Homeless

Room shortage affects international PhD students too | **p.7** |

A clean office

Makes for harder-working, happier employees | **p.8** |

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RESOURCE [EN]

For everyone at Wageningen University & Research

no 5 – 18 October 2018 – 13th Volume

EU blocks innovation

The exodus of CRISPR-Cas researchers has begun | p.12

Thomas + blacklights

Thomas Ashley, guest researcher at Hydrology and Quantitative Water Management

FLUORESCENT SAND GRAINS

No, it's not a disco. Thomas Ashley of the University of Wyoming, temporarily working at WUR, is watching the spectacle of sediment particles in running water. Some of the sand has been coloured with fluorescent dye. Blacklights make the movement of the particles visible. In this experiment in the water lab, Ashley and his host Suleyman Naqshband are studying soil formation in rivers. **RK, photo Sven Menschel**

ILLUSTRATION COVER: JEROEN MURRÉ

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no 5 – 13th volume

EXODUS FROM EUROPE

Director of the Plant Sciences Group Ernst van den Ende told me recently that he'd had some angry Wageningen students in his office. They were angry because after graduating they cannot apply the highly promising CRISPR-Cas technique that they have learned so much about. Not in the European Union, at least. The European Court has decided that CRISPR-Cas comes under the strict legislation for genetic modification. This will cause plant-breeding companies to leave Europe to develop their resistant potatoes and salt-tolerant grains somewhere else (see p.12). Rosanne Hertzberger's column in the Dutch newspaper *NRC Handelsblad* of 13 October is about this. Her headline is 'Biotech students learn everything but are not allowed to do anything'. She writes: 'So there we are, with the best agricultural university in the world, co-discoverer of the CRISPR-Cas mechanism no less. (...) We train the best scientists here. But anyone with the slightest ambition to put all those nice tools to use, goes straight to the US after graduating.' Worth a read. Hertzberger is angry, like Van den Ende's students. And rightly so. For a sustainable agriculture without chemicals, biotechnology is badly needed. Time for Parliament to take up the cudgels.

Albert Sikkema, editor

AND MORE...

>> Your chewing gum has far more flavour than you get from it | p.10

‘The intake seems to be stabilizing a bit’

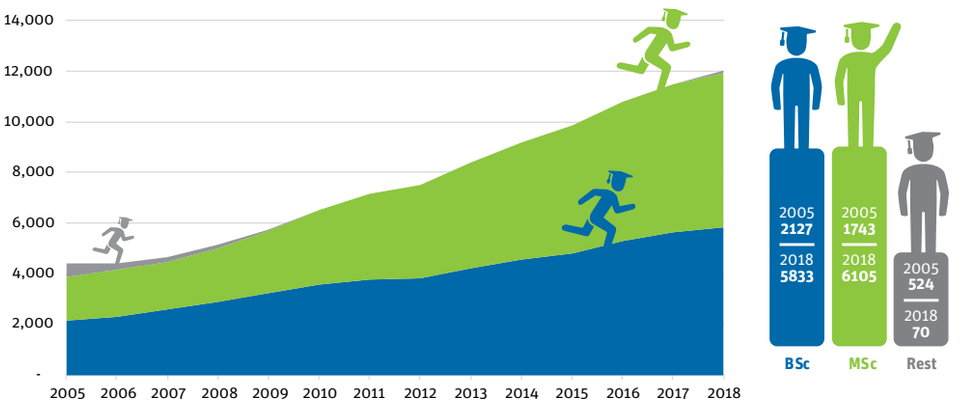
STUDENT POPULATION GROWS BY 5 PER CENT

The total number of students at Wageningen University grew this academic year by around 5 per cent compared with the 2017-2018 academic year. A total of 12,008 students are now enrolled, according to provisional figures from Education & Student Affairs (ESA).

The intake of first-year Bachelor’s students is up 2.5 per cent, from 1637 in October 2017 to 1678 now. That growth is concentrated in the new English-language Bachelor’s programmes, says Eric de Munck of ESA.
The intake of first-year Master’s students (including students who did their Bachelor’s at Wageningen) has grown by more than 2 per cent, from 2315 in October 2017 to 2365 now. This increase is largely due to growth in the number of internal students. Last year the Master’s intake grew by as much as 5 per cent.

‘The intake seems to be stabilizing a bit,’ concludes De Munck. Despite this, the student population as a whole is still expanding (see figure). This is the knock-on effect of the big increases in recent years, explains De Munck. It is because the cohorts that are leaving are smaller than the cohorts that are still doing their degree.

Student numbers at WUR 2005 - 2018



‘Growth in the intake always has this kind of impact in following years on overall student numbers.’

The number of ‘linkage programme’ students (mainly students from applied universities who take a six-month programme to prepare for a Master’s) has fallen by almost 22 per cent, from 82 in autumn 2017 to 64 now. De Munck is not surprised. ‘That number is always fluctuating but has hovered around 70 in recent years. It’s not a striking decline.’ LZ

BSc programmes with biggest intake:	
Food Technology	177 first-years
Biology	176 first-years
Nutrition and Health	148 first-years

MSc programmes with biggest intake:	
Food Technology	181 institutional first-years*
Environmental Sciences	103 institutional first-years
Nutrition & Health	92 institutional first-years

**First-year Master’s students who did not do their Bachelor’s at Wageningen University. The total Master’s intake per programme is not known.*

PHOTO: GUY ACKERMANS

CAMPUS SAFARI

Armed with a page of stickers, children could roam the campus on Sunday 7 October to spot WUR’s ‘big five’: humans, animals, plants, soil and food. The Campus Safari, organized in honour of the WUR centenary, attracted hundreds of children and their parents. They got to decorate cookies, imitate cow DNA with sweets, make ‘plant meat’, listen to a plant orchestra and mix Martian soil.

CODE FOR DEALING WITH CORRUPTION

International organizations that WUR collaborates with increasingly often ask for the institution's anti-corruption code. So the Executive Board has decided to draw up an anti-corruption code for staff.

WUR is involved in a lot of international projects, including many in countries which are low down corruption rankings. So researchers can sometimes be faced with aspects of corruption. Last year, for example, there was an incident in which a business partner asked for money for nothing. It is important that staff know that such things can happen, and what they should do, says WUR legal expert Frans Pingen. They should report such cases to their boss and sit down with the international partner to explain that Wageningen won't have anything to do with that kind of deal.

The new code states that WUR operates fairly and ethically, and does not accept corruption and bribes. Staff are also expected to distinguish clearly between the interests of WUR and their own interests. They should not accept any gifts worth more than 50 euros. And the code also states that WUR does not participate in projects in countries which systematically flout UN agreements on corruptions. **AS**

in brief

PHOTO: TESSA LOUWERENS

>> BATTERY EGGS

Questions in parliament

What exactly is going on with the growing number of battery eggs on sale in the European Union? Dutch MPs of the Christian Democrat party CDA want an answer on this from ministers Carola Schouten (Agriculture, Nature and Food Quality) and Sigrid Kaag (Foreign Trade and Development Cooperation). The party submitted the question after an article in the last *Resource* in which poultry expert Peter van Horne of Wageningen Economic Research explained how battery eggs from countries including Ukraine are sold and processed in the EU, while this kind of farming is banned here. The CDA says imported products should be subject to the same standards as those from within the EU. The written parliamentary questions must be answered within three to six weeks. **LvdN**

>> FRÉ PEPPING

Royal honour

Fré Pepping has been appointed Officer in the Order of Oranje Nassau. He received his ribbon from Wageningen Mayor Geert van Rumond on Friday 5 October at his farewell as secretary of WUR's VLAG Graduate School. Pepping, who is retiring, received the ribbon for his great efforts to further the professionalization of WUR's PhD programmes. 'Dr Pepping's personal input in the research programmes has contributed to WUR's top global status,' according to Wageningen municipality. **AS**

>> VELUWE RUN

Twice as many students

The cross-country race the 'Veluweloop' was organized by students this year for the first time in years. And with effect: on Saturday 13 October, 22 student teams took part, twice as many as last year. A total of 88 teams were at the ready when Rector Arthur Mol fired the starting gun at 9am. The Rotterdam student team Renra 3 won both in the overall category and in the student category. The happy winner in the business category was PwC Data Analytics. The day ended with an afterparty at KSV Franciscus student society. **TL**

COLUMN|GUIDO

Dumb scientists

I reviewed three articles last week. It doesn't matter how busy you are, how much teaching you're doing, or even whether you are on holiday: emails from journal editors come when they come. 'Dear Dr Camps, might we invite you to review…'

Reviewing articles is part of being a scientist, and it's nice to see what your colleagues submit for publication, so I always try to say yes to publications within my subject area. The funny thing is, though, that it takes a lot of time to review an article well, and that time is actually intended for education or research. So the university or a grant-awarding body is in fact subsidizing your reviewing time.

Scientific editors (often professors) spend even more time on these kinds of journals, and the same goes for them: they often get a nominal fee, whereas the work takes up a lot of time that comes on top of their job.

Meanwhile, we scientists have to pay to publish an article. And we pay – through a university subscription – to be able to read the work. In other words: scientists are the editors, reviewers, writers and readers of academic journals, but spend time or money at every stage of the process.

So does anyone make any money out of all those publications? Well, Elsevier, the academic publications branch of the RELX Group, had a turnover of 2.5 billion pounds in 2017, and a profit margin of 37 per cent. Higher than the profit margins of Google, Apple or Amazon. We scientists are pretty dumb to go along with this. Plan S, the intention of European research financiers to make open access compulsory from 2020, is a step in the right direction. But it only solves one small part of the problem.

Guido Camps (35) is a vet and a postdoc at the Human Nutrition department. He enjoys baking, beekeeping and unusual animals.

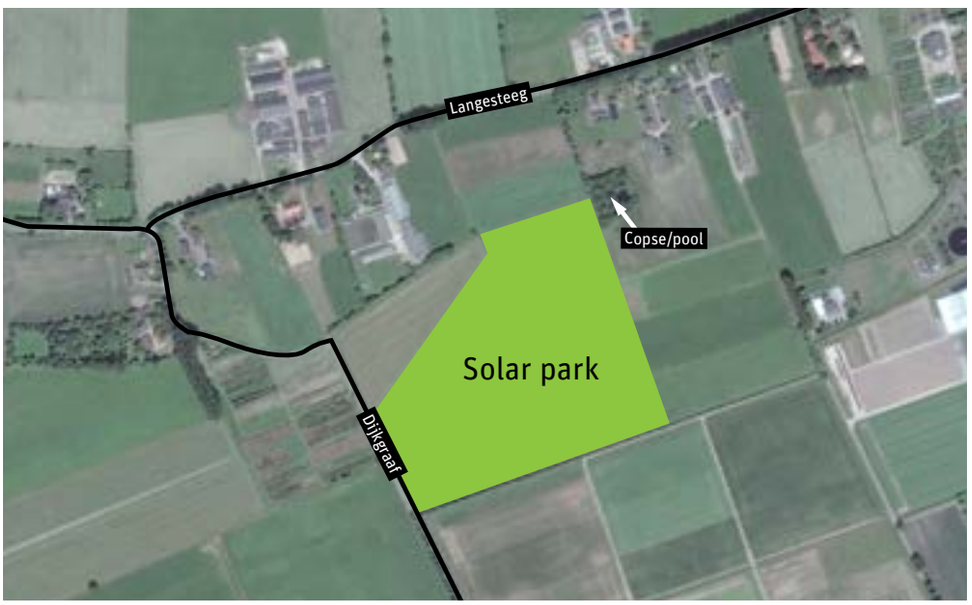
WUR WORKS ON SOLAR PARK IN THE BINNENVELD

A 10-hectare solar park may be built on the Dijkgraaf in the Binnenveld area just outside Wageningen. A plan for the park has been drawn up by WUR and the company LC Energy. Local residents and nature conservationists strongly oppose the location of the solar park in this rural area.

