

No English-taught BSc

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RESOURCE [EN]

For everyone at Wageningen University & Research

no 20 – 15 June 2017 – 11th Volume




There is more to
taste than taste

p.12

INTERNATIONAL
EDITION

SPECIAL GUEST

Plant-e, a WUR spinoff, hosted a special guest on Wednesday 7 June. 'We really had an incredibly nice morning. The queen was extraordinarily enthusiastic,' says director Marjolein Helder. During her one-and-a-half-hour visit, Queen Maxima was given a guided tour of the building on the Mansholtlaan and an explanation of the company's products and experiments. The queen had done her homework and was really interested, says Helder. She also had one reservation. 'Maxima suggested that we should focus more on just one specific application of our technology.'  TL, photo: Sven Menschel



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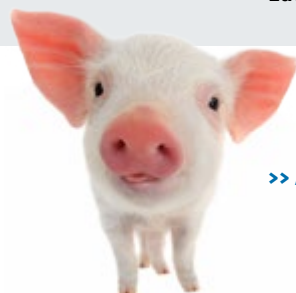
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THRESHOLD

The university's plans to launch five English-taught Bachelor's programmes in September 2018 have been put on hold for now. The Student Staff Council has provisionally rejected the Executive Board's plan because they don't think we are ready for it yet. With an emphasis on 'yet'. We first need to assess the standard of English in the classroom. The competencies of both students and teachers leave a lot to be desired, apparently. I have no idea about that, but I do understand the Council's concern about the quality of education if people's command of English falls short. What is the minimum requirement, actually? Has anyone ever looked into the standard of English among our international students? Of course we mustn't become a laughing stock but intuitively I reckon we passed that stage long ago. The question is simple: when are we ready? In this battle of the languages there comes a time when you reach the threshold. Or is it a hurdle? Once we are over it, we'll be on the fast track towards a new culture.

Edwin van Laar



>> A pig from a group pen is happier | p.9

EXTENDED TIMETABLE MODIFIED AND POSTPONED

The Executive Board wants to heed the objections of the Student Staff Council to the extended timetable. The board now proposes postponing the change by a year, providing additional support for teachers and recruiting additional support staff. The Student Staff Council decided whether they agreed under these conditions on Wednesday afternoon, after this magazine went to press.

In a letter to the Student Staff Council, the Executive Board agrees to an independent study on the question of whether the extended daytime schedule, as it is called, can cater for the predicted increase in student numbers. The board is also willing to postpone the introduction of the new timetable until September 2018. As a result of this postponement, WUR is going to have to invest more in teaching space at the Dreijen.

The board will also offer all Wageningen teachers support in adjusting their courses. This adjustment is necessary because classes will be shortened in the new timetable from 45 to 40 minutes. By offering this support the board wants to ensure that the new timetable does not affect the quality of the education.



The board has also agreed to hire additional support staff for the education programme. Split shifts cannot be entirely ruled out but the board wants to minimize them and looks to consultations between Facilities and Services and the Student Staff Council to work out the details.

In the letter, the board also reiterates its agreement that the new timetable should allow for one long lunch break per week per programme, and that 80 percent of students will get two long lunch breaks per week. The board stops short of promising two long lunch breaks for all students, however, because that would cancel out the gains in teaching space compared with the present situation.

The board also agrees that students should not have classes until seven pm on more than two days a week. However, the board does not intend to record the eleventh and twelfth classes of the day on video so that students can watch them at another time. That is too expensive and anyway, this is not distance education, says the board. Yet the board is in favour of the principle of recording all lectures and making them available online. Finally, the board agrees to an evaluation of the extended daytime schedule after two years.

It was two weeks ago that the Student Staff Council rejected the introduction of the extended timetable from September 2017. In doing so they laid down eight conditions which the introduction of the new timetable should fulfil. The board's letter is a response to that. The Student Staff Council's decision on whether the board's concessions suffice was made in the afternoon of Wednesday 14 July. News about that is on the *Resource* website. **AS**

Does the Student Staff Council agree now? Find out on resource-online.nl

ENGLISH-TAUGHT BACHELOR'S VETOED FOR NOW

The Student-Staff Council at the university has provisionally rejected the Executive Board's proposal to launch five English-taught Bachelor's programmes in September 2018.

The Council wants to be sure that the standard of education can be maintained and has therefore adopted a 'not unless' position: only under certain conditions is the Council prepared to endorse the proposal.

To safeguard educational standards, the competencies of students and teachers need some improvement, in the Council's view. The standard of English needs to go up too. So the current standard of English should be assessed, and skills brushed up where necessary. The Student Council would also like the Board to address the problems posed by the international class-

room in Master's programmes first, to avoid introducing the same problems into Bachelor's programmes.

The Student Staff Council also fears that the Board underestimates the additional influx of international students that will result from the introduction of English-taught Bachelor's degrees. So the Council thinks the university could initially economize on student recruitment. If that does not stop student numbers from growing, the Council is in favour of an admissions cap for the English-taught programmes.

Lastly, the Council believes that Idealis needs more time to get ready to accommodate more international students, who should all be allocated a room as soon as they arrive. The Student Staff Council will not endorse the proposed language change until these issues are addressed. **AS**



PHOTO: SVEN MENSCHER

DITCH BUGS

Inspiring the young generation to find out about aquatic life. With this aim in mind, professor of Aquatic Ecology Marten Scheffer launched an app to go with the latest edition of his book about ponds, ditches and puddles, *Vijver, sloot en plas*. Pupils from GJ van den Brink Primary School in Wageningen tried out the app on

campus on 8 June. They had no trouble identifying stone loaches and three-spined sticklebacks. Scheffer: 'It is not hard at all to inspire the young generation.' **VK**

Watch the video on resource-online.nl



DESIGN THE GREENHOUSE OF THE FUTURE

Wageningen is going to brighten up the centennial celebrations with a Green Challenge. In this green contest, teams of students will design the urban greenhouse of the future.

The Green Challenge is Wageningen's answer to student competitions such as the World Solar Challenges and iGem. The first edition will get started this autumn, so that the first winners can be announced in the festive year 2018.

The assignment for the competing multidisciplinary teams is: design the ultimately sustainable urban greenhouse, making sure it draws in city residents. The new greenhouse should raise urban farming to new levels by combining sustainable energy genera-

tion with new concepts for producing healthy food in the city, says project coordinator Rio Pals.

Multidisciplinarity is central, says student Gijs Lysen (Economics and Policy, Business and Consumer Sciences). He is one of the driving forces behind the competition. 'We are not just looking for technical solutions. It is also about how you make sure local people are involved with the urban greenhouse.'

Participating in the Green Challenge will take up six months of students' time. Team registration opens in October. Information sessions will be held in Forum P0631 on 15, 20 and 22 June at 12.30. **③ RK**

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Peace

It's not really allowed, but I so enjoy sitting on the banks of the Rhine with a beer. Preferably for a moment of complete peace and quiet, and then talking about life with friends until the sun goes down. I don't like it as much if it gets really busy at the Rhine, but usually it's fine.

All in all, I'm as happy as a lark in Wageningen. Not because of a vibrant city life or great museums: we don't have those here. We have something else: peace, small scale, the personal touch. And I don't think I'm the only one who sees it this way. Almost everyone I speak to is content here. 'We shall never have it so good anywhere else,' is something I often hear.

Of course, nowhere's perfect. I sometimes hear some grumbling about evening classes. And pressure of work with the rise in student numbers – which is tedious, I admit. But it's not all roses in other places either. Whenever I go somewhere else I am struck afresh by how friendly Wageningen is. I can understand why more and more people want to come here. I can understand why Wageningen keeps on growing.

