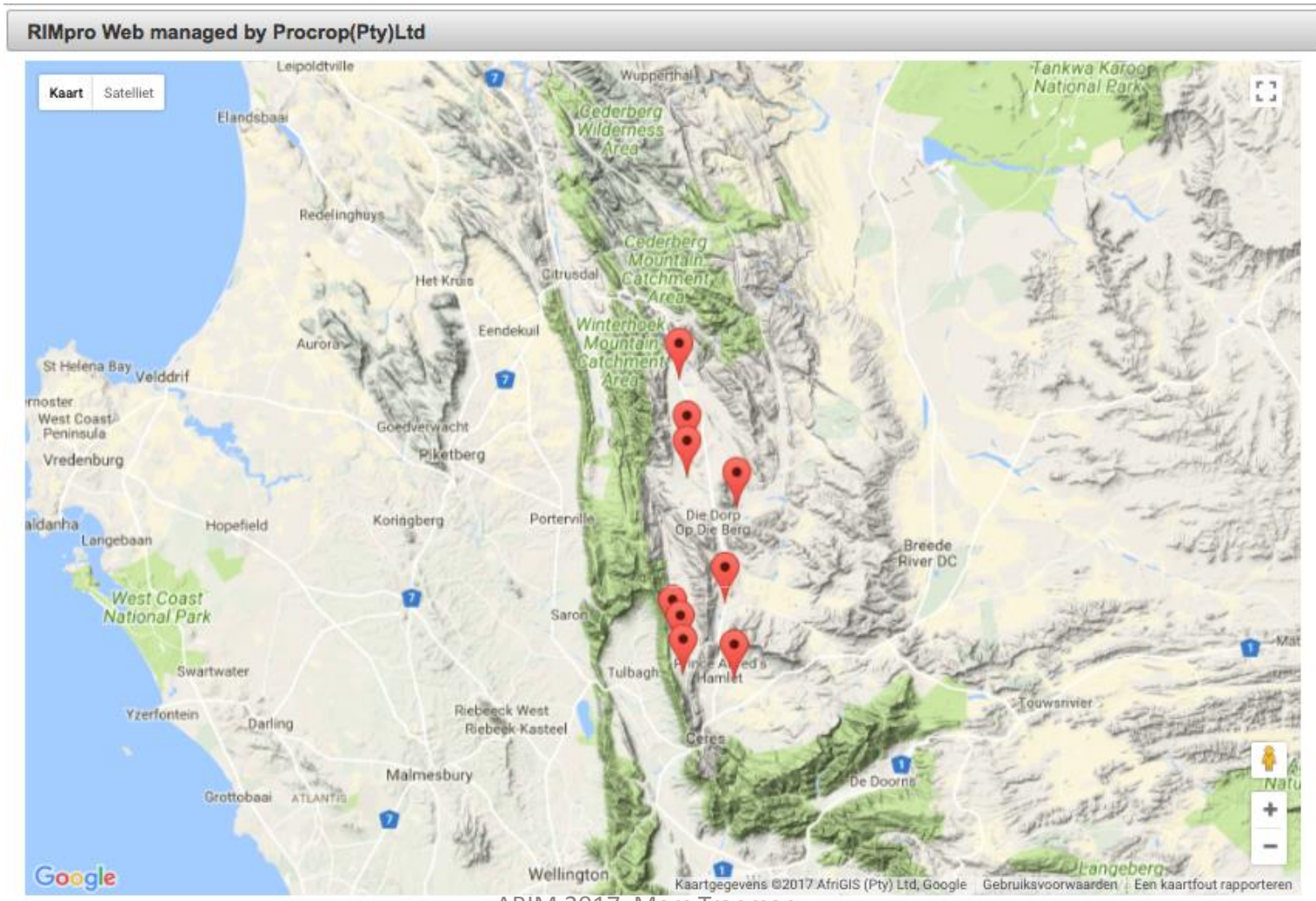
Field station



MeteoFrance



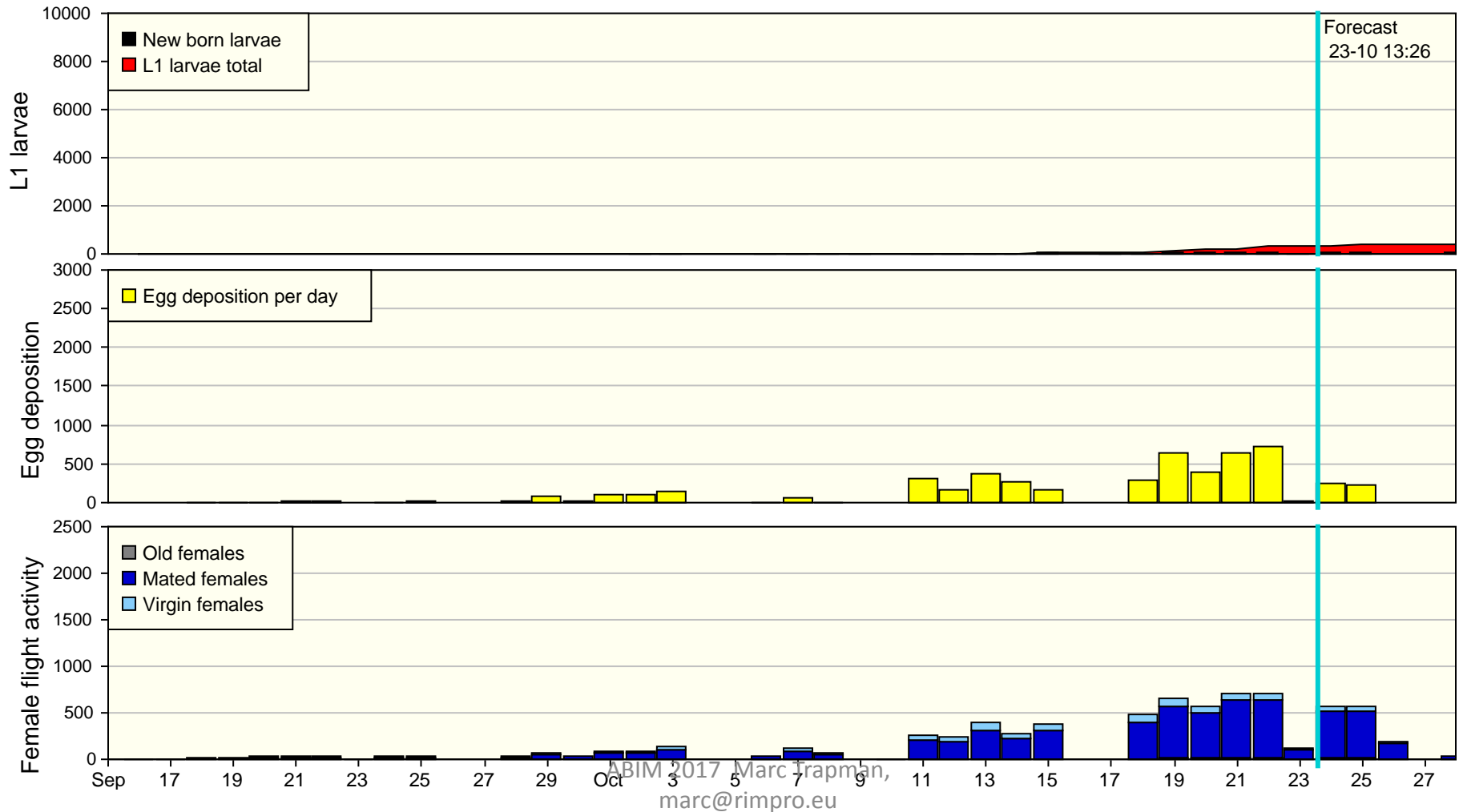
Practical situation in South Africa : Guiding Scab and Codling Moth management