The solar park is planned for the corner of the Dijkgraaf and the Langesteeg, on a 19-hectare plot WUR bought over a year and a half ago. The land is part of a farm on the Langesteeg, Nergena 21, which is just over the border with Ede municipality. The takeover of the dairy farm was called a 'strategic purchase' at the time. The land borders WUR trial plots.

But instead of more agricultural trial plots, WUR aims to use some of the land to generate green energy. According to spokesperson Simon Vink, this will be part of WUR's contribution towards achieving a societal goal. WUR does not need the park for its own energy supply, as its wind turbines on land in Lelystad generate more green electricity than WUR needs.

WUR wants to rent the land to LC Energy. This young company is a joint venture between the British investor Low Carbon (LC) and Wageningen entrepreneur Martin Ruiter's consultancy firm Qing. LC Energy has an office in Plus Ultra and is behind the plans for a seven-hectare solar park on WUR land on the Haarweg too.



▲ The land on the Dijkgraaf, about two kilometres north-west of the campus, where the planned 10-hectare solar park would be installed.

Spokesperson Vink points out that there is an experimental side to the plans for the solar park. 'It may become a testing ground for research on how solar parks can be combined with the development of nature areas. This research would be done by the Environmental Sciences Group. Talks about it are ongoing but are still in the early stages. LC Energy seems to view the idea positively.

The plans for a solar park in the Binnenveld face strong opposition. A 'Dijkgraaf solar park committee of worried residents' has drawn up a petition opposing the installation of the solar panels. The petition calls on Ede municipality not to collaborate in the creation of the park. It claims that the solar panels will affect the openness and biodiversity of the Binnenveld. The petition has been signed by nearly 600 people. **RK**

UNIVERSITY TO GET COMMEMORATIVE COIN

A special commemorative coin has been designed in honour of the university's centenary. All WUR staff will receive one of these Wageningen University coins, the design for which was formally presented to WUR president Louise Fresco by Mint Master Stephan Satijn of the Royal Dutch Mint on Thursday 11 October.

There is a sunflower and a portrait of King Willem-Alexander on one side of the coin. The other side bears the logo of Wageningen University & Research and an Erlenmeyer flask, as a symbol of science. The coin was designed by the Swedish artist Malin Persson. It will be ceremonially minted in Orion by Jeroen Dijsselbloem, who studied Agricultural Economics in Wageningen and was minister of Finance from 2012 to 2017. The Executive Board will make a gift of the coin to all WUR staff. It can also be bought through the website of the Royal Dutch Mint (knm.nl). **LvdN**

ILLUSTRATION: KONINKLIJKE NEDERLANDSE MUNT

INTERNATIONAL PHD STUDENTS CAN'T FIND HOME

The current accommodation shortage in Wageningen is not just a problem for BSc and MSc students; it is also affecting foreign PhD students on a grant. Idealis stopped giving them priority in the allocation of rooms last May and their grants are often too small for them to rent privately.

Lerato Thakholi, a PhD sandwich student in the Sociology of Development Change group, is homeless. She was unable to find a room via Idealis and doesn't have enough money to rent somewhere on the private market. 'The hopes of immersing yourself in your studies and embracing Dutch culture are quickly exterminated when you arrive at Schiphol and are reminded that you don't have a home. I'm lucky that I already know people here who I can stay with.'

Last Monday, Thakholi organized a meeting about the housing problem in Leeuwenborch. Two other international PhD candidates explained that they too were having problems finding accommodation. Representatives of various PhD Councils were present. They are considering organizing a survey to find out how many PhD students are affected by the housing shortage.

Pim van Hengel, who works in the PhD Services department at WUR, says Thakholi's story is familiar. He has had other international PhD students coming to him because of trouble finding affordable accommodation. 'There is currently not much support for international doctoral students looking for a room. Only PhD candidates with an NFP grant from Nuffic are still entitled to an Idealis room. Until May 2018, all PhD students on a grant were covered by that scheme but because of the room shortages, Idealis scrapped that priority scheme in agreement with the university.' The PhD students are told to use the private housing market, but Van Hengel says that is not an option for students on a grant.

The Executive Board is currently considering how to resolve this problem, says spokesperson Simon Vink. 'Idealis had to have 1000 rooms available as of September for the new first-years. That's why the PhD students had to make way last May. But of course the PhD students have to be housed somewhere too.' **TL**

▲ Lerato Thakholi

'YOUNG PEOPLE ARE THE DRIVERS OF CIRCULAR AGRICULTURE'

The transition to sustainable food systems is under way, said Frederike Praasterink, a lecturer in Future Food Systems at HAS university in Den Bosch, in a lecture in Wageningen. And it is mainly young people who are working on new food systems. Praasterink spoke at the first gathering of WUR's Food Systems think tank on 9 October. The think tank is a new platform for Wageningen researchers working on food systems.

We are in a transition process from a cost price-driven food production system to one that is sustainable and circular, said Praasterink. The old agriculture system is increasingly crisis-ridden, and there are a lot of small-scale initiatives to create new food systems, most of them coming from young people. These niche initiatives may form part of the future food supply.

Praasterink sees transformation taking place along three lines. Firstly, businesses and groups are working on redesigning food systems to make them less damaging or more sustainable. Examples of this are agro-ecological systems which combine food production with the development of forest and landscapes, and healthy food in the interests of the health sector. Secondly, new links are being forged between producers and consumers through initiatives such as urban farming. And thirdly, there are schemes which upcycle food in new business models such as the *'Verspillingsfabriek'* (Waste Factory). Praasterink wants to do research so as to be able to predict which new initiatives stand a chance of succeeding. Praasterink: 'I think partnerships made up of a variety of people have the most potential. Because to be successful you need to work on several fronts.' **AS**

FISH AND DUCKS IMPROVE RICE FARMING

Combining rice farming with fish, ducks and water ferns make it more robust than a monoculture of rice. This conclusion was drawn by Uma Khumairoh, a PhD candidate in Farming Systems Ecology, from research in Indonesia. Her findings have been published in *Nature Scientific Reports*.

PHOTO: SHUTTERSTOCK

▲ Conventional rice farming does not withstand extreme weather as well as the combination of rice, fish, water ferns and ducks.

Climate change is causing an increase in extreme weather conditions, with more flooding and drought around the world. This makes countries such as Indonesia vulnerable, notes Khumairoh. Heavy rains and drought between 2013 and 2016 led to an increase in rice imports in Indonesia. The extreme weather conditions cause an increase in weeds, diseases and pests. Switching to a more robust method of growing rice seems advisable.

Khumairoh compared the mixed cultivation of rice, fish, water ferns and ducks with conventional and organic rice production in four regions of Indonesia. Conventional rice farming proved to deliver high yields in good weather, but production plummeted under extreme weather conditions. Organic rice farming had lower yields across the board, but they were less affected by bad weather. The combination of crops and products gave the highest average yield. Under favourable conditions, the combination produced a similar yield to that of conventional rice farming, but under extreme conditions it performed much better.

In the complex mixed system, just as in organic farming, no artificial fertilizer or crop protection products are used. Duck poo and water fern provide the nutrients for rice farming, while the movements of the fish and ducks help improve the nitrogen absorption of the roots of the rice plants. And the ducks and fish create an environment in which the natural enemies of rice pests can establish themselves. **AS**

CLEAN OFFICE LEADS TO BETTER WORK

Cleaning costs pay off for employers, shows a Wageningen study. In a clean office, people work harder and experience greater job satisfaction.

The link between cleanliness and productivity has been shown before, says Johan van Ophem of the Urban Economics chair group.

PHOTO: SHUTTERSTOCK

◀ According to researcher Johan van Ophem, the research results carry a message for managements not to cut back on cleaning too much.

'But then the level of cleanliness was assessed on the basis of an impression. What was new about our research was that we did physical tests as well as conducting surveys. And the results of the two methods are pretty similar.'

The practical work was done by student Mirte Hoorevorts. She found five comparable organizations in the non-profit sector that were prepared to take part in the study: a school, a municipality, two foundations and a WUR department. Participants filled in surveys about their work (speed, amount and quality) and about the cleanliness of their workspace.

Besides that subjective impression, the cleanliness of the workspaces was also precisely assessed using internationally recognized benchmarks from the cleaning industry. The study was sponsored by the Dutch cleaning branch's research association, the VSR. The quantity and the size of fine particles was measured as well. The assessments were always done in the morning, before the office was cleaned.

The results are clear, says Van Ophem. A cleaner working environment leads to significantly higher productivity and job satisfaction. But it is not clear how much more is produced. Van Ophem: 'You can't tell with this method how strong the link is.' But he does think the existence of a link carries a message for managements. 'Cleaning is often a popular area to economize on if an organization has to make cuts.'

The question remains as to why we don't flourish amid dirt. There are several theories about that, says Van Ophem. 'A health expert will point to the possible risks of infection in a dirty environment. A sociologist will say that our upbringing has conditioned us to clean up the mess. But we don't actually know for certain. Apparently we don't like dirt much: not at home and not at work either.' **RK**

DIET OF ALGAE MAKES OYSTERS SWEETER

Pacific oysters that eat microalgae taste sweeter. People not only enjoy them more, they are also willing to pay more for them, concluded PhD researcher Jasper van Houcke.

'Compared with France and Ireland, Dutch oysters are very cheap, whereas the quality is the same,' says Van Houcke, who graduated with a PhD in Food Quality and Design on 8 October. 'We discovered that you can increase the value of oysters by adding microalgae to their diet.' This kind of 'refinement', as it is called, has been going on for a long time in France, where every river mouth has its own combination of microalgae and unique oyster culture.

Van Houcke studied the impact of a microalgae diet on the biological composition, smell, taste and sensory characteristics of the Pacific oyster, the most commonly cultivated species in the Netherlands. He did this with two species of microalga: *Rhodomonas baltica* and *Skeletonema cosatum*. The oysters were given one of these species to eat for seven weeks.

The oysters were then served up to a taste panel, whose members reported that the oysters fed on *Skeletonema* algae were sweeter and more melt-in-the-mouth than those fed on *Rhodomonas*. That was good news, as a survey among 85 consumers showed that they prefer sweet oysters.

Van Houcke investigated whether people were prepared to buy the oysters. A survey among 56 consumers revealed a widely held preference for sweet oysters from Dutch waters. It made no difference to the respondents whether the oysters were refined or not. But Van Houcke thinks that might be because people do not know exactly what refinement entails. 'We did explain it in a few lines, but you might get more out of it with a bit of marketing.'