The question is, though, why do we still want that? However minor they may be, practically all the problems we have are related to growing student numbers. And we really have nothing to offer new students if we get really big. A field trip by bike is a lot less fun if there are 200 of you cycling in convoy. What is more, there aren't jobs for large groups of graduates from many of our degree programmes. Just imagine hundreds of agricultural economists entering the job market every year.

Actually, Wageningen's uniqueness owes everything to its relatively small student population. If we grow much more there will be nothing left of that. And hey, who would want to go to university here then?

Stijn van Gils (29) is doing doctoral research on ecosystem services in agriculture. Every month he describes his struggles with the scientific system.



in brief

>>QS RANKING

End to the ascent of WUR

Wageningen University has fallen from position 119 to 124 in the QS World University Rankings. Last year, the university climbed 16 places. The score for academic reputation has fallen, as has the score for the student-staff ratio. On the other hand, the citation score is higher than last year. When compared with the other Dutch universities, Wageningen is ranked seventh. The QS list is the most important university ranking apart from the Times Higher Education and Shanghai rankings. **③ AS**

>>LIBRARY CLOSED

Major renovations

The library in the Forum will close in the summer for major renovations. A total of 165 new study places will be added. The work should be finished by the end of October, says Petra Otten, who is managing the renovation project. 'The new study places vary from separate tables and chairs to bench workplaces, lounge areas and themed rooms for group study.' The library will be closed from 4 July. Students will be able to

use the Forum classrooms for private study. The second floor will open again around 11 September. Otten: 'We have also laid claim on behalf of the students to all classrooms from 4 September onwards that haven't been allocated in the timetable. But unfortunately the students will have to improvise a bit in Period 1. They will still be able to study in Orion, De Leeuwenborch or at home.' **③ LvdN**

>>TWO HEADS

Unusual porpoise

Fishers have caught a two-headed porpoise in the North Sea. They took photos of the beast and then returned it to the sea. 'We wrote a scientific article in record time because we'd never seen this before among porpoises,' says researcher Mardik Leopold at Wageningen Marine Research. The fishers didn't land the dead porpoise (a protected species) for fear of a fine. Leopold: 'That's a shame because it means unique material has been lost to science.' He hopes the legislation can be changed to allow dead sea mammals that have been caught to be brought back to land for the sake of science. **③ AS**



PHOTO: HENK TANIS

CURB ON NUMBER OF STUDENT HOUSES

Wageningen municipal council wants to set limits to the number of student houses in 'ordinary' streets. To avoid an overload, the new rule is that only one in 20 houses per street can be a student house.

This is the nub of the new rules for room rental, now available for perusal and comment by the public. The current rules are only two years old but are already inadequate. According to the mayor and councillors, there are some streets where the presence of students threatens to spoil residents' enjoyment of the neighbourhood.

According to the municipality, it is the difference in hours kept by students and their neighbours which causes problems. The issues are parties and late-night visitors, says a spokesperson. Other things that bother residents is litter, bicycles parked in the wrong place, poor maintenance of houses and antisocial behaviour such as cycling on pavements.

The municipality cannot give precise figures on the number of complaints received. 'But we have received strong signals that the current policy does not sufficiently protect the interests of sitting residents, from discussions with neighbourhood associations, individual residents and with the councillor responsible for this issue, Han ter Maat,' says the

spokesperson. So the rules are being sharpened up to keep the nuisance factor down. The municipality also wants to take the wind out of the sails of profiteering landlords.

The new rule is that a maximum of five percent of residences per street may be student houses. Concentrations of student houses in one street are taboo. The current rule is a maximum of 15 percent student houses within a radius of 50 metres around any other house. Student residences run by housing corporations such as Idealis are covered by this rule too. A licence is only required for renting out rooms in houses in which owners themselves do not live. The ruling still holds that no licence is needed for rental by a resident landlady or above a shop or restaurant.

The introduction of new rules means there are already a number of streets on which no more student houses would be allowed. The municipality is drawing up a list of these streets. Since 2015, when current regulations came into force, 120 licenses have been issued for student houses, room rental to refugees with a residence permit, and sheltered housing projects. A rough estimate suggests that Wageningen has about 200 premises housing students. The public has until 20 July to lodge objections to the new rules. **RK**



The back garden of De Kogel, a student house on the Niemeijerstraat in Wageningen.

TEACHING BONUS BRINGS FEW NEW LECTURERS

So far, few staff at Wageningen Research (WR) have made use of the 'equalization budget' that lets them pass on their expertise by teaching at Wageningen University. There have been 25 applications for grants from the fund since 1 January but nearly all these employees were already teaching last year.

Since January 2017, staff at Wageningen Research have been able to apply for a teaching bonus from the equalization budget if they lecture at the university. Before then, it was difficult for the university to hire WR staff for teach-

ing activities because the hourly rate charged by the institutes is more than the education allowance. According to the Executive Board, the equalization budget facilitates collaboration between Wageningen Research and the university education and therefore helps create One Wageningen.

The Executive Board has put aside 250,000 euros a year for the fund but after six months only 50,000 has been spent, says Marion Engel of the Education Institute. In the past few months, 25 applications were submitted for 18 WR employees; 19 applications were approved. But these were nearly always institute

staff who were already teaching last year. Then, they received a bottle of wine or book token for their efforts. Now they get paid properly from the budget.

In other words, so far the scheme is not encouraging the chair groups to hire more WR lecturers, concludes Engel. She is not surprised because the chair groups draw up a teaching plan for each academic year and the scheme has only been running for five months. It should become clear in the next few months whether the chair groups will be hiring more institute staff next academic year. **AS**

SUPERVISOR NO LONGER HAS TO BE A PROF

Wageningen University will make use of the flexibility offered in the new legislation that extends the right to award PhDs. As a result, some associate professors (UHDs) will probably be able to act as PhD supervisor from 2018, according to the rector Arthur Mol.

At present, only professors can grant PhD candidates the title of doctor in the Netherlands, in contrast to countries such as Belgium and Germany. But thanks to a change in the law that was passed by the Upper House of Parliament on 6 June, Dutch universities will soon be able to let other staff with a PhD be supervisors.

WUR still has to go through the decision-making process but Mol estimates that the new

rules will come into effect here from 1 January 2018. 'We already discussed this 18 months ago. At the time, we concluded that in principle anyone with a UHD1 tenure track position should also get the right to award PhDs.'

Wageningen University will probably also grant PhD rights to staff without a UHD1 position in exceptional cases, says Mol. 'An associate professor with their own line of research and a great deal of supervision experience might be able to take on the role of PhD supervisor earlier on in their career. On the other hand, someone with a UHD1 job who only teaches and doesn't have any experience in supervising PhD candidates should perhaps not be given this right.'

Maarten Smulders, chair of



Emeritus professor of Education Martin Mulder awards Yvette Baggen her PhD degree.

the Wageningen Young Academy and an assistant professor, is in favour of the change. Birgit Dekkers, chair of the Wageningen PhD Council, also agrees

with the change to the rules. 'The quality of the supervision is the key thing for us. Whether someone is a professor or not has nothing to do with that.' **SVG**

NOELLE AARTS IS GOING TO NIJMEGEN

Personal professor of Strategic Communication Noelle Aarts is leaving Wageningen after 25 years. From 1 September, she will be professor of Socio-ecological Interactions at the Radboud University in Nijmegen.