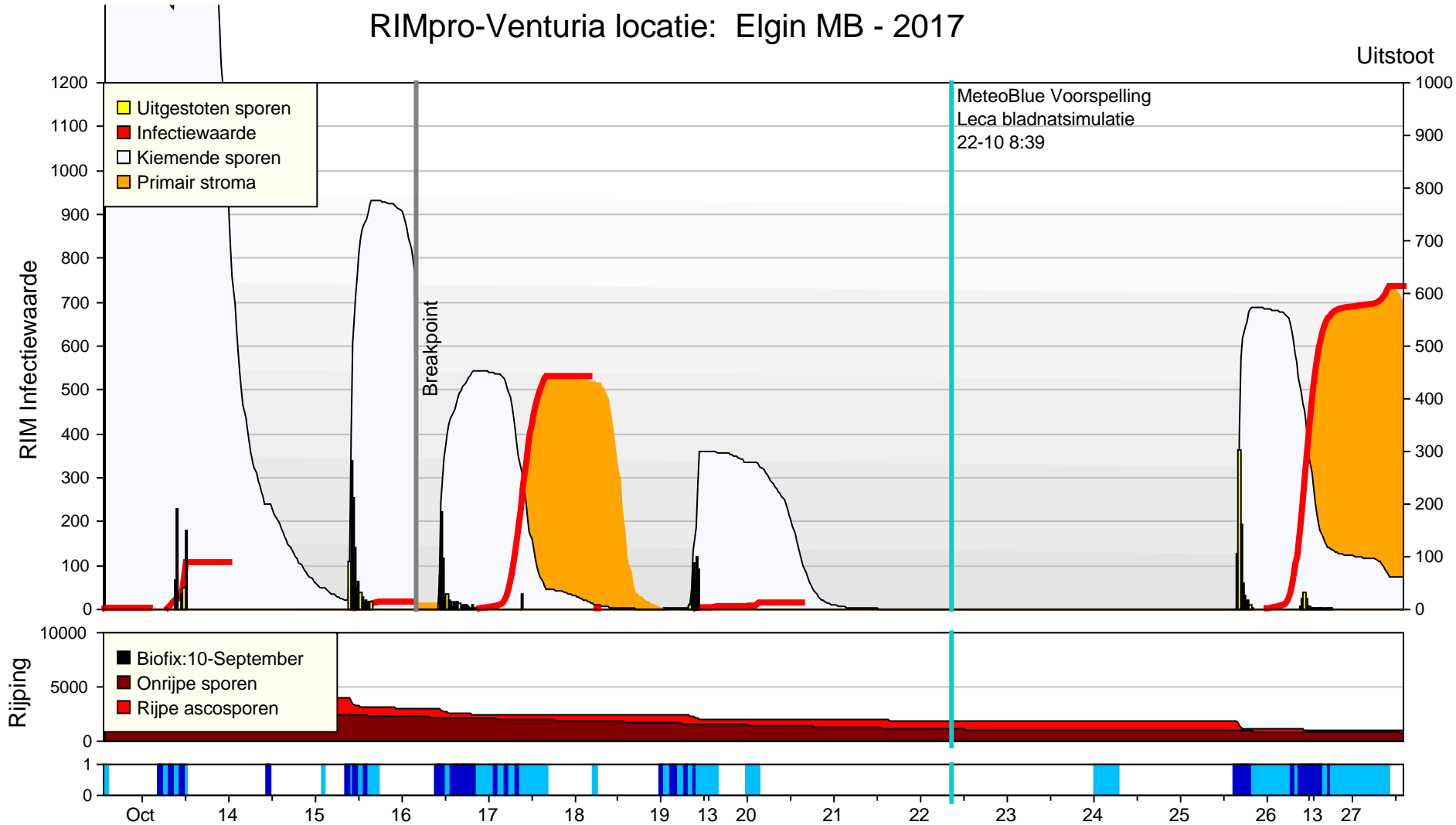
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Situation okt.23: Codling Moth egg hatch started, but still on very low level

RIMpro-Cydia location Lindeshof Virtual - 2017



Prediction: Fungicide treatment needed on Oktober 25 !



Great opportunities !

- Quantitative pest and disease models help to optimize the use of biocontrols.
- Now the input of 'now cast' data from meteo providers enables to guide the use of biologicals on any farm, anywhere in the world.
- Real time model output can be presented on the websites of companies, distributors, or consultancies to support their customers.

The screenshot shows the RIMpro Cloud Service website. At the top, it says "Welcom at the RIMpro Cloud Service !" with a background image of a red apple. Below the header, there are flags for the UK, Germany, Denmark, and France. The main content area is divided into sections for "Grower" and "Consultant". The "Grower" section describes the RIMpro Cloud Service as an interactive Decision Support System (DSS) for pest and disease management in fruit and wine grape production. The "Consultant" section describes how consultants can set up a private RIMpro network for their clients. On the right side, there is a "RIMpro Login" section with fields for "Username" and "Password", and buttons for "Login" and "Create new RIMpro account". Below the login section, there is a "RIMpro information" section with buttons for "Documentation" and "BIOFIX info". At the bottom right, there is a "Contact" section with the RIMpro B.V. address and contact information.

Welcom at the RIMpro Cloud Service !

Real time information and forecast of pest and disease development

Grower

RIMpro Cloud Service is an Interactive Decision Support System (DSS) for pest and disease management in fruit and wine grape production.

For many growers and consultants RIMpro is their essential tool for effective crop protection.

Connect your weather station to the system in minutes. Get valuable real-time information to manage your crop protection in integrated, low-input or organic production systems.

The RIMpro simulation models are carefully developed in cooperation with specialist, worldwide validated, and widely used. User-friendly interfaces show you what you need to know to make your decisions.

RIMpro is no black-box. All biological processes in the models are explained and you can see all simulation parameters to your personal experience.

RIMpro is constantly developed further based on user feedback, input of working groups and projects, and new insights in the biology of the pests and diseases involved.

Consultant

As consultant you can setup a private RIMpro network for your clients even using different types of weather stations.

RIMpro generates an interactive geographic map showing all your stations. You can embed this map in your own company's website to offer your clients access to all your station results.

You can also create links to single stations, or only to the results of single models.

RIMpro Login

Username

Password

Forgotten your password ?
Send e-mail to: marc@rimpro.eu

RIMpro information

Contact

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v.22.10.09:00 Marc Trapman RIMpro B.V. Zoersmond The Netherlands **



Thank you for your attention!

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