People also said they were prepared to pay more for a sweeter oyster. Van Houcke: 'That doesn't mean they will necessarily do so in the shop, but it does suggest some quick wins are possible in the oyster trade, perhaps by focusing marketing on flavour. And the traditional oyster basins, such as those now used in Yerseke, can be adapted for refining with just a few minor changes.' Ⓡ TL

VISION

'We can achieve 1.5°C if we want to'

There is a lot to be done if we are to keep global warming below 1.5 degrees Celsius, says the Intergovernmental Panel on Climate Change (IPCC) in a special report. But it is possible, says Niklas Höhne, special professor in the Mitigation of Greenhouse Gases.

Was there a need for this report?

'I think many policymakers may not have understood what they agreed to when, in 2015 in Paris, they agreed to the rise in the global temperature to 1.5 degrees. Now the IPCC has made it clear: A 1.5 degree limit is necessary to protect important ecosystems, it is technically and economically feasible and, properly implemented, it can contribute to sustainable development – but only if we all join forces.'

But hasn't the message been clear for a long time?

'Actually, the report contains nothing really new. However, new pressure comes from the fact that what has to be done is now written in black and white. Every state in the world has to agree to the summary, which gives the report enormous political legitimacy. You cannot get out of it now.'

What do we have to do to keep below 1.5 degrees?

'We've got to bring net CO_2 emissions down to zero. The report makes it amazingly clear that we must do this by 2050. To do this, almost all areas of life have to be turned upside down: how we live, eat, move around, and what we consume. Technical solutions alone will not be enough; we have to change our behaviour. And we have to help developing countries make this rapid transformation.'

Isn't it already too late?

'The question should be: do we want to limit warming to 1.5 degrees? And anyone who has read the IPCC report will probably say "yes". This is about protecting our habitat and ecosystems and minimizing disasters. So we have to try. One thing is for sure: if we give up the goal and do not even try, we will certainly miss it by a long way. And yes, it is possible and I am positive. The report confirms that there have already been transformations of this speed, but these have been geographically limited, not yet global.' Ⓡ RK

APP HELPS IMPROVE SOIL QUALITY

Farmers can now use a Soil Quality App (SQAPP) to test and improve the soil quality on their land. The app was developed in an EU project led by WUR's Soil Physics and Land Management chair group and the international soil institute Isric.

▲ With the Soil Quality App farmers can get a thorough assessment of the soil quality at any location they choose.

Dutch farmers already receive advice on soil fertility from the soil analysis institute Eurofins, says Violette Geissen, professor of Soil Physics and Land Management. But this advice usually focuses on the short-term fertilization of crops. The new app addresses soil quality in the long term, such as the amount of organic matter and the soil life. The app can be an aid to achieving circular agriculture, which is one of the current Dutch cabinet's goals.

The researchers integrated soil maps with climate maps on a global scale so as to define zones with comparable environmental conditions. They also combined soil maps with land use maps, to be able to differentiate between grasslands and arable farming. They added databases about organic matter, quantities of nutrients, acidity levels and soil texture. Threats such as salinization, acidification and erosion were included as well. The result is an interactive soil quality assessment, says Geissen.

Farmers can download the SQAPP on their smartphones and use GPS to obtain a soil quality assessment for any location they wish. 'The app is interactive and is still in the testing phase,' says Geissen. 'If the data on the map are incorrect, the farmer can correct the data and send them to us, so we can improve the app.'

The app makes recommendations based on the information entered. A healthy soil is coloured green, poor soils are shown in red. Farmers can also see by what percentage they could improve their soil and what it would take to do so. Possible interventions would be fertilizing with compost or a new crop rotation, says Geissen. **AS**

CHEWING GUM WITHHOLDS MOST OF ITS FLAVOUR

You might as well spit chewing gum out after a couple of minutes. The taste has gone, we say. But we're wrong, write PhD candidate Emma Hinderink in Food Research International. More than 95 per cent of the aroma and flavour is still in the gum after use.

How flavour is released when we chew our food is still poorly understood. This is partly because it is so difficult to measure the release of taste, explains Hinderink. 'Every mouth is different. The experience of taste depends on a lot of factors. How fast you eat, how long the food stays in your mouth, the acidity in the mouth, how much saliva you produce, etcetera.'

With a view to standardizing all those variables, the big Swiss aroma and flavouring producer Firmenich has developed an artificial mouth. This is a cylinder with a piston that simulates a chewing movement. Lumps on the piston and on the bottom of the cylinder function like teeth. Water and air flowing in and out represent saliva and breath.

Hinderink, who did an internship at Firmenich, gave the artificial mouth chewing gum to eat which contained a mix of five different commonly used flavourings. The artificial mouth chewed on each piece of gum for a quarter of an hour. Through close analysis of the saliva and the air, Hinderink could monitor how long the flavours lasted. 'Depending on the kind of flavouring, between two and four per cent of the flavour is released. The rest stays behind and is therefore lost.'

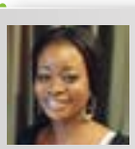
It is also the case that almost all the taste is released in the first couple of minutes, when the water-soluble part of the chewing gum dissolves. Most of the flavourings are not embedded in this part of the chewing gum, but in the tough gum that does not dissolve in saliva. That is why these flavours are only sporadically released during chewing. It is also why the release of flavour turns out to be a bit more complex than we realized. Producers of flavourings, such as Firmenich, can benefit from that knowledge, says Hinderink. **RK**

PROPOSITION

‘Even finding food is a challenge’

When Ruth Ngadze came to the Netherlands from Zimbabwe as part of her sandwich PhD, she found there were quite a few things she had to adapt to.

‘As a sandwich PhD student you spend part of the time in your home country and part in the Netherlands. Just like in a survival reality show you are being taken out of your comfort zone, away from everything you are used to, and put somewhere completely different. Then you have to learn how to survive in this new environment.
Here I live in a tiny room on the Bornsesteeg, without my friends and family. I sometimes miss the comforts of home, where for example I can call my mum or sister and they will be with me when I need them. Also there were a lot of practical challenges I had to overcome. For instance riding a bike. In Zimbabwe cycling is not a common means of transport, but in the Netherlands everyone cycles. So I also bought a very good and expensive bike. Unfortunately it was stolen shortly after. I didn’t know yet that there was such a thing as a “stationsfiets”. Even simple things like finding food are a challenge, because in the supermarket everything is in Dutch and it is not always easy to determine what is what.
And at the academic level too, you have to learn how to survive. You have to be independent, especially when you are doing your field work abroad, because your supervisor will not be there to hold your hand. It is not a bad thing, because these challenges also help you grow. For instance one skill I learned in the Netherlands is being punctual. I had to be, otherwise I would miss the bus or be late for a meeting. This skill is useful to have. So the question is: how do you meet the challenges so that you can be the survivor at the end of the show? Which in this case is graduation.’ Ⓡ TL

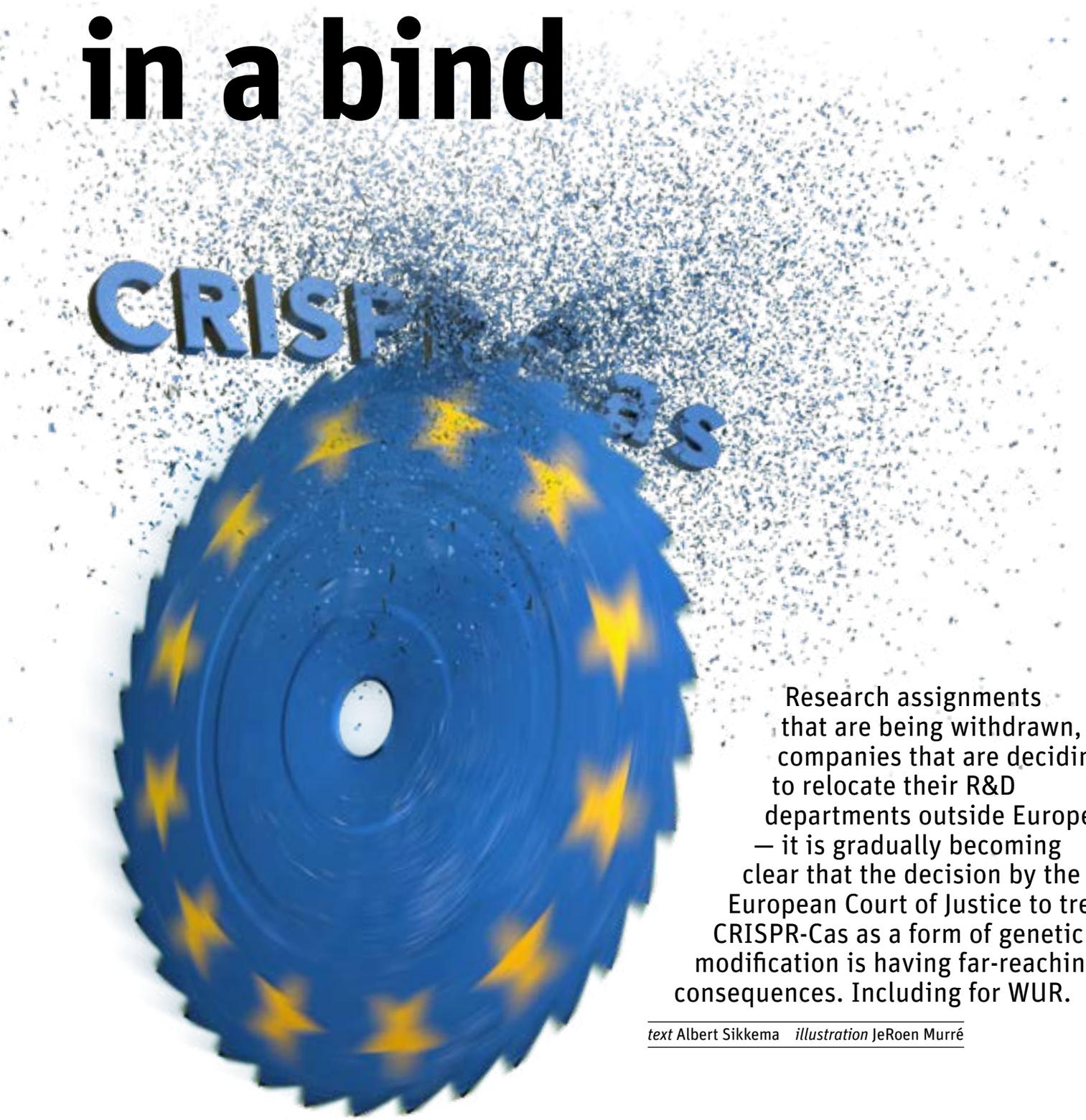


Ruth Ngadze graduated with a PhD in Food Quality and Design on 10 October, for her study on improving food security in sub-Saharan Africa by making use of indigenous fruits.