'In Nijmegen I will be looking at the interaction between scientists and societal actors in addressing complex societal problems and developing innovations,' says Aarts. She does that kind of research in Wageningen too, but in Nijmegen she will hold a chair. She will also be co-director of the Institute for Science, Innovation & Society (ISIS), which her chair group is part of. 'I am going to a very nice, challenging position.'

There is no chance of such a position in Wageningen, says Aarts. 'My partner is Cees Leeu-

wis, who is already professor in Knowledge, Technology and Innovation, a group which is closely connected with Strategic Communication. In research terms I can do what I like, but in terms of management jobs my hands are tied in Wageningen.'

It hurts to leave. 'It feels like a divorce. I have loved working at this university for 25 years. Wageningen really is a great university. Compared with the University of Amsterdam, where I work one day a week, I find the social issues we study here more exciting and more international. I will definitely go on collaborating with my Wageningen colleagues.'

Aarts was Teacher of the Year at Wageningen University in 2015. Now she will teach in Nijmegen. 'Everything is in Dutch there. That will take some getting used to.'

AS

An advertisement featuring a close-up of a steaming cup of coffee on a bed of coffee beans. The text 'FRESH DAILY!' is prominently displayed in large white letters. Below it, the text 'Visit resource-online.nl for the latest news' is shown. At the bottom, the word 'RESOURCE' is written in large white letters, followed by 'For everyone at Wageningen University & Research'.

SPITSBERGEN IS THE RUBBISH DUMP OF THE OCEAN

The sea around Spitsbergen is the ocean's rubbish dump, and more and more plastic is piling up there. Much of it comes from fisheries, says Wouter Jan Strietman of Wageningen Economic Research, who has just got back from an expedition to Spitsbergen and the island of Jan Mayen.

Together with Eelco Leemans of the Clean Arctic Alliance, Strietman investigated the origins of the large amounts of plastic on the coast. The pair travelled on a tourist ship from Oceanwide Expeditions and collected rubbish from seven different beaches.

That rubbish was then catalogued and analysed. The analysis was new, and was done with the aim of locating the source, says Strietman. 'It is important to know which buttons you need to press if you want to reduce the amount of plastic in this area. So if you find fishing nets, you want to know precisely which fishery they come from. What we are doing in fact is paving the way for a strategy, together with regional and international stakeholders.'

According to Strietman, waste flows in from roughly four directions. 'You've got the Gulf Stream from North America and from Europe, the ocean current from Siberia, and fishing in the surrounding waters. Fisheries are the main source of the traceable



PHOTO: WJ STRIETMAN

Among the researchers' finds on Spitsbergen was a strapping band, with which fish boxes are secured on board ship.

waste. And the most surprising source is the ice pack. A lot of plastic is frozen into it and where the ice melts, the plastic floats free.'

Strietman and Leemans analysed a total of almost 2000 pieces of plastic, ranging from buoys and nets to household waste and even the steering wheel of a speedboat. On the remote Norwegian island of Jan Mayen, which is

roughly the size of Terschelling and lies in the middle of the ocean between Iceland and Greenland, 575 pieces of rubbish were found on a 100-metre beach. By way of comparison: a remote Dutch beach has an average of 395 bits of rubbish. Ocean currents from the north and the south meet at Jan Mayen, explains Strietman. 'So you find rubbish that comes from everywhere.'

The researchers found a plastic part used in oyster farming in southern Europe, for instance. 'So that has drifted more than 3000 kilometres.' But Strietman and Leeman could not trace the origins of all the plastic, by a long way. Strietman: 'Twenty to fifty percent of the pieces have disintegrated so much that it is impossible to identify their origins.' **✎ RK**

A MIX OF GREEN MANURE CROPS IS MOST PRODUCTIVE

Combinations of green manure crops ensure a higher yield in the next year, shows a study by Wageningen soil ecologists.

After harvesting, many arable farmers and vegetable growers nowadays sow green manure crops such as grasses, rye, yellow mustard and phacelia. These crops leave a legacy behind in the soil in the form of nutrients and soil organisms which are good for the growth of the next generation of crops.

PhD candidate Janna Barel conducted a field trial in which she alternated two main crops, oats and endive, with winter manure crops. She then assessed which combination of crops did the most for the productivity of the latest crop.

The use of green manure crops leads to higher yields the next year than leaving the field fallow over the winter, states Barel in the *Journal of Applied Ecology*. And the rule that you should avoid growing a

succession of closely related crops in the same field turns out to be good advice. The successive combination of oats-English ryegrass-oats led to a lower oat harvest second time round than the combination of oats and less closely related manure crops. Mixes of manure crops were the most productive, and helped suppress diseases and pests, says Barel. This is because these diseases and pests are less able to spread in mixed fields than in monocultures.

Some combinations of green manure crops seem to lead to higher crop yields than others. Barel found that oat and endive production was higher with a combination of radish and vetch than with a mix of English ryegrass and white clover.

With their results, the Wageningen researchers endorse the recommendations of the world food organization FAO and of the Dutch government. **✎ AS**

PIGLETS FROM GROUP PEN GROW BETTER

Piglets that have lived with their mothers in group nursery pens eat and grow better later on and are less likely to bite other pigs' tails. However, piglet deaths are slightly higher in the group pens, according to PhD research by Sofie van Nieuwamerongen.

It has been mandatory since 2013 to keep pregnant sows in group housing because that lets them exhibit their natural social behaviour. But to give birth, the sows are placed in farrowing pens that are too small for them to turn in. This is to prevent them from rolling onto the piglets and crushing them to death. After the birth, the sow and her piglets spend about four weeks in that pen, after which the piglets are weaned (separated from the sow). That often causes a lot of stress. They have to switch to solid feed and are transferred to new surroundings with unknown piglets. As a result they don't eat so well and run a greater risk of becoming ill or engaging in tail biting.

Van Nieuwamerongen investigated the welfare of the piglets if you keep five sows together with their pigs in group nursery pens. She discovered that this has benefits. The piglets learn about eating solid feed from their mother from an early age. In addition, the piglets grow up

together in a more spacious environment with play materials such as straw and jute sacks, and they stay together after weaning. Van Nieuwamerongen established that these piglets ate more, grew better and had fewer problems with diarrhoea. The animals also played more and were less likely to damage one another's ears or tails.

Those benefits increase if you make the separation of the piglets from the sow a gradual process. In this gradual weaning process, the sows were able to isolate themselves from the piglets in a separate area between four and nine weeks after giving birth.

Yet the group housing also has a downside. Piglet deaths were higher because they were more likely to be laid upon by the mother, especially in the first week. Van Nieuwamerongen thinks this problem can be resolved by improving the design of the farrowing pen. Pig farmers could also choose the kind of sow that takes better care.

The PhD candidate can't say whether the group system is a financially better choice. It is more expensive because the animals take up more space, but the meat may fetch a better price if it gets two or three stars on the Beter Leven animal welfare label. **AS**



PHOTO: VIC STERKSEL

A group pen for sows and piglets.

VISION <<

Phytophthora one step ahead of the breeders

While plant-breeding companies are developing potato varieties which are resistant to *Phytophthora infestans*, the pathogen is developing new aggressive strains which are rapidly spreading across Europe. This finding comes from research by EuroBlight. Phytopathologist Francine Govers is not surprised. '*Phytophthora* is so dynamic.'

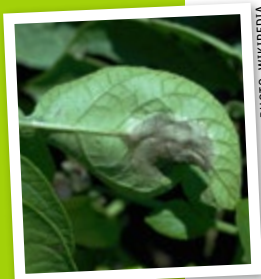


PHOTO: WIKIPEDIA

Where do these new aggressive strains come from?

