

4 UPDATE

The news in brief about research and developments at Wageningen UR.

16 INNOVATION

The Nutri-Pulse e-Cooker could be the next revolution in the kitchen. Meals ready in seconds.

18 THE DEBATE

Underground storage of CO₂ has met with strong opposition from local communities. Is storing CO₂ under the sea a better idea? Four experts air their views: Jan Brouwer from CATO-2, Chris Karman from IMARES, part of Wageningen UR, Eelco Leemans from the North Sea Foundation and Rik Leemans from Wageningen University, part of Wageningen UR.

22 FLIGHT ARTISTS

Several hundred Dutch citizens are contributing to science by filming flight movements with a high-speed camera. 'We are going to see things we have never seen before.'

26 SYNERGY

Wageningen UR Greenhouse Horticulture is working with partners from the business world on developing a demonstration greenhouse in Turkey. Greenhouse constructor Ton Schrover and researcher Ruud Maaswinkel paid a visit...

38 THEN & NOW

Horticulturalists have always relied on their own eyes to know whether their plants are diseased. This task is gradually being taken over by high-tech machinery.

FEATURES**40 LIFE AFTER WAGENINGEN**

Gerjo Koskamp and Henk Oldenziel both came to Wageningen in 1990 to study Animal Sciences. More than twenty years later, they look back.

44 WAGENINGEN UNIVERSITY FUND

Kenyan Winnie Raey is studying Bioinformatics at Wageningen. This would not have been possible without the parents of her friend Madelon Lohbeck and the Anne van den Ban Fund.

46 KLV

Announcements from alumni network KLV.

48 ALUMNI

News for alumni of Wageningen University.

50 PERSONALIA

News of the lives and careers of alumni of Wageningen University, part of Wageningen UR.



PHOTO GUY ACKERMANS

Bee deaths need analysing

Alarm bells are ringing all over the world about the death of bee populations. Although it is not known exactly how severe the decline is, it is important to take the problem seriously. The signals are alarming and the bee is important, not just for natural ecosystems but also for the pollination of most vegetable crops and fruit trees.

The bee needs a varied diet to stay healthy, and one cause of the rising death rate may be a lack of variety in the available food sources. But that is just one piece of the jigsaw puzzle; there are probably several factors involved in the decline. We should also look into the limited genetic variation in the bee, the impact of the varroa mite, the use of pesticides and the way knowledge is shared, since the death rate seems to be far higher for some beekeepers than for others.

Neonicotinoids have been in the limelight recently, with some researchers claiming that this group of insecticides is the main reason for the rising bee death rate. Some neonicotinoids are certainly highly toxic to bees. The danger in the wild lies in the combination of toxicity and exposure. As a precaution, a number of European countries have banned the use of this substance in sunflowers, for example, because this crop attracts large numbers of bees. And yet it is far from conclusively proven that these are the culprits, as was clear in a United Nations report of March 2011 which pointed to a complex of possible factors. So let us not jump to premature conclusions or start sketching disaster scenarios. Instead, let us really find out how things stand. The Ministry of Economic Affairs, Agriculture and Innovation will probably facilitate a thorough analysis of the situation, under the guidance of a broad steering committee. We shall use this knowledge to turn the tide.

Piet Boonekamp, manager of Biointeractions and Plant Health at Plant Research International, part of Wageningen UR.