Undertaking a sandwich PhD is like participating in a survival reality show

European ruling on CRISPR-Cas has major consequences

Innovation in a bind



Research assignments that are being withdrawn, companies that are deciding to relocate their R&D departments outside Europe — it is gradually becoming clear that the decision by the European Court of Justice to treat CRISPR-Cas as a form of genetic modification is having far-reaching consequences. Including for WUR.

text Albert Sikkema *illustration* JeRoen Murré

This summer, the European Court of Justice ruled that the technique CRISPR-Cas, which allows very precise changes to be made to the DNA of bacteria, plants and animals, should fall under the strict laws for genetically modified organisms (GMOs). This means that crops that were improved using CRISPR-Cas have to undergo a time-consuming and expensive approval procedure before they can be grown or traded. In countries such as the US and Japan, CRISPR-Cas is not covered by that GMO procedure so plant breeders can now develop and market new varieties much faster there. The court's decision will put the Dutch plant breeding sector at a disadvantage, concludes Ernst van den Ende, director of the Plant Sciences Group.

MUTAGENESIS

Plant breeders can use CRISPR-Cas to make precise changes in the DNA. That is an improvement on classic mutagenesis techniques in which untargeted changes are made in the DNA using chemical reactions or irradiation, as an organism that has been given the desired mutations by these techniques may also have many other random mutations.

The classic forms of mutagenesis are exempt from the strict European GMO laws because experience has shown that the techniques are not harmful to health or the environment. Many researchers had hoped that CRISPR-Cas — which is much more precise, after all — would also be exempted from the GMO rules. But the European Court judged that the safety of this new technique has not yet been established. That is why it is still subject to the GMO legislation.

GRAPEFRUITS

The court's ruling — that organisms obtained by mutagenesis count as GMOs for EU law, and that some kinds of mutagenesis have been proven to be safe and others not (or not yet) — has interesting implications. Red grapefruits that are the result of classic mutagenesis techniques are on sale in Wageningen market. Many organic varieties were also bred in this way and are sold and eaten like normal products. Yet they were created using much cruder, more imprecise techniques than the CRISPR-Cas products that are *not* going to be available on the market for the time being. Those products still have to get through the complex approval procedure for GMO products.

That procedure is becoming ever more difficult. Plant breeders took the classic transgenic crop of maize with an inbuilt resistance to the pesticide Roundup and inserted genes with the aid of *Agrobacterium*. As a result it contains chunks of foreign DNA that monitoring organizations can easily find. But CRISPR-Cas is a 'clean' technique that does not introduce extraneous DNA. As a result it is much harder to tell a CRISPR-Cas product apart from a traditional product. But the EU still wants to make that distinction. That is why plant breeders will have to be able to prove that they created their new varieties without the help of CRISPR-Cas.

DISAPPOINTED

Plant breeding companies are drawing their own conclusions. The largest Dutch trader in seed potatoes, HZPC, is relocating its research on CRISPR-Cas outside the EU, the trade journal *Boerderij* announced this summer. HZPC director Gerard Backx was very disappointed in the ruling by the European Court. 'This means we won't be able to be as innovative as we would like for our European potato growers. I really regret this. We'll have to move some of our research outside Europe, which will only benefit non-European growers.'

The German plant breeding company KWS is also taking measures. KWS Saat, which mainly breeds maize, sugar beets, cereals and potatoes, will move part of its R&D from Europe to the US, as Harold Verstegen, head of the Cereals department, recently told *Resource*.

Other plant breeding companies are more cautious. 'We respect the ruling of the European Court of Justice and won't be making use of CRISPR-Cas in the development of our vegetable varieties,' says Anneke van de Kamp, PR manager at the vegetable breeding company Rijk Zwaan. 'We never practiced GMO breeding before and that will remain the case. Though we do use CRISPR-Cas in our research.'

SPLIT INTO TWO

The position expressed by Van de Kamp is shared by other vegetable breeding companies. They don't want to be associated with GMOs because of public opinion and are therefore not rejecting the European Court's judgment out of hand. This is also because it is relatively easy for vegetable breeders to develop new varieties using the standard breeding techniques as most vegetables have rather simple genomes. They can use CRISPR-Cas to test new or improved properties in their research departments. If that works, they can replicate their findings using the standard techniques.

'R&D is being split into two,' says a recruiter for a breeding company who wishes to remain anonymous. 'The research can be done anywhere, including in Europe. The development is going to other countries. That's already happening. You don't notice it because all the breeding companies are global operators with multiple R&D centres in Europe, Asia and the US. They're shifting their R&D investments to non-European countries; those discussions are going on now.'

CONSEQUENCES FOR WUR

Plant Sciences Group director Ernst van den Ende is already seeing that this shift is having an impact on WUR. 'A few companies have withdrawn their CRISPR-Cas research assignments in the past few months.' He is not prepared to say which companies or how much money is involved. There are also discussions in the Horticulture and Propagation Materials top sector about whether breeding companies will still be willing to invest in research on CRISPR-Cas, says Van den Ende, who is on the board of this top sector.

The critics of GMO techniques will see this as good news, as the big companies will have less influence on Dutch plant breeding research. But Van den Ende points to something else: 'Have you noticed that major global players such as Bayer and Syngenta have been relatively quiet on the subject of the court's ruling? Their position is not affected under the GMO legislation, which drives up the price of new varieties. It is precisely the smaller companies that focus on specific crops in smaller market segments that need the cheap technology and shorter procedures.' Ⓡ

'A few companies have already withdrawn their research assignments'

Ernst van den Ende, director of the Plant Sciences Group

Tropical crop can replace maize as animal feed

Growing sorghum on Dutch soil

Grass and maize dominate Dutch cattle feed. But now a newcomer has appeared: sorghum. Feed specialist Gerrit Kasper is working on turning this cereal crop from the tropics into a regular fixture in Dutch fields.

text Roelof Kleis *photos* Guy Ackermans

On the outskirts of Woudenberg on this first Tuesday of October, a cereal crop is being harvested on the land of farmer Van de Vliert. But don't expect a harvest festival. Heavy drizzle has turned it into a somewhat depressing exercise. Gerrit Kasper, an animal feed researcher at Wageningen Livestock Research, is busy bringing in the sorghum from his trial fields. That is manual labour: Kasper collects the sorghum that his colleague Henk Schilder saws off just above the ground with an electrical hedge trimmer. It seems rather amateurish but there is no room for larger machinery on plots measuring 6 by 2.5 metres.

SOIL DEPLETION

The cultivation of sorghum is a new phenomenon in Dutch fields. There are a few experiments going on here and there (see inset) but no large-scale production for animal feed as yet. But that will eventually happen if Kasper has anything to do with it. He sees sorghum as a good alternative to maize.

Maize was successfully introduced in the Netherlands about 60 years ago. Farmers are very happy with it, says Kasper. 'It's a good crop in terms of energy yields, but the protein content could be higher.' There are other downsides to maize as well. 'The crop isn't very good for the soil. Growing maize over a long period gradually reduces the quality of the soil. Monocultures in Brabant and the Achterhoek region in particular suffer from this problem. So we

started to look for an alternative, a third animal feed crop for dairy farming alongside maize and grass. Sorghum could be that crop.'

Sorghum spares the soil, is less susceptible to disease and can cope better with drought

LONG ROOTS

Sorghum's big advantage according to Kasper is that it puts down deep roots that are finely meshed. While maize's finer roots get down to about 60 to 80 centimetres, sorghum makes two metres. 'What's more, the root system is much finer and denser, which has a positive effect on the soil structure. The roots that remain behind also sequester more CO_2 in the soil. As a result, sorghum does more to combat climate change than maize.'

From the perspective of soil quality, sorghum has another plus side too: it makes better use of nitrogen fertilizers than maize. Kasper: 'Maize does not take up all the nitrogen that is added, so some leaches into the soil as nitrate. In comparison with maize, sorghum leaves little or no nitrate behind in the second part of the growing season. The water boards in particular are very interested in sorghum for precisely that reason.' Sorghum also suffers a lot less from disease than maize and needs a quarter less water. Those are useful characteristics in a time of climate change and dry summers like we had this year.

BUSY DEMO DAY

That is the theory based on research in other parts of the world. But it all still has to be demonstrated for Dutch fields. Trials in Woudenberg (Utrecht), Wijnandsrade (Limburg) and Oldeboarn (Friesland) will provide the initial answers. The soaking wet plots in Woudenberg have been planted with five varieties of sorghum, with maize as the control. The plants are in sandy soil. The experiment here focuses on the effect sorghum has on the moisture content of the soil and nitrate leaching. In the Limburg loess, the effect of different amounts of fertilizer is being studied and in the peat soil of Friesland the main topic is tillage. Each project has its own sponsors: local water boards, the provincial authority, a local water supply company, an experimental farm or an area organization.

The recent demo day in the Woudenberg trial fields attracted 75 attendees, including a lot of farmers. So there is clearly interest. But it takes more to get the fields full of sorghum. Sowing is one area of concern, for example. Sorghum seeds are ten times smaller than maize seeds. What tillage methods and machinery do you need to sow something that small? Sorghum is also more susceptible to sub-zero temperatures than maize. Kasper: 'That is why this cereal needs to be sown three to four weeks later than maize. It also grows more slowly than maize. The crop comes from the tropics, where the days in the growing season are shorter than they are here. So we still need plant breeding to adapt it to longer days.'

MILK YIELD

The sorghum in the Woudenberg fields is fed straight into the chopper on site. Part of the sorghum pulp will be measured in Wageningen to determine the amounts of dry matter, protein, lignin, starch, sugar and energy. Another part will be turned into silage to get an impression of feed losses during the silage process. This is also in preparation for the next stage of the research: a consumer survey. If they can get the funding, a three-year programme will show how cows digest the tropical crop. And most importantly, what effect it has on milk yields.

GUINEA CORN

Sorghum – *Sorghum bicolor* or Guinea corn – is a grass-like cereal that originated in Africa. In the 17th century, African slaves brought it to the United States where it is now cultivated on a large scale as animal feed and an alternative to maize. Sorghum is an important food crop in Africa, Central America and South Asia, and it is the fifth most cultivated cereal crop. The Dutch also call it '*kaffer*' corn: '*kaffer*' is an insulting name for the Bantu people of South Africa.

SORGHUM PIONEERS

Wageningen Livestock Research is not the first to investigate the potential of sorghum as animal feed. The real pioneer is the Zeeland farmer and retired plant scientist Walter de Milliano, who has been breeding sorghum for cultivation in the Netherlands since 2005. Some of the varieties Livestock Research uses come from De Milliano. The Louis Bolk Institute, which Livestock Research is also collaborating with, has been experimenting with sorghum cultivation for about six years. Their experiments show that sorghum produces five to ten per cent more protein than maize. Stopping maize cultivation for one year to grow sorghum increases the next maize yield by seven per cent.

▲ Researcher Gerrit Kasper of Wageningen Livestock Research.

FOCUS

Photograph all aspects of a major enterprise. That was the assignment that teachers at the Photo Academy gave photographers Maarten Verbaarschot and Rik Kooke. They chose the Plant Sciences Group at WUR. They were struck by the fact that most people there were concentrating incredibly hard on their work. That is why 'Focus' became the theme for their photos. The series of 19 photos taken on a normal working day forms an interesting small exhibition, on display in the Radix hall until 30 November.