'*Phytophthora* has a dynamic genome; it can copy or discard fragments of DNA very fast. If just one of those strains holds its own in a field of potatoes that gets sprayed with pesticides, then this strain will survive, push out other strains, and be able to develop into an epidemic.'

Will the new strains affect the potato harvest?

'We shall see in the next few months. We don't know whether the main potato varieties are resistant to these strains. That could vary from one variety to the next. Resistance to *Phytophthora* is important to the breeders, but even more important are the harvest, colour and taste of the potato.'

Why not build fast resistance into the potato?

'You can do that but then you first have to find resistance genes in, for example, wild potatoes which successfully fend off this new aggressive strain. You can even pile up resistance genes in a potato, to ensure long-lasting resistance to *Phytophthora*. WUR's DURPH project has demonstrated that. But then you still have to introduce those genes into an existing cultivar and go on propagating those tubers for another five years before you have enough seed potatoes. By that time there can already be new aggressive *Phytophthora* clones.'

So the pathogen is faster?

'*Phytophthora* is so dynamic, it can discard genes so the resistant potato will no longer recognize it and will still get sick. Luckily we also have resistance genes which attach themselves to genes the pathogen always needs. *Phytophthora* can't discard those genes but it has other ingenious methods up its sleeve for suppressing recognition.'

Who will win the race in the end?

'That depends on your breeding technique. Vegetative propagation is the method currently used for potatoes, but you can also grow potatoes from seed, as the company Solynta has shown. In that case, after cross-breeding and selecting you can – in theory – very quickly obtain enough potatoes of a resistant variety.' **AS**

BREEDING FOR SUSTAINABLE FISH FARMING

Personal professor of Breeding and Genetics Hans Komen wants to make aquaculture – fish farming using cages, ponds or closed systems – more efficient and sustainable with the help of targeted breeding programmes. He talked about his ambitions in his inaugural address on 1 June.

Worldwide, more than 300 species of fish are farmed, among them salmon, catfish and tilapia. To go on being able to feed the world population, this aquaculture needs to expand. It can do so successfully with the help of breeding programmes, thinks Komen. His aim is to select fish which are more resistant to disease and metabolize feed more efficiently. He also wants to select for fish characteristics which are directly related to health, such as oxygen uptake capacity.

Selection for health, resistance and efficient feed conversion can help improve growth by more than 10 percent per generation, shows Komen's research. This makes breeding programmes for fish very economically viable, he stated in his address.

Komen wants to see fish farming becoming part of a circular economy and address the implications of climate change for fish farming. He also wants to select for fish which are more able to digest alternative diets based on algae and insects. This requires smart breeding programmes using knowledge about DNA, so that the breeder can link several useful characteristics with particular patterns of DNA variation, and select the best-performing fish.

Komen works with fish farms in several countries to develop breeding programmes which match their environment and wishes. For example, he selects better bass and bream in breeding programmes in Greece, and he has breeding programmes for barramundi in Singapore and tilapia in Ethiopia. He also works with the international research institute Worldfish on designing a selection programme for Nile tilapia, and he will soon start a breeding programme in the Netherlands for yellowtail, a small species of tuna. Komen collaborates closely with the aquaculture group at Wageningen Livestock Research. **AS**



PHOTO: GUY ACKERMANS

Hans Komen at his inauguration.

PRECISION FARMING FOR AFRICAN FARMERS

Precision farming is not the preserve of modern western farmers. Small-scale farmers in West Africa can practise a low-cost version of precision farming to boost their labour productivity and yield per hectare. So say Wageningen agro-ecologist Ken Giller and his colleagues in *Agronomy for Sustainable Development*.

Farmers in semi-arid regions of West Africa are faced with poor crop establishment, erratic rainfall, low soil fertility and a shortage of labour. What is more, they do not have much cash or many resources for addressing these problems. So they stand to gain from farming practices which make efficient use of the available

resources and reduce the risk of a poor harvest. This precision farming can help them improve production, write the researchers.

One example is the digging of pits in which farmers concentrate water and nutrients. This is done in Burkina Faso, where the pit is called a *zai*. The technique is combined with timely sowing and weeding. Another aspect of the approach is the selection of large seeds treated before sowing with a mix of pesticides and fungicides. This treatment can easily increase the yield by 15 percent. And putting artificial fertilizer in the pits can further double production.

Furthermore, the distribution and use of seeds and artificial fertilizer can be much improved by mechanizing it. This also saves on



PHOTO: TREE AID

In this field of millet in Burkina Faso, the *zai* method has been used, with shallow pits which trap water and organic matter.

labour during the sowing season. Finally, the pits can retain water and prevent erosion, as long as they are dug well before sowing time. This combination of meas-

ures can greatly increase food security in the region. The principles can be applied to all the major crops in semi-arid West Africa, conclude the researchers. **AS**

MEANWHILE ON...

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PHOTO: GUY ACKERMANS

THE NAKED TRUTH

'You don't want to hear the naked truth,' shouted the 12 students who campaigned at the end of the 1980s against a proposal by Minister Deetman to make cuts in education. The 12 stripped off completely at a session of the Lower House of Parliament. The 'incident' was dealt with in the spirit of the thing, and within a few minutes the activists were outside again, fully dressed.

To mark the WUR's 100th anniversary, *Resource* is delving into the archives in search of interesting photos. Perhaps you have a nice story about this photo, or there might be another one in the series that brings back memories. Let us know. Drop in on the editors or send an email to vincent.koperdraat@wur.nl.

**See the photo series
'100 years of ... our own opinions'
on resource-online.nl**

BAKING FOR CREDIT POINTS

Anyone arriving on the seventh floor of the Forum this week was greeted by delicious smells. 120 second-year students of Nutrition and Health were baking nutritionally enriched snacks such as brownies containing spinach or peanut cookies made with insect flour for additional iron. The assignment was part of the course called Food & Health: Theory and Practice.

**Watch the video
on resource-online.nl**



SNAPPED WITH RUTTE

It's your first day of trying out life in The Hague and you're having your picture taken with Prime Minister Mark Rutte. That's how it went for the Wageningen student of Earth and Environment Lianne de Bie (24). Along with another 400 people, she had responded to a call by The Hague municipal council for young people who would like to try living in The Hague for 30 days. The hope is to attract young talent to the city. Lianne

was one of the three who were selected. And there she stood on her first day, queuing for coffee with Rutte. 'Apparently that's considered quite normal in The Hague.'

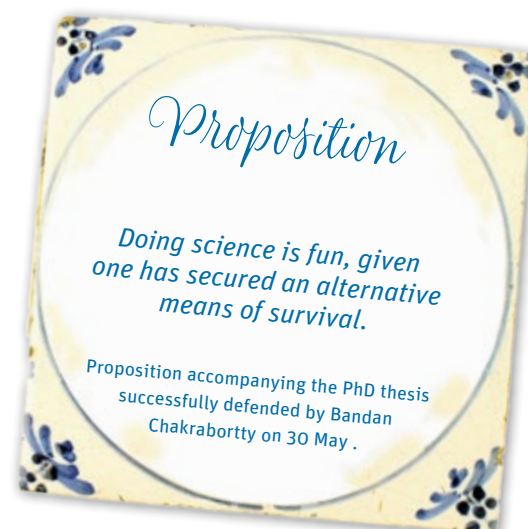
BLOG: NO VISION ON GROWTH

Wageningen teaching staff can only just cope with the pressure caused by rising student numbers. Strange, thought blogger Carina Nieuwenweg, because the student-teacher ratio at other universities is still much higher. She delved into WUR's Strategic Plan and discovered that it did not say anything about WUR's intended priorities when it comes to quantity versus quality. 'The aim is good, effective and efficient education for larger numbers, with extra energy going into preserving our small-scale character,' Carina read. 'That sounds a bit like wanting to lose weight but go on eating an awful lot of chocolate.'

**Read the whole blog
on resource-online.nl**

BREAD SPREADS

Three students of Food Technology have made a new kind of spread for on bread: a sliceable bean roll made of white beans. They produced it in three flavours: Italiano, curry-coconut, and chocolate, dubbed it 'Mr Bean', and won the Food Innovation Bachelor's Award 2017 with it.



The wonderful world of taste

No doubt you are aware that your sense of smell affects what you taste. But did you know that your eyes, ears and sense of touch are all in on the act as well? To say nothing of what is between your ears. Garmt Dijksterhuis, a Consumer Science researcher at Wageningen Food & Biobased Research, has written a book about the wonderful world of taste.

text Tessa Louwerens illustration Paul Gerlach



In his lectures and classes, taste and smell researcher Garmt Dijksterhuis often talks about what happens in the human body when we eat, which senses play a role, and how the brain gets involved. 'I often give the same examples and the audience responds with enthusiasm.' So in the winter of 2012, Dijksterhuis forged a plan to write them all down. And now he has published the book he has been writing in his spare time, with long gaps: *Hoe smaakt het?* (*How does it taste?*).

The main point the researcher makes in the book is that there is more to tasting than the sense of taste. Actually, we taste with all our senses, he says. That is why chefs present their thin slices of home-smoked fillet of duck breast on a bed of rocket garnished with carrot rosettes and a colourful mango chutney. The eye wants a treat too. Dijksterhuis says this is why eating in the dark does not work. 'The theory behind it is that you taste more because you are more focused on taste and smell. That is not my experience. If you consider that all the senses play a role, it is not too surprising that you actually taste less if one of the senses is out of action.'

SNAP, CRACKLE AND TASTE

Not only do we look at our food: we listen to it too. Not so much to butterscotch or oyster mushrooms perhaps, but certainly to crisps. A study at the University of Oxford showed that people's assessment of the freshness of crisps depends on the sound they make in the mouth.

Background noise affects our taste experience too. In a noisy environment, for instance, food tastes less sweet and less salty, revealed a study by Unilever and the University of Manchester. Dijksterhuis: 'The press seized on this as an explanation of why aeroplane meals are so tasteless.'

Besides odour, taste, appearance and sound, the feel of food is important too. Some people find fatty rind on meat disgusting, not because of the taste but because of the slimy structure. We feel whether food is warm or cold, hard or soft, tough or crunchy with the tongue, the roof of the mouth and the jaws. Without that 'mouthfeel', it is hard to tell what we are eating, explains Dijksterhuis. 'That is comparable to eating in the dark. Take one sense away and it suddenly gets quite a bit harder. Pureed pumpkin or carrot: it's all just orange-coloured mush and that makes it all the same.'

ASTRINGENT SENSATION

A familiar, and for many people unpleasant, mouthfeel is the dry, rough, astringent sensation after drinking red wine or eating spinach. The tannin in these products reduces the production of saliva, causing that rough feeling if you run your tongue over your teeth. The opposite of this astringency is a creamy mouthfeel. Almost everyone likes that feeling. The downside is that creamy products tend to be high in calories, so scientists are searching for cream substitutes that are not fattening. Not an easy task. A fat substitute was once produced which could not be converted in the gut and therefore delivered zero calories, says Dijksterhuis. The only disadvantage of the substance was that it was metabolized so fast that it caused a symptom graphically described as anal leakage.

BETWEEN THE EARS

It is not just the senses which determine how we experience flavour. A lot of tasting actually takes place between the ears. Dijksterhuis gives several nice examples in his book. If we have learned, for example, that red foods taste sweeter, that is what we will experience. Water with a tasteless red colouring added to it suddenly tastes sweeter than plain water.

Researcher Andy Woods demonstrated experimentally that there is a change in brain activity when we have particular expectations. He gave people diluted orange juice to drink and got them to lie down in a brain scanner. When the researcher told the test subjects they were going to taste 'something very sweet', more activity was seen in the part of the brain that processes taste. The orange juice tasted sweeter, without any extra sugar or sweetener being added.

BITTER

Most of our likes and dislikes are developed in the course of our lives, writes Dijksterhuis. 'Delicious', he says, is not so much a matter of taste as of emotion. 'What we like and dislike is first and foremost related to our history, ideas, upbringing and culture.' There are exceptions, though. Our aversion to bitterness is something we are born with. In nature, bitterness often signals poison. If we had to learn from bitter experience over and over again, it would cost a lot of lives. **R**

Hoe smaakt het? Nieuwe inzichten uit de wetenschap van proeven en ruiken
Garmt Dijksterhuis
ISBN 9789463011174
172 pages, 18 euros



PAINFULLY DELICIOUS

Capsaicin is the substance in hot peppers that sets your mouth on fire. It does so by stimulating the pain nerves. That doesn't stop some people deliberately seeking out this sweat-inducing, painful culinary experience. That is probably because pain and pleasure are not, as we have long thought, the opposite of each other. Instead, recent research findings suggest that pain and pleasure have a lot in common. When the brain experiences pain, endorphins are released which work as painkillers. The feel-good chemical dopamine, associated with pleasant experiences, is released too. That explains why food that hurts can be enjoyable.



What's the done thing?

Noblesse oblige. A full professorship may come with new privileges but it also comes with new obligations and rulebooks. No trainers or sandals under that gown, please. And be sure to don and doff your cap at the right moment. A brief introduction to Wageningen etiquette.

text Albert Sikkema photos Guy Ackermans

Wageningen professors can often be seen fumbling nervously with their academic caps. The protocol for this headwear demands a certain vigilance. The rule is: you must have your cap on when you are in procession or delivering a speech, and off when seated. Watch rector Arthur Mol at the next *Dies Natalis* (Founders Day) at the university. Every time he introduces a new speaker, on goes his cap. And every time he sits down, off it goes again. The commonest mistake made by professors is forgetting to take it off. All this applies to men only, though. Women professors are free to keep their caps on if they want. Emeritus professor Just Vlak, the co-author of the *Vademecum for Professors* (see box), has no idea why that is. Renata Michel, the university's beadle, does know: repeatedly doffing and donning her cap can ruin a woman's hairstyle. This Wageningen cap protocol is typical of the sort of thing you have to explain to new professors, says Vlak, because such rules vary per university. At some universities, for instance, you only put your cap on to speak.

GOWN FOR SALE

The rules about academic gowns are simpler: you have to wear them on all official occasions such as Founders Day, an inaugural lecture or a PhD ceremony. New professors are expected to buy a gown, which can be done in several ways. You can order a new one from a Wageningen supplier for about 1100 euros. Or you can buy a second-hand gown from your predecessor or another departing professor. They might put up a notice in the dressing room, or the beadle will act as intermediary. There is a small difficulty at the moment: a lot of male professors are leaving and a lot of women are coming in, so there is not much call for large sizes.