Ⓡ AS, photos Maarten Verbaarschot and Rik Kooke

The promise of blockchains: more transparent production chains

Sharing the truth

In our global market economy, it's not easy to find out where your grapes or orange juice came from and whether their production was sustainable. The new IT technology of blockchains may be able to solve that problem, say the enthusiasts. WUR is carrying out pilot studies to see if they are right.

text Anton van Elburg *illustration* Geert-Jan Bruins

Fazenda Norrinhos in Brazil is one of 15 plantations producing the oranges for the juice in bottle L1750024 at Albert Heijn. The orange concentrate used to make the juice in the bottle was shipped in bulk on 13 July from Santos and arrived in Ghent on 3 August. After bottling by Refresco in Bodegraven on 14 September, the bottle was received by an Albert Heijn distribution centre on 20 September. The plantations have the Rainforest Alliance certificate. Other parties in this supply chain meet the SQF, SMETA, SGF and IFS standards, if you're interested.

It recently became possible for consumers to retrieve all this information by typing in the code on the bottle in an Albert Heijn website. The supermarket is using blockchains (see inset) in this application in an effort to satisfy the demand for information about where products come from. Were the oranges produced sustainably, were the farmers and labourers paid a fair price and was the food transported and processed safely?

Trouw newspaper looked at the information on the Albert Heijn website and discovered that working conditions on one of the orange plantations were substandard, or at least had been in the past. The Rainforest Alliance corrected this impression: the fazenda in question has met the certificate standards since 2015. Which is a nice example of what you can achieve with transparency.

TRANSPARENCY IN THE SUPPLY CHAIN

Blockchains are a technique that holds out real promise for numerous sectors, including the agrifood industry. The prevention of fraud is another use that is often mentioned in addition to promoting transparency. The scandals with toxic milk powder in China and horsemeat sold as beef in the Netherlands are still fresh in people's minds. Such affairs are often the result of fiddling with information. Blockchains would make that tampering a lot more difficult. A third benefit that is often cited is that blockchains could reduce transaction costs in production chains. Those are the costs of arranging a transaction, such as the administration, payment transfer, certification etc.

The assumption made by the proponents of blockchains is that the technology will encourage information sharing. Blockchain technology is software that creates a kind of ledger in which production and supply chain partners can all store information and view it at the same time. This could be information about payments, certificates, quality stamps, contracts, rights of use, ownership, etc. In the orange juice example, Albert Heijn says information about an identifiable batch is added to the blockchain application at every stage in the process, such as certificates for the quality and production method, and the harvesting, processing and transport data.

Information about a product is saved in unchangeable 'blocks'

The information is stored in blocks that are copied across various decentralized nodes in a network. The blocks can't be changed retrospectively. What you get is a kind of shared truth. The assumption is that this lets you quickly and easily see the route that a product takes from the farmer via the processor, trader, transport company and wholesaler to the retailer.

GRAPES

WUR is heading the public-private partnership project 'Blockchain for Agrifood', which was commissioned by the ministry of Agriculture, Nature and Food Quality. Other participants include TNO, RVO, NVWA, Ahold, Fairfood, Oxfam Novib and SMEs such as Moyee Coffee, VAA and VDH. The project builds upon a WUR pilot study on the impact of blockchains on the

WHAT ARE BLOCKCHAINS?

LEDGER
A blockchain is a kind of digital ledger in which participants can store information that they can all view simultaneously. This could be information about currencies, payments, certificates, quality stamps, contracts, rights of use and ownership.

UNCHANGEABLE
A blockchain application stores information in 'blocks'. Blocks are approved after 'consensus' has been achieved using a complex cryptographic algorithm. After this, blocks can no longer be altered and any changes have to be added in new blocks.

EQUAL RIGHTS
The blocks are copied to nodes in a distributed network. It is a system without an owner where everyone has equal rrights, unlike database systems with a central administrator.

TRANSPARENCY
All blocks are visible to all participants in the blockchain.

SMART CONTRACTS
Blockchains are often mentioned in the same breath as smart contracts. These are transactions that are carried out automatically provided that a particular condition is met. For example, if the quality certificate for a batch of grapes is declared valid, the shipment of that batch gets the go-ahead.

PERMISSION
A blockchain application can be accessible to all (such as Bitcoin) or only following permission. In the latter case you need a central administrator, which strictly speaking violates the blockchain principle of equal rights. There are already experiments with permissioned blockchains in agrifood supply chains.

BITCOIN
Digital currencies are one of the best known applications of blockchain technology. That fame is partly due to the highly volatile prices of Bitcoin and other cryptocurrencies.

certification chain for grapes from South Africa.

In the traditional distribution chain for South African grapes, documentation for certificates is often still stored in hardcopy form or in databases that are not accessible to all other parties in the distribution chain. That is inefficient, expensive and susceptible to fraud and errors. It means that products are often not accompanied by reliable information about that specific product. That can result in risks to food safety and quality.

In 2017, Wageningen Economic Research and TNO built a blockchain application to enable certificates for grapes to be shared in this distribution chain. They proved that it was possible to store information on certificates in blocks that could not be changed and to share this with various distribution chain partners. But they also discovered a number of limitations. It was not always clear what benefit blockchains had over existing IT applications. Doubts also arose about the scale on which the technology could be applied as only a limited amount of information could be tested in the pilot.

TRUST

Lan Ge, senior researcher in Risk and Resilience at Wageningen Economic Research, heads the Blockchain for Agrifood project. She sees the technology as a potential tool for enhancing trust among participants in production chains. 'In the past, people could see and feel products before buying them. That changes when transactions are digital. In larger distribution chains, you need different methods to organize trust. Such a shared truth can help here. The strength of blockchains is that they can bridge company and sector boundaries. In theory, supply chains become supply communities and they no longer function so linearly.'

But despite the enthusiasm among many parties for the experiments, it has turned out to be difficult to get agrifood players properly on board for the whole process, according to Ge. 'Setting up a blockchain application requires a lot of changes and organizational work. Organizations have to be prepared to share their data and to work in a transparent manner. That's still a step too far for many. On top of that, a lot of processes have to be redesigned and turned into codes. You might need less certification or a different kind of certification. The edge in terms of knowledge that intermediaries such as controllers, inspectors and auditors have may change. So the distribution chain roles will have to be filled in differently.'

'Sharing their data is a step too far for many organizations'

That is where the opportunities lie for WUR, thinks Ge. 'As an independent science institute, we can safeguard the quality of blockchain applications and advise companies and governments. We can provide the underlying data semantics and standards for data exchange based on our knowledge of the agrifood sector.'

MYTHS

There is a huge hype around blockchains. But as so often when everyone is raving about a new technology, an awful lot still needs doing before the technique can easily be applied in a financially viable manner. Ge: 'The technique is more complex than a lot of people realize. One of the blockchain myths is that a "smart contract" is totally secure. Of course, that only applies if the code has been programmed well: all software can contain bugs. You can't prevent the wrong information being entered and GIGO still applies – garbage in means garbage out. You can agree to record the identity of the person inputting the information, using a pseudonym if necessary, and you can log the document history to help you track down any incorrect information.'

The blockchain gurus are crying out that the technology has disruptive potential — 'What do we still need banks for?' — but that won't happen any day soon, thinks Ge. 'At present, it is still being used to make existing supply chains more trustworthy. You shouldn't see blockchains as an isolated phenomenon anyway but as something linked to big data, precision farming and the internet of things. All that digitization and automation is creating a rich basis for new developments and new applications that we may not be able to imagine at the moment.'

One possible new direction could be more direct contact between producers and consumers. There are already blockchain experiments running in which consumers can pay or donate to coffee farmers directly, for example through Moyee Coffee.

NOT YET MATURE

Jaclyn Bolt, business innovator at Wageningen Environmental Research, agrees that the blockchain technology is not yet mature: 'We are still at the stage of asking whether it is worthwhile implementing blockchains.' Bolt studies best practices in the use of blockchains in various countries and sectors. She sees the main potential advantage to blockchains as the fact that they are distributed information systems in which small businesses can take part, not just the big companies. Bolt: 'In the Netherlands we have a lot of laws, rules and clear communication structures aimed at guaranteeing mutual trust. In such a situation, blockchains don't offer much of an advantage. But in other countries the market is often less controlled and regulated. Precisely because of that, blockchains could offer solutions for improving trust among distribution chain partners.'

EQUAL RIGHTS

Sceptics are now asking whether blockchains are really necessary to facilitate tracking and tracing in supply chains, for instance. It is claimed that many problems could be solved with existing IT systems. There is also the question of definition: what counts as a blockchain? Bolt, for example, has doubts about what is known as a 'permissioned blockchain', a variant in which access is restricted and one body or company decides who can be involved and who can't. Albert Heijn's juice chain could be classed as a permissioned blockchain. Bolt thinks that permissioned systems don't really deserve the label 'blockchain'. 'A blockchain is fundamentally different to a central database. It is a system without an owner where everyone has equal rights. If you have a permissioned system, you still have one party that's the boss.'

Market research company Gartner is predicting that after a period of grand promises followed by disappointment, blockchain technology will have matured by around 2025. Perhaps the technological terminology will have faded from view by then and the focus will be on the real issue, namely how to ensure transparency, predictability and trust in production and distribution chains.

SHOULD WUR STILL RECRUIT STUDENTS?

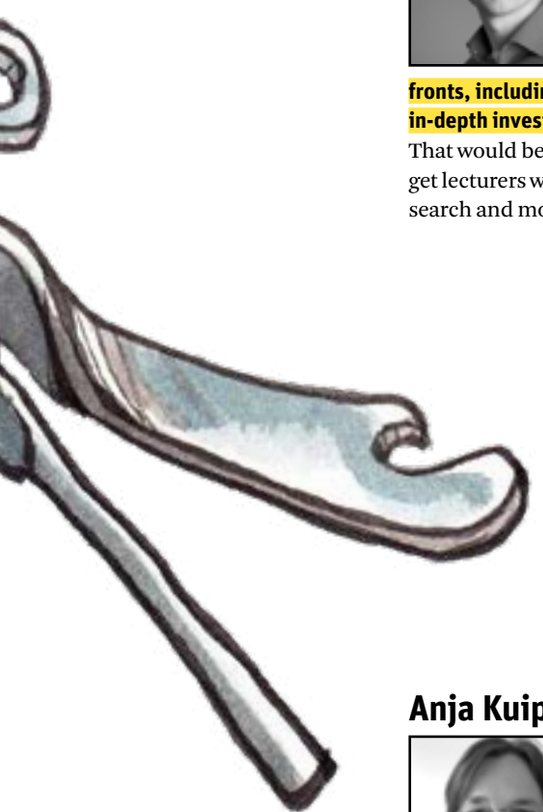
Lecture halls are bursting at the seams, there is a shortage of student accommodation and teachers are complaining about the workload. Should WUR still be actively recruiting students? Yes, say most people that *Resource* asked, but more selectively. And the capacity needs to grow too.

text Tessa Louwerens and Luuk Zegers *illustration* Henk van Ruitenbeek

Edwin Kelhout

Manager of Digital Marketing & Student Recruitment

'Ten years ago, all academic and applied universities had these amazing recruitment campaigns full of meaningless phrases. But we stopped doing that years ago. We give honest information to people looking to choose a degree. That's our duty, it's what society demands from us and it's precisely what we do. We give the people information and advice, working closely with the degree programmes so that the people choosing make the right choice and we avoid students dropping out. The dropout rate in Wageningen is by far the lowest in the Netherlands so we are doing a good job at that. **Wageningen is a university with a very distinctive profile and a focus on topical, global challenges. People are needed to study those challenges.** More people than in the past. In WUR's case, the growth in new students is also about the recruitment of new scientific staff. It is about recruiting talent. And that talent is badly needed to explore the potential of nature to improve the quality of life.'



Bram Büscher

Professor of the Sociology of Development and Change

'I think it could definitely be taken down a notch or two. The money that is saved on marketing could then be spent on extra lecturers. **After many years of growth on many different fronts, including students, it's now time for stabilization and in-depth investments in the academic staff and science itself.** That would be good for the students too as then they would get lecturers who have more room for top-class scientific research and more time for the students themselves.'

'The money that is saved in marketing could be spent on extra lecturers'

Anja Kuipers

BSc & MSc programme director for Plant Sciences

'Yes, WUR should continue to actively recruit students. Every year, there is a new cohort of schoolchildren who have to decide on their degree. And there are also new students every year who are deciding on their Master's. Those people need to know what WUR has to offer. **If we stop recruiting, it might not take much to trigger a rapid decline in student numbers. Informing and advising potential new students remains an important priority.** At Plant Sciences, we know from experience how important continuous, sound information and advice is in making potential students aware of our degree programme. We definitely won't be stopping this.'

Hannie van der Honing

Study coordinator for Cell Biology

'In my opinion, student numbers should stop growing. Quite apart from the workload for lecturers, the crowded rooms or lack of rooms, and the timetabled longer days, our team of lecturers is concerned about the quality of the teaching. There is huge pressure on what makes Wageningen unique — lots of contact hours, intensive practicals, personal contact between students and lecturers and a good student-to-staff ratio. We've already had to scrap one practical, for instance, because it didn't fit in the timetable. That doesn't mean we should no longer actively recruit students. I think it is actually good if a broad public becomes and remains aware of WUR and the issues we work on here. **But there are other ways of stabilizing growth, for example an enrolment limit or a motivation or admission test.**'

Sophie Galema

Nutrition and Health student and chair of the Student Council (speaking in her personal capacity)

'WUR focuses on issues that are of major importance to society. That's why active recruitment is important, so that people know Wageningen is there. At the same time, the university should always aim for top-quality education. **If the number of students grows, capacity should increase too; otherwise lecture halls get more and more packed and you lose the small-scale teaching.** You can already see signs of that. As soon as growth leads to a decline in the quality of the education, you have a problem. The university is trying to avoid any deterioration in teaching quality due to the growth; they are putting up a new teaching building for instance, which will increase capacity. But of course that's not something you do in three weeks.'

Arnold Bregt

Dean of Education

'Our recruitment isn't aimed at getting as many students as possible. We use careful information and advice to help students find the right degree programme. The student intake this year is similar to last year. It is true that the total number of Master's students has increased compared to last year, but that's mainly because smaller cohorts are leaving and larger cohorts are moving on to the next year. We don't have a growth goal as such. We are pleased if we can keep the same level and we use selective recruitment to see how we can let student numbers per programme keep pace with capacity and the labour market. WUR also aims to be an "international classroom", and targeted recruitment lets us achieve a diverse student population. We are trying to increase the intake from African countries, for example; that's why five scholarships were granted this year, among other things. There are also degree programmes such as Animal Sciences that still have room for more students. So we are recruiting selectively on fronts where there is room for more students, and less so where it is already full.'

Gap year after Bachelor's more popular

Taking a break

More students are arranging a gap between their Bachelor's and their Master's. Study adviser Lonneke Debets and four students explain why. 'Your choice of Master's degree feels more important for your future.'

text Echica van Kelle *photo* Shutterstock

The number of students who take a year out between their Bachelor's and their Master's is growing, according to figures from the Education & Student Affairs department. Of the 991 students who got a BSc in Wageningen in 2014–2015, 17 (1.7 per cent) arranged a break of six months to a year before starting their Master's at WUR. One year later, 40 of the 880 Bachelor graduates (4.5 per cent) did this. The total number of gap-year students is probably higher as these figures only cover students who do both their Bachelor's and their Master's in Wageningen. What is more, students who do a year of committee work at a society normally stay enrolled as otherwise they would miss out on the financial support (FOS money) the university gives them.

Self-development

Health and Society study adviser Lonneke Debets keeps track of what her students do after their Bachelor's. She does not yet have enough figures to determine whether the gap year really is becoming more popular but she does know that at present around 20 per cent of 'her' students who get their BSc in three years opt to take a year out. 'Common choices are a year on a committee, a voluntary internship, working and travelling. There are also students who have some time available due to study postponements. They also frequently use that time for travelling, extra modules or courses, often focused on self-development.'

Many of the students considering a gap year do so because they want to get a better picture of their next degree, explains Debets. 'Your choice of Master's degree feels more important for your future than your Bachelor's because a Bachelor's is often broader and you can make more adjustments. Students sometimes want more time to avoid hasty decisions and to get a better understanding of their own interests. Working life can also suddenly seem very close; if your Bachelor's flew by, your one- or two-year Master's will be over in a flash.'

Setting goals

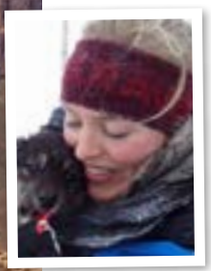
A period in which students break with the university rhythm and broaden their horizons can be very refreshing according to Debets, but it is a good idea to set goals. 'I think you should ask yourself what you want to get out of that gap year. What you want to learn, experience and develop and how you could achieve that. When you look back in a year's time, what do you want to be proud of? I find students often get a huge benefit if they tackle it in this way.'

‘TOOK TIME FOR MY HOBBIES’

‘I actually didn’t feel like continuing with my studies immediately after my Bachelor’s in Soil, Water and Atmosphere,’ says **Marte Hofsteenge** (22). ‘It felt rushed. I postponed my Master’s for six months and concentrated on photography and drawing, hobbies I had too little time for. I took courses on this outside Wageningen. I really enjoyed being away from the academic world and getting a different perspective on society. I also discovered that in addition to extracurricular activities that can be stressful, it is really valuable to have a hobby that relaxes you.’ Marte began her Earth and Environment Master’s in September. Did she get anything out of the break? ‘I now feel enthusiastic again about my Master’s. When I took that time off, I realized I actually enjoy my subject a lot.’

‘A BREAK FROM STUDYING’

Rahel Balkhausen (21) has just finished her BSc in Biology and will now spend four months working to earn money. ‘Then I want to go to South Africa for three months, where I’ll be working in a national park. I’ll be giving tours there with an emphasis on sustainability and protecting animal species. I want to work on nature conservation in my degree too, so this looks ideal for me.’ Balkhausen is taking a year off mainly because she felt the need to do something other than study for a bit. ‘Since secondary school, I’ve only had one and a half weeks summer holiday because of courses. Now I’m ready for a break.’



‘I LIKE ADVENTURES’

Nina Sandfort (22) decided not to start her Master’s immediately last academic year. First she worked, then she spent a couple of months as a ski instructor in Austria and finally she travelled across China and Vietnam. ‘I like adventures and I enjoy being in different surroundings and meeting new people. I travelled for a year after secondary school too. Now you can still do that; it might not be so easy once you’ve graduated.’ Nina got a lot out of her gap year. ‘I didn’t do anything related to my degree but I found I’m interested in climate change, natural processes and the formation of landscapes in the mountain regions I visited. I want to learn more about this, which fits with the Earth and Environment Master’s I’m doing now.’

‘MY BACHELOR’S DIDN’T HAVE AN INTERNSHIP’

As of this month, Health and Society student **Ayse Varol** (21) will be spending nine months at Arci Catania, an NGO in Sicily. ‘I’ll be managing projects there for disadvantaged young people. For example, we’ll be giving workshops for refugees to help them integrate. I chose this because my Bachelor’s didn’t have an internship option and I wanted to get experience in the field. I also enjoyed my minor in England so much that I basically wanted to go abroad again immediately.’ Varol doesn’t yet know what her Master’s will be. ‘I hope this internship will make clear what I like.’

OPTICAL ILLUSION (1)

Can you see things that aren't there? Yes — watch *The Rabbit Illusion* on YouTube. It was thought up by psychologists at Caltech. They play three bleeps in quick succession, with a flash accompanying the first and third bleep. The result: you see three flashes instead of two. Our brain fills in the middle flash as it assumes we must have missed it. Oh, and this isn't a spoiler: it works even when you know the answer.

OPTICAL ILLUSION (2)

So the senses influence one another in interpreting the world around us. Even in retrospect. Scientists call this postdiction, the opposite of prediction. Interesting fact: audio controls the visual stimuli but not vice versa. You don't hear an extra beep if you see an extra flash. That teaches scientists a lot about decision-making processes in the brain. And what does it teach us? Nothing is what it seems.

EASY

Being an optimist is usually seen as a good character trait. But that's not the case for businesspeople starting out, says a British study. Optimistic starters earn 30 per cent less than pessimists. That is because they look at everything through rose-tinted glasses and take too many risks.

FACES

How many faces do you know? Probably about 5000, according to a study by the University of York. The participants (average age of 24) knew between 1000 and 10,000 faces from their own circle and the media. It is not known how many faces our brains can remember in total or what effect age has. Except when you get dementia, of course.

Dutch lessons will be free

Wageningen University wants to make it easier for international students to learn Dutch. That is why the university's language institute Wageningen in'to Languages will start offering its Social Dutch courses free of charge in 2019.

The Social Dutch course currently costs 90 euros. The idea to make that zero euros comes from the Student Council. 'We heard this week that the Executive Board has agreed,' says chair Sophie Galema. 'We have already got a lot of reactions from international students who are pleased and plan to make use of this.'

The Social Dutch I and II courses will be free for all international students provided that they attend at least 80 percent of the lessons. It is not yet clear how this will work. 'We will start figuring out the details now,' says Galema. Not only will the course be free, it will also be given more often. 'Social Dutch is always full,' says Galema. 'The lessons will probably become even more popular now so we should increase the number of groups.' At present two groups per level, with a maximum of 18 participants each, start in September, January/February and April/May. The Executive Board sees the language lessons as a way of improving the integration of international students. Rector Arthur Mol: 'Virtually everyone in Wageningen speaks English but of course you will have more interaction between Dutch residents and the international community if international students can also express themselves in Dutch.' Incidentally, the university is not alone in wanting to make it easier for international students to learn Dutch. Student Anne Walther recently set up Taalclub Wageningen, in which language lessons are linked to voluntary work. LZ

PHOTO: SVEN MENSCHEL

BIGGER THAN EVER

A record number of 800 soil drillers competed on 10 October in the annual championships organized by Pyrus study association. True to tradition, they dressed up, coming as a dwarf, an elephant, a crocodile, Trump or Obama. Gert Peek was absent for the first time: the Soil Science teacher has retired. Hydrology teacher Roel Dijksma took over his role as referee. The Wageningen team Aspergus Maximus made off with the first prize for the fourth time in a row. Dijksma: 'Down to one metre 20 in less than a minute. Bizarrely fast.' LZ

Health students start their own association

PHOTO: APOLLO

▲ The Apollo board, with chair Milou Verstegen in the centre.