But not all professors have their own gowns. Special professors, who might only be in Wageningen one day a week and not have to attend very many formal occasions, often borrow a gown when they need one. There are eight gowns

available at the Aula and they are borrowed a lot. Sometimes too much, because some associate professors enjoy mingling with the ranks of the illustrious. That is not allowed: wearing a gown is strictly the privilege of the full professors. Although that is likely to change when a number of associate professors become eligible to supervise PhDs. They'll need to be able to hire a gown then too.

RED STILETTOS

These are not the only rules for a professor's dress code, though. Male professors should wear black or grey shoes – not brown. And professors seen wearing sandals or trainers under their gowns – as some do, says the beadle – are

Serving pizza instead of dainty nibbles? That was going too far

called to account. Court shoes are allowed, though. The most remarkable footwear Michel ever spotted under a gown was Thea Hilhorst's red stilettos.

There was a time – we're talking about the 1970s and 80s of course – when some professors didn't want to wear gowns. They didn't go with their anti-establishment style. But Vlak never hears such sentiments anymore. Nowadays, if professors attend Founders Day in their 'civvies', it's because they were too late (or too lazy) to get changed in time to walk to the ceremony in procession.

INAUGURAL LECTURE

According to the rules outlined in the *Vademecum*, a new professor must first deliver an inaugural lecture – in academic dress – before appearing in this attire at another university ceremony. The university assumes that this lecture will take place within one year of being appointed. 'That gets stretched a bit,' says Vlak. Which is an under-

statement: many professors have been here years and still haven't put in an appearance in the Aula to explain how they intend to fulfil their task.

Notorious spoilsports are Ton Bisseling and Jaap Bakker, two professors in their sixties who have been walking around in their gowns since 1998 without having given an inaugural lecture. Perhaps they can combine it with their valedictory lecture. That would be economical for them, as the drinks after an inaugural lecture are traditionally on the professor, while those after a valedictory lecture are on the university.

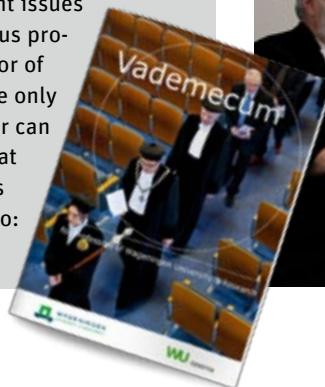
And even the drinks parties at the Aula are done by the book. Custom dictates elegant glasses and dainty nibbles, preferably served by smartly dressed members of a student fraternity. There was once a professor who wanted to serve pizza from cardboard boxes instead of the prescribed nibbles. That was definitely not on. She also wanted cushions on the floor so that her guests could chat sitting cross-legged. Not on either. Save that for the informal afterparty in a café.

HARD ROCK IN THE AULA

There is more leeway than you might think, though. For the special professor of Reformation Philosophy, the organist at the Aula agreed to play a Bach piece which went well with his inaugural lecture on biotechnology. And you are allowed to make music yourself in the Aula. As Professor Jeff Harvey so memorably did when, after playing 'opponent' at a PhD ceremony, he produced his guitar and amplifier and proceeded to play hard rock throughout the drinks party. Was that acceptable? Well, it was a fait accompli and it was certainly unforgettable. ①

BY THE BOOK

Vademecum, for professors of Wageningen University & Research contains all the codes of conduct for professors. It also explains how to go about procedures such as applying for a PhD graduation or dealing with a suspected case of academic fraud. It was published by WU-genoten, an association of Wageningen professors and their partners. This club lays on the annual Founders Day dinner and regularly hosts discussions about current issues at the university. Emeritus professor Just Vlak, co-author of the *Vademecum*: 'It is the only forum in which the rector can still have an informal chat with the professors.' Dos and don'ts apply here too: no money talk.



These professors know how it's done: at the end of the ceremony, just before standing up, on go the caps again.





DRILLING INTO THE PAST

What on earth are those two doing? Passers-by on the Bobbenagelseweg in Sint-Oedenrode must wonder. In the meadow beside the lovely meandering Dommel, two men are holding onto a long plastic tube. Covered in mud from top to toe, and

their hair tousled. Beneath that palette of shades of brown are Jasper Candel and Niels Kijm, a PhD candidate and an MSc student in the Soil Geography and Landscape chair group. And the tube they are pushing into the ground with all their

might is a soil sampler, a kind of suction drill with which they can 'look' five metres under the ground. Candel is using the data they get to make a geographical reconstruction of the Dommel. He wants to know how the stream acquired all its



bends. They have already taken 180 samples, about 9 a day. The drill brings up metres-long sausage-shaped columns of soil, which Candel then analyses systematically. Every coloration of the soil has a story to tell, and he takes notes in

telegram style on what he sees. 'There is a whole world under your feet which nobody knows. We know a lot about the major rivers, but we actually know very little about these kinds of streams.' The fieldwork is lovely but it is not for wimps.

Stinging nettles and mosquitoes are always lurking. And cows. Candel: 'This morning the cows ate all my sandwiches. I didn't pay attention for a moment and my backpack was empty: nine sandwiches gone.' **© RK, photo Margriet van Vianen**



Teaching under pressure

Due to growing student numbers, Wageningen classrooms are bursting at the seams, practicals and excursions are oversubscribed, and thesis supervision is more time-consuming. How are teachers coping? By pulling out all the stops, apparently. And by trying new methods and digital resources.

text Roelof Kleis *photos* Guy Ackermans and Roel Dijkisma

Former teacher of the year Roel Dijkisma's window is adorned with two small white megaphones. A symbol of the problem of ever-increasing numbers of students and the many ways teachers and students adapt to the situation. Dijkisma has some striking examples.

Take the annual Catchment Hydrology field trip to Iceland, for instance. 'An eight-day study tour which is fantastically popular,' says Dijkisma. 'When we started out we took 14 students; this year 64 are going along.' That means renting an awful lot of tents, driving in convoy in seven large vehicles, and giving the local supermarkets advance warning. 'Otherwise we'll clear the shelves of bread and the Icelanders themselves will have nothing to eat for three days.'

EVENING WORK

Or take the field trip to the Ardennes, which is part of the Hydrogeology course. 'I have switched locations three times already, because we kept growing out of them. And it is quite a hunt every time. That's because I don't want to go to a campsite. After all, this is an educational trip, not a camp.' Dijkisma even goes so far as to allocate beds in advance. 'This year there were eighty of us. If you don't do that, it will take hours before everyone has found their bed. And figuring all that out is evening work. Those are the sorts of things you didn't have to do in the past.'

Oh yes, and those megaphones. 'Not everyone has the voice to lecture to a group of 80 students,' says Dijkisma. But he sees these things as challenges. 'I refuse to say we're full. We'll solve the problems. We try to avoid having to adjust the content of the field trip because of the size of the group.'

Such adjustments are in full swing elsewhere in Wageningen education, however. A Resource investigation earlier this month showed that three quarters of the chair groups have adjusted the education programme to cater for the growing student numbers (see inset). In its most rigorous form, this has meant scrapping course components. 'One component of the Master's level course Structure and Reactivity was always that students had to write an essay based on what they had read on a particular theme,' says professor of Organic Chemistry Han Zuilhof. 'So we stopped doing that when the group went over 30. Please note: we are talking about essays of 15 sides that the teacher has to read and grade. That got too much.'