Students on the BSc programme Health and Society (BGM) and the MSc programme in Communication, Health and Life Sciences (MCH) have split off from Mercurius study association to form an association of their own: Apollo.

BGM and MCH were part of Mercurius together with the programmes Business and Consumer Sciences (BBC) and Economics and Policy (BEB). 'They were more geared to the economics side of things,' says Apollo chair Milou Verstegen. 'And Mercurius's activities matched those programmes better, which was why the turnout of Health and Society students was exceptionally low. Since our programme is big enough now for an association of its own, we have started Apollo.'

With 1300 members Mercurius is also too big, really, says Verstegen. 'It is almost impossible to organize it properly with a part-time board. And the new Extended Daytime Schedule would make it practically impossible to organize activities for different programmes, because everyone has breaks at different times.'

The idea of splitting off has been in the air for some time. 'We split off officially last June, and the first board of Apollo started then. Now we have about 125 members.' The main activities of the first few months were to do with sorting out the practicalities of starting up the association. Verstegen: 'From very small things like an email address to bigger issues like a website and a bank account. That's in place now.'

At the moment committees are being formed that will organize nice activities. 'Drinks parties, for instance, *bitterballen* bingo, a first-year weekend and a trip to a trampoline park. And we shall also organize lectures and excursions that relate to our subject and help students find out more about the job market.' LZ

MEANWHILE IN... BRAZIL

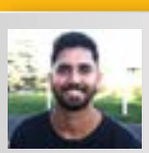
'Bolsonaro causes fights within families, including mine'

Jair Bolsonaro took 46 per cent of the votes in the first round of Brazil's general election on 7 October. This 'Tropical Trump' openly supports military dictatorships, wants to 'develop' instead of protect the Amazon and offers questionable solutions to crime and corruption. PhD candidate Carlos Alho hopes that the 30 million people who did not vote in the first round have now woken up.

PHOTO: ANTONIO SCORZA/SHUTTERSTOCK.COM

▲ Presidential candidate Jair Bolsonaro campaigning.

'Bolsonaro has easy answers to complex problems, and some people like that. You want to believe that those who support him are just crazy, yet these voices are about to elect him president, so it's really scary. I'm not usually the person who starts conversations on politics with my international friends – I have the feeling that some people find it confrontational. This idea is based on what I've experienced in Brazil: the country is polarized. There are even fights within families, including mine. I had an argument with my brother-in-law because I was trying make him see that Bolsonaro is just not an option. Not to mention Bolsonaro's homophobic, misogynist and racist speeches.



Carlos Alho, a Brazilian PhD candidate in the Soil Biology Group, reflects on recent affairs in his home country.

Twenty per cent of the population didn't vote in the first round. So even if Bolsonaro got 46 per cent, there are still 30 million people who have yet to decide. Now in the second round, you can only vote for either Bolsonaro or Fernando Haddad. I hope that people will now be mobilized to vote for the other option. But I don't know.

I'm well adapted to Dutch life, even the weather. But I never think: I live here now, so forget Brazil. It's not possible to think like that. So I still do what I can from here, like keeping in conversation with my family. Whenever my brother-in-law posts something in the family WhatsApp group supporting Bolsonaro, which I know is fake news, I counteract that. I'm the youngest in my family and the only one who made it to a PhD, so they see me as someone they can listen to. But it's harder when you're not there. Yet I just want them to see that there is another side, so that they cannot be manipulated easily.' GH

YOU ON CAMPUS

PHOTO: ANNE VAN DER HEIJDEN

Laurens van der Hart (21), a third-year Bachelor's student doing International Land and Water Management, will soon be doing an internship in Palestine. 'Water supplies and water shortages are a really big deal there; people can go to war about these things.'

When he came to Wageningen as a first-year, Laurens immediately joined the Christian student society Navigators Wageningen (NSW). 'I wouldn't call myself an active member,' he says. But when he checks his diary, it turns out many an evening is filled with society events after all. 'What I do alongside my studies varies each period, but at the moment I've got quite a few NSW activities. And sometimes I meet up with friends.'

Laurens spends most of his day on campus. 'I came to Wageningen for the degree programme; I wasn't thinking about the town. They have basically got good education here, haven't they?' Laurens is on schedule, which means he is in the final year of his Bachelor's. He is considering doing his Master's in Wageningen too. 'I certainly wouldn't mind staying on here. Perhaps because I come from Nijkerk, where there's not much to do either.' He adds: 'I don't find Wageningen town anything special but the surroundings are pretty cool. The woods, the fields, the heathland: they're really nice for a bike ride or a walk.'

'A bus I'm sitting in might be blown up'

Laurens still has a lot of arrangements to make in the next while for his four-month internship in Palestine. 'I have to put time and energy into that, which I don't feel too keen on.' It is also a challenge as he will be going alone. 'I've never been abroad on my own for so long. I will see if I can find something with students or other people so that I don't waste away on my own. Perhaps I'll find an international church.'

Laurens isn't worried by the fact that it's an unsettled region. 'Sure the risks are a bit bigger; a bus I'm sitting in might be blown up. But I don't think that's likely.' **AvdH**

'Give your feedback in your most lucid and sincere way'

Students tend to take a lot for granted, blogger Donatella Gasparro discovered when she started working as a teaching assistant. Her message from the other side: think carefully before you judge your teachers.

'The very first day of class that I had here was quite prophetic. I looked at the coordinator while she was presenting the course, and said out loud, without thinking: I want to do her job. A few months later, I found myself being her student assistant for that course, and some time after that, being the assistant for more courses of the chair group. Exactly one year later, I was introducing the course that she was introducing the abovementioned prophetic day.

Fascinating, right? It is.

It is fascinating and inspiring first of all because, in Wageningen, things happen. If you want something to be reality, you'll find the means to make it come true. For the sake of putting this statement into context: in the country I am from, the position of teaching assistant doesn't even exist.

THE OTHER SIDE

Being a teaching assistant is a great opportunity that really provides a student with insights into the academic world. Plus, it allows you to develop several skills which may turn out to be very useful in your career.

Being "on the other side" – the teaching side – also, and maybe most importantly, allowed me to understand how difficult it is to make a course go smoothly and work. As students, we often take too many things for granted (especially here where education facilities and services really spoil us!), while in the background there is so much thought and work on the coordination and organization, even for the smallest of things. Teachers have to deal with a lot of work that goes way beyond teaching per se, including crazy scheduling and rooms matching, which become even more complicated with increasing numbers of students.

In all of this, feedback between teachers and students plays a very relevant role. And I've never seen the openness to it of this university anywhere else. Students truly get the chance to shape the way courses are designed when careful ears listen to their suggestions.

A REASON WHY

So my message from the other side, eventually, is: give your contribution with feedback in your most lucid and sincere way, always keeping in mind that there's very often a reason why things are the way they are.'

BLOG

Donatella Gasparro is a Master's student in Organic Agriculture from Italy. You can read all of her blogs on resource-online.nl.

Wageningen Master's students do internships and thesis research all around the world, getting to know their field and other cultures. Here they talk about their adventures.

A farmer's son in Brussels

'Here I am in the enormous European powerhouse of ministers, commissioners and Members of the European Parliament. I feel slightly uncomfortable walking around here. I managed to wangle my way into this position with a "get on with the job" mentality. Don't be too scared. Nothing ventured, nothing gained. As the son of a Twente farmer, I am in my element in the agriculture sector. And as a student on two Master's programmes, having previously studied veterinary medicine in Ghent, and at the applied sciences university in Leeuwarden, I think I have enough agricultural knowledge. My main interest is in future perceptions and experience of food, better known as the international food supply issue.

DAIRY FARMERS

I wrote my major thesis on policy limitations on food waste, and there were links with Europe. I could think of no better place to develop further professionally. In my view there is a shortage of plain common sense around here.

My task is to document the impact of the shrinking EU budget for the Common Agricultural Policy on Dutch dairy farmers. I have to do this by "operating freely": not being afraid to jump in at the deep end without knowing where I'll end up. I am looking at different levels in the agriculture chain: producers, lobbyists, policymakers, ministers and MEPs. I find it very interesting to talk to all these different people, because I learn something from them all. It really is a unique opportunity. I get to spend six months in the Champions League of the agricultural world.

MIGRATION

The craziest experience so far has been the notorious mass migration of the entire parliament from Brussels to Strasbourg. Voting takes place there every month on dossiers people have been working on for months. The atmosphere was indescribable, because they are talking there about European policy, so it concerns billions of euros.' **EvdG**

THE WORKS

Who? Stijn Broekhuis (26), MSc student of Animal Sciences (Wageningen University) and European Animal Management (Purpan University, Toulouse, France)

What? Internship at the European Parliament as assistant to MEP Annie Schrijer-Pierik

Where? European Parliament, Brussels

More interviews on resource-online.nl

PHOTO: SHUTTERSTOCK

In memoriam

Annabel Staneke

On 2 October we received the tragic news that Annabel Staneke passed away on 30 September 2018. She was 23 years old.
Annabel was a Wageningen student in the final stage of the BSc programme in Animal Sciences. She loved animals, especially cats and other pets. She drew animals as a hobby, and she was a gifted painter.
Annabel was already looking forward to joining the Master's programme in the near future, and was focusing on learning laboratory skills. As her main research area, she was interested in animal behaviour. During her studies, Annabel preferred to work and operate individually and hesitated to ask for help from her fellow students, lecturers or study advisers. Sadly, Annabel found it difficult to cope with some situations in her daily life. On the card announcing her death, there is a poem by Annabel that may reflect her struggles: 'For life is not meant to last forever. That we may dream, dreams such as may be eternal'. Our sympathies go out to Annabel's parents, twin brother, family and friends for their terrible loss.

On behalf of students, staff and the Animal Sciences education team, Egbert Kanis (Study adviser)

In memoriam

Alison Burrell

Alison Margaret Burrell was born on 9 July 1943 in Sydney, Australia.
As a young woman she arrived in Paris with the intention of following an education in music (composing). But the Paris revolt in May 1968 changed her ideas, interests and perspectives and she switched to studying Mathematical Economics and Econometrics at the London School of Economics. She worked as an associate professor in Wageningen from 1994 until her retirement, and in the course of her scientific career she became an authoritative and influential international scientist with impressive analytical skills and special gifts as a teacher, consultant and editor. Alison made a long-term contribution to the profession of agricultural economists in Europe via her editorship of the *European Review of Agricultural Economists* (1995-2007). She taught many young researchers how to improve their papers, aided by her fluency in many languages (English, French, Italian, Dutch and Spanish). Although she did research in several areas, dairy modelling was consistently one of her main areas of research, first in relation to the introduction of the milk quota system and later in relation to its abolition. Her studies (together with others in Toulouse, Rennes and Wageningen) played a major role in EU decision-making on abolishing the EU milk quota system by 2015. Apart from doing thorough research, she could also communicate the results clearly to administrators and policy makers. Near the end of her life, Alison returned to her initial passion: composing. Two weeks before she died she was present during the recording of her compositions in Adelaide. Alison Burrell died peacefully at home in Sydney on Tuesday 9 October 2018. She had led a very full life.