EROSION OF STANDARDS

Jan van Kan of the Phytopathology chair group offers another example. 'In our practical on Plant-Microbe Interactions, there was a component on protein electrophoresis, a technique for separating proteins on a gel. You can buy that gel or you can make it yourself, but that involves working with toxic substances. With a large group there are safety concerns so we scrapped that experiment to keep the practical safe and workable. Ten years ago you could let students get to know such a technique, so they could work with it at the final thesis stage. You can't do that anymore. The same practical included measuring the pH during plant cell culture with a sensitive, fragile and expensive electrode. We've got one and with a group of 20 students they can all have a go at measuring, but with double that number it turns into a demonstration. Nowadays we've replaced the experiment with something else.' Insufficient equipment is a much-cited problem. Less access to sophisticated equipment is another. 'When I

was a student here myself, you did the practicals at the chair group,' says Jaap Keijer, professor of Human and Animal Physiology. 'Now the practicals take place in the Forum or in Orion, where none of the complicated apparatus is located. Nowadays, at best, students get to see that kind of apparatus during a field trip, or only when they get to the Master's stage. That is an erosion of standards.'

KNOWLEDGE CLIPS

Scrapping components is only resorted to in exceptional cases, though. The preference is for making practicals more efficient so as to cope with bigger groups. The Food Technology degree programme already faced a big increase in student numbers three years ago. 'You feel the pinch first in the practicals,' explains programme coordinator Anja Janssen. 'The solution was to split the group. One group does a practical while the other works on knowledge clips, for example.'

A lot of chair groups have started working with these online modules using film clips which explain basic skills and how to use equipment. Janssen: 'You can do the planning and preparation of an experiment online. Nothing changes in the learning goals, just in what goes on around the hands-on work. That even improves the practical in terms of content, because students start out better prepared.'

Professor Zuilhof confirms the benefits of the knowledge clips. 'If you need to learn how to work with a gas chromatograph, you first get an explanation of how the machine works, where you put the specimen, etcetera. The teacher used to do all that, and now we do it with a film. There are 40 such films on YouTube. All made by us. Do it well once and you're done.'

TIME-CONSUMING

Full use is being made of digital resources in class too. Zuilhof mentions web-learning. 'We make use of that throughout the Bachelor's. These are questions you answer online. You can only go on with the material if you've completed the previous assignment. Students who come to a practical after doing some web-learning are better prepared, on average.' In Janssen's chair group they make their own interactive modules for the classes. 'Our students get a lot of classes in which they carry out assignments and make calculations to help them assimilate the knowledge. This material is so complex that we also anticipate the most common errors of thinking. Students get feedback on that through the module. That enables you to cope with a large group of students with just a few supervisors. Then the teachers are there to give more



The annual Catchment Hydrology field trip to Iceland started small, with 14 students, and is now a major event, with 64 participants.

explanation and guidance if students really cannot figure it out themselves.' Food Technology has two large Bachelor's courses and a Master's course that are equipped with such material. 'There are more to come,' says Janssen, 'but developing them is very time-consuming.'

LESS POPULAR

Professor Keijer echoes this caveat. 'Making more use of digital resources is a natural trend. Students learn more and more visually thanks to the rise of the digital media. But it is a mistake to imagine that using digital media leads by definition to greater efficiency. It takes an awful lot of time to establish digital learning. And then you have to bear in mind that lectures are not the same every year. You try to integrate new data into your course material all the time. In a digital course that requires much more adaptation and it takes more time.' According to Keijer, students are not all that enthusiastic either, if digital learning means less contact with teachers. 'Last year we tightened up on the contact time in

the distance learning course Essentials of Nutritional Physiology. But it didn't work. The students got lower grades and gave the course lower evaluations.'

Professor of Rural Sociology Han Wiskerke is similarly critical of the claims that new methods have increased efficiency. His group has tried out the concept of the flipped classroom

'We want to bring in a ticket system for thesis supervision'

in several classes. 'The core idea is that you set homework in advance so that students can discuss it in class. That is how the usual system is flipped: Learning at home and consolidating the knowledge in class. The teacher is there to supervise and to answer questions. But preparation is time-consuming. And it only works if the students prepare properly. If that doesn't happen, you have a lot of fol-



low-up work. Often, it is easy to claim that there are methods with which you can teach with less time input, but the reality often falls short.'

THESIS CIRCLES

Another well-known way of coping with rising student numbers is the thesis circle. Both Bachelor's and Master's students round off their degree programmes with a thesis. A lot of work goes into supervising these projects. One alternative option is thesis circles: groups of students supervising each other. This has met with varying success. 'We have experimented in the Bachelor's phase, but in our case it meant sacrificing quality,' says Carlijn Wentink, programme coordinator for the Health and Society chair group. 'So we stopped. It puts extra pressure on the students and the feedback they gave each other was not good enough. We do plan to introduce it in the Master's, though. I think Master's students are more capable of giving feedback. But a thesis circle does not replace supervision: it is something extra. The feedback in the thesis circle is mainly about whether the writing is clear, and about aca-

demic skills.'

In Keijer's group too, the thesis circle in the Bachelor's programme has bitten the dust. The idea here was actually that students assessed each other's work on the content. 'A teacher is involved, but just to guide the process. Our experience is that a thesis circle does not promote good quality. Nor was it more efficient. We kept up the existing supervision – which was already very intensive – on the assumption that it would take less time thanks to the thesis circle. That was not the case. And another factor is that the students were not all positive. The weaker students enjoy it, but the strong ones complain that they don't learn anything. They say: all we are doing is helping other students. So we stopped. But in the Master's programme it does work. That's because Master's students have more baggage and they are ready for it.'

SUPERVISION TICKETS

Keeping the work pressure during thesis supervision within bounds sometimes requires drastic measures. An admissions cap, for instance, as in the Health and Society

programme. 'Previously, everyone was welcome,' explains programme coordinator Wentink. 'But we can't keep that up anymore. We've got four chair groups involved in one programme. On the Bachelor's programme we now have 75 students between us who want to do their thesis with us. Three quarters of them want to do it with Health and Society. And we've got six supervisors available for it. That doesn't work. We can allocate a maximum of four of five to each supervisor. We'll find places for the rest in other groups, in consultation.'

To steer the process properly, an application round has been introduced, in which students can say who they would prefer to have as supervisor. The range of possible thesis topics is now more limited too. But other options for keeping supervision manageable are being considered. 'We are contemplating bringing in a 'strippenkaart' system,' says Professor Wiskerke, whose chair group is part of the cluster. 'A kind of ticket giving you the right to a certain number of hours of supervision. Students can then decide for themselves how to make use of that time. Our aim is to divide the available time more fairly.'

DUNES

Meanwhile, Dijksma has other things on his mind. In a couple of weeks it is time for the field trip to the dunes near Zandvoort, an important source of water. 'I have permission to go into the area with 20 people on bikes. When the group got bigger I first divided it into two groups of 20. But since then they have grown from 20 to 80. And of course, they are not going to give permission for that, so now I've got to divide the group up again.' ⑧

Students air their views on the new teaching methods in Point of View on p. 22.

DOSSIER ON GROWTH

The continuing growth in student numbers has been much on people's minds in Wageningen for a while now. To get the measure of its implications for teaching staff, *Resource* conducted a survey last month. It showed that their workload is very heavy, they are being forced to adapt their teaching methods, and there is less personal contact. The results were published in the last issue. In this sequel, teachers talk about how they have adapted their teaching methods to cope with the growth.

The articles on growth at can be found on resource-online.nl

WHAT DO YOU THINK OF THE NEW TEACHING METHODS?