On behalf of the Agricultural Economics and Rural Policy Group, Arie Oskam and Jack Peerlings

Announcements

PARTICIPANTS NEEDED

We invite Dutch men and women with good general health and adequate understanding of the English language to participate in two studies about eating-related sensations. Participants will receive a €5 gift card plus a bag with an assortment of snacks or a free lunch. For more information contact aikaterini.palascha@wur.nl.

OTHERWISE: INNER SUSTAINABILITY SERIES

After a successful iWEEK summer training course on 'wild wisdom' in July, OtherWise will continue exploring the topics of connection to nature, sustainable activism and our personal role and voice in the challenges of these times through monthly 'inner sustainability' workshops. In order to build a sustainable world, we need to (re-)connect to the web of life: to ourselves, to others and to the nature around us. On November 6 we'll kick off with a documentary on Joanna Macy, deep ecologist, Buddhist scholar, activist and founder of the Work that Reconnects. Her work helps people transform despair and apathy in the face of overwhelming social and ecological crises into constructive, collaborative action. It brings a new way of seeing the world, as our larger living body, freeing us from the assumptions and attitudes that now threaten the continuity of life on Earth. **OTHERWISEWAGENINGEN.NL**

Agenda

Thursday 18 October – 8 November

FILMS FOR STUDENTS

Tampopo: A Japanese comedy about a truck driver who helps a struggling restaurant. *Whitney*: A moving portrait of Whitney Houston. *Figlia Mia*: An Italian drama about an adopted girl's love for both her mothers. *Juliet, Naked*: a comedy about life giving you a second chance. *Stalker*: sci-fi film about a zone that is both terrifying and stunningly beautiful. *Benzinho*: A Brazilian ode to human resilience. *Dogman*: An Italian biographical crime film about revenge. Location: Wilhelminaweg 3A, Wageningen. €6.50/€5. **MOVIE-W.NL**

20-28 October

LANDSCAPE ART AND THEATRE FESTIVAL: THE SECOND EDITION OF THE WOEST&BIJSTER-FESTIVAL

The backdrop for this festival is 21 pleasant spots around Bennekom and Renkum, where inspiration can be drawn from wild forests, pretty valleys, secluded heaths and abandoned barns in the woods of Ede, Oostereng, Renkums Beekdal, Quadenoord estate and the Bennekom heath. The locations are linked by a cycle route and a walking route of 15-25 kilometres. WOEST&BIJSTER is an autumn festival and not for wimps: as its name suggests, it is wild and rugged.
It offers an experience of innovative art forms with artists active at the locations. The theatre programme consists of nine shows with performers including Yvonne Beelen, MOMO-Theater, Arnhemse Nachttheater and the Vliegend Fort collective. Audiences are actively involved in this location-based theatre and the experience is all the more intense for the wild natural setting.
WOESTENBIJSTER.NL

Thursday 25 October

WEES WORKSHOP & SEMINAR

Dr Daniel Bopp (University of Zurich, Switzerland) is visiting Wageningen to give a workshop and seminar on sex determination systems in the common housefly. Workshop 'New directions in pest control management' at 1:30 pm in Orion C3040. Registration required via yidong.wang@wur.nl. Seminar 'Genetics and evolution of sex determination system in the common housefly' at 4 pm in Orion C3033. Drinks and discussion afterwards in The Spot!
WEESWAGENINGEN.NL

Thursday 30 October, 15:30-19:00

CAREER DISCOVERY DRINKS 2018

Semper Florens study association is organizing a big drinks party to put students in touch with businesses in the plant sector. Students from all degree programmes are welcome and admission is free. Location: Unifarm, Bornsesteeg 48, Wageningen. Email: sf.career@wur.nl.
SEMPER-FLORENS.NL

Saturday 3 November, 20:00

WUR CENTENNIAL CONCERT MUSIC & SCIENCE

As part of the centennial celebrations, student orchestra De Ontzetting and choir and orchestra WSKOV are joining forces to give us an evening full of lovely music and song, as well as spoken intermezzos (in English) by Marten Scheffer and Simon Vink. Both modern and classical works will be performed, from Schubert to Pallhuber's magical *Elements of Nature*. The evening is sponsored by the Van Uven Stichting. Venue: Junushof Theatre, Wageningen. Tickets: €7.50/ €5 (students).

ONTZETTING.WUR.NL/WINKEL

Sunday 4 November, 14:00-15:00

LIVING ROOM LECTURES: 'GET TO KNOW THE NEIGHBOURS' (IN DUTCH)

Wageningen residents will be opening their doors all around the town, inviting a WUR professor, researcher or lecturer to give a talk to interested residents. There'll be talks about why birds do not collide with each other in the air, why war can benefit women, and how fibre affects digestion and bowel movements in pigs.

WUR.NL/MAAKKENNISMETDEBUREN

Thursday 8 November, 15:00

ROB GOLDBACH VIROLOGY LECTURE 2018 & PRIZE-GIVING FOR THE GOLDBACH THESIS PRIZE

The biennial Rob Goldbach Virology Lecture takes place on 8 November, this time with Professor Michael Strand, (University of Georgia, Athens, USA). The title of the lecture is: *Evolution, Function and Endogenization: Lessons learned from virus associations with parasitic insects*. Professor Strand is an authority on symbiotic interactions between viruses, insects and parasitic wasps. The Goldbach MSc thesis prize – a continuation of the Van der Want MSc thesis prize – will be awarded to Erick Bermudez Mendes for his thesis *Development of neutralizing nanobody complexes using bacterial superglues*'. The Rob Goldbach Fund was established by the Goldblach family in 2010 in memory of Rob Goldblach, professor of Virology 1987-2009. Location: W.01 Radix, Wageningen Campus.

Colophon

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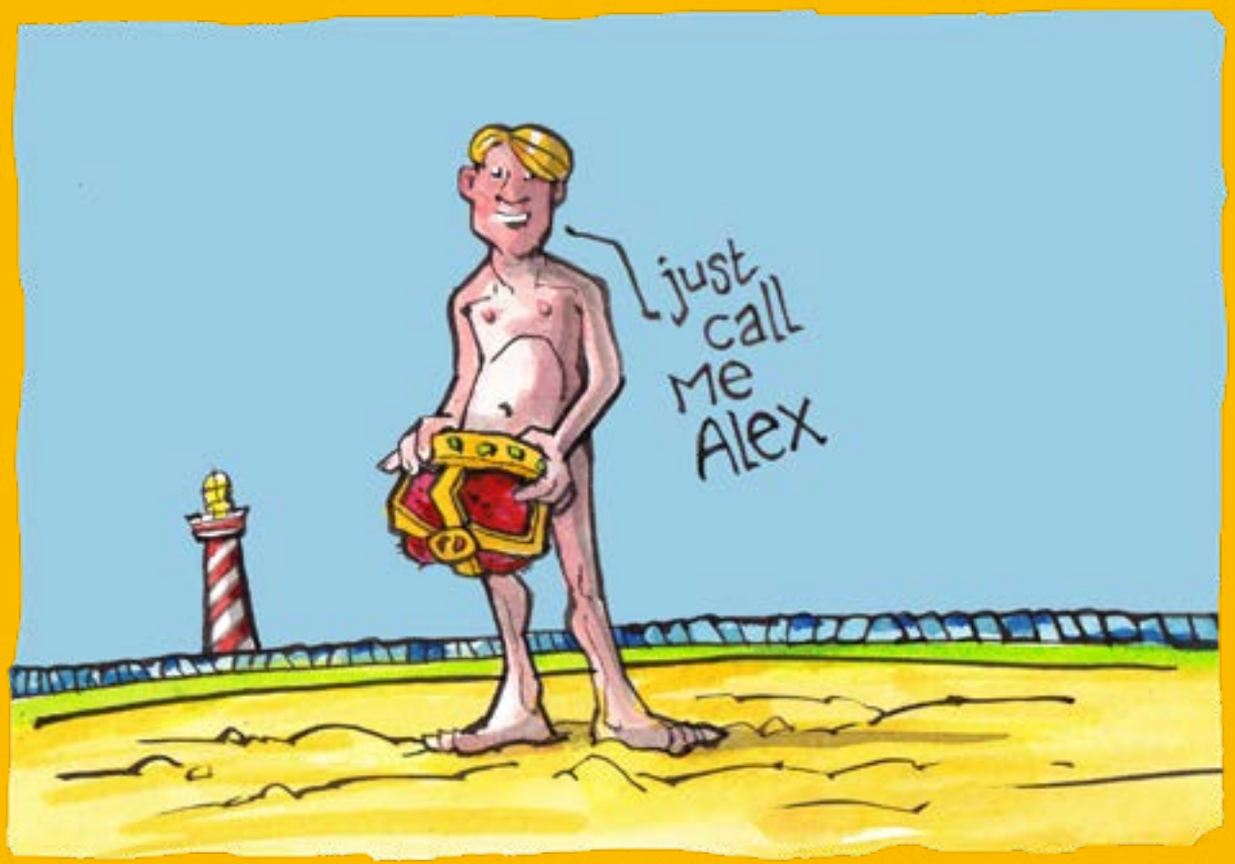

ILLUSTRATION: HENK VAN RUITENBEEK

On first-name terms with teachers

I have been in the Netherlands for over a year now and I can confidently say that I am now used to the Dutch culture, even though I miss my family and my favourite Ghanaian delicacy. However, there is one thing I am still not used to: the way lecturers are addressed by their students.

I was astonished the first time I heard a student addressing a lecturer by his first name only. The title of Professor or Doctor is hardly mentioned. Eventually, I came to terms with the fact that this is more or less the norm at Wageningen University. It is perfectly normal here to address lecturers or tutors by their first name without adding their title.
This is completely different in my home country. In Ghana, addressing a lecturer without his or her title denotes a disrespectful attitude. A friend from the Czech Republic told me that it is the same there.
One thing I have noticed is that lecturers at Wageningen University are down to earth. They are approachable and straightforward, which makes it easy to build a healthy student-teacher relationship. Though I still find it difficult to address a professor by his or her first name, I am trying my best to get used to it. After all, there is a proverb that says: 'When in Rome, do as the Romans do.' **Claudia Ayim, MSc student of Management, Economics and Consumer Studies, from Ghana**

'In Ghana, addressing a lecturer without his or her title denotes a disrespectful attitude'

Do you have a nice anecdote about your experience of going Dutch? Send it in! Describe an encounter with Dutch culture in detail and comment on it briefly. 300 words max. Send it to resource@wur.nl and earn twenty-five euros and Dutch candy.