Instruction films instead of explanations delivered in person, thesis circles, practicals using dummy data, and group essays instead of individual ones. These are the kinds of new methods Wageningen teachers are using to cope with rising student numbers (see p. 18). So what do students think of them, actually?

text Teun Fiers and Carina Nieuwenweg illustration Henk van Ruitenbeek

Anne van den Berg



MSc student of Development and Rural Innovation

'With the growth of the WUR and the passing of time, change is inevitable; and I think innovation is rightly part of that. But in the process you should keep an eye on the core values of your organization. Group work contributes to your personal development, but only up to a point. I think we have reached the limit, at least for the courses I took in the past year. **More group work can detract from the small-scale feel of the programme, which is one of the WUR core values that students consciously opt for.** What is more, group work is not necessarily representative of a work situation. Friction between students arises more easily because one member of the group is aiming for a 9 while another is satisfied with a 6. In a workplace people's goals are more aligned.'

Iris van Marwijk



MSc student of Molecular Life Sciences

'I am working now on my second MSc thesis and taking part in a thesis circle for the first time. The idea is that in a group of students supervised by a faculty member, you evaluate each other's presentation, research proposal or report. **I think a thesis circle makes a positive contribution to the process of writing a thesis.** You get feedback from your fellow students, it provides some pressure to finish a piece of writing faster so you can share it, you learn to look at your own and other people's

work critically and to give and receive feedback. Because you are with students from other degree programmes or years, it also helps you broaden your perspective and learn from each other.'

Anne Walther



BSc student of Molecular Life Sciences

'Educational innovation is good because innovation means you might improve a situation. **But in the case of WUR it is questionable whether these are innovations or emergency measures to cope with the pressure.**

Preventing a situation from getting worse is not innovation.

Take the thesis circle. I can't do anything with two lines of feedback on 20 pages. If the teacher isn't really involved, you are not sure about the quality of the feedback, whereas the idea is that you learn from it. I also have my doubts about the digitalization of things like practicals. Sounds nice enough but it does mean less hands-on experience. And that was precisely one of WUR's strong points.'

Pelin Karsili



MSc student of Biotechnology

'In one of the courses I have followed during my MSc, most of the lectures were replaced by self-study.

Every week there would be active discussion sessions about the topics instead of passively attending the lectures. I think that was a good initiative.

With traditional lectures you easily lose attention and a more active approach allows you to learn faster. But I do think we need-



ed some time to get used to it. It would have been different if we had more courses taught that way. I think this is normal with innovations: you need time to adapt before you know if it works.'

Lennart Jongen



MSc student of Earth and Environment

'I found the thesis circle a helpful addition to the process of writing my MSc thesis. It did take some time but I certainly got some improvements out of it both for the content and the writing in my thesis. **The disadvantage of a thesis circle is that the quality of it depends heavily on students' motivation.** If there are a couple of students who can't be bothered, it won't work. There were big differences between the students in my thesis circle. It is also important that there is a teacher at the discussions, to keep up standards. Then it is a valuable bit of educational innovation which is not just efficient but also contributes to raising the quality of the thesis.'

Bart Vlemmix



BSc student of Soil, Water, Atmosphere

'In several computer practicals I worked with dummy data, which didn't come from actual measurements. That doesn't really bother me. I only had instruction films on one course. The information in that kind of film must be simple and clear, because if you still have to ask questions about it in

class, it defeats the object. I wonder a bit whether these kinds of methods can really solve the capacity problems, but I would want to assess that for the whole programme and not per course. So as a first-year I feel too inexperienced to really be able to say anything about it.'

Ivo van Gerwen



BSc student of Business and Consumer Sciences

'On my programme there is a lot of group work, which I find useful for polishing the skills needed to function in a group. Through consultations you often discover new things, which you wouldn't have come up with on your own. But sometimes the groups are too big, I feel. Three to four people should be the maximum. With a group that size, even with the division of tasks, you can all be actively involved in everything. **And then, there is a lack of an individual essay moment in the Bachelor's.** It would be nice if you could already develop some writing skills before you start on your thesis. A combination of individual essays and small group essays would work best for me, for gaining the most subject knowledge and learning to work better in a group.'



‘Towards the end you’re

Swimming nearly 4 kilometres, cycling over 180 kilometres and then running a marathon. No mean feat. Julie von Gruenigen, student of Nutrition and Health, does all this for fun. She’s good at it too. ‘Endurance sport really is my thing.’

text Linda van der Nat photos Sven Menschel

While you are eating your sandwiches and catching up with your friends during the lunch break, Julie von Gruenigen is swimming lengths in the pool. When you go back to your room to study after class, this student of Nutrition and Health pulls on her running shoes to run half a marathon. While you sit at home watching Netflix series at the weekend, Von Gruenigen is cycling halfway round the country.

The half-Swiss, half-Dutch Julie von Gruenigen is a triathlete. This means contests called Ironman, which consist of swimming 3.84 kilometres, cycling 180.2 kilometres and running 42.195 kilometres. ‘I’m not a sprinter,’ laughs the blonde student. ‘Endurance sport really is my thing. I’ve been swimming, cycling and running since I was very young.’

HAWAII

It is one of the first warm spring days on campus, but Von Gruenigen’s legs already look sun-tanned. She has just come back from Barcelona, where she did the first half Ironman of the season, and came first among the amateurs. ‘It

went very smoothly,’ she says. ‘An Ironman feels like a reward for all the hard work. You have trained for months for that one day and by then you are so strong that can really enjoy such a taxing competition. The support of people on the sidelines is hugely encouraging, especially if they are family and friends.’

Since Von Gruenigen started running triathlons in 2012, at the age of 17, she has always made it to the podium. ‘I loved sport and I thought: let me give it a go. It wasn’t my ambition to become very good.’

That changed in 2015 when she took a gap year to travel after her exams. ‘I was in Hawaii when the Ironman World Championship was on. Only the best were there, people for whom the World Championship is a major goal in life. The atmosphere was one of determination and yet at the same time very relaxed. I was impressed by that sense of achieving a big goal together. I wanted that too.’

IMPROVING

The idea of the World Championship kept haunting her. ‘Halfway through my gap year I



Triathlete Julie van Gruenigen:
'I enjoy the cycling most. I always
overtake everyone and that is very
motivating.'

totally knackered'

went home to earn money to go to Australia, but I couldn't get the Ironman out of my mind. I thought: I'm on a gap year now anyway, why don't I spend it training?' So she stayed in Switzerland and ended up running the Ironman in Maastricht. That went better than expected. 'I didn't know whether I would be able to finish the race, so I started out slowly. Then it turned out I had done so well that I had qualified for the World Championship in Hawaii.'

She did well there in October 2015, too. 'And then I thought: now I want to improve. I got a coach who makes me a training schedule every week, which fits around my timetable. It always means training two to three times a day for three days in a row, followed by a rest day. I don't usually train in the mornings because I'm not at my best at that time of day. I use that time to study. During the lunch break I usually go swimming or running and in the afternoon I go running or cycling. At weekends I'm often out for nine to ten hours, going for long bike rides or a good long run. I train more frequently in the summer. That is

when the races are, and I sometimes train for 20 to 25 hours a week.'

HAPPY


If she's honest, Von Gruenigen is not equally keen on all the components of the triathlon. 'I always find the swimming races quite stressful. You swim in open water so you have to keep a lookout for the other competitors. I enjoy the cycling most. I always overtake everyone and that is very motivating.' The running is the toughest component for her. 'It's nice at the start. My strategy is to look around me and smile at the people on the sidelines. That makes me happy. But towards the end you are totally knackered; the distance is so punishing for your body. It's just that you've got so far by then, you can't stop.'

After a triathlon, Von Gruenigen is always very happy. 'I'm usually super-happy and relieved I made it. You forget all the hard slog and I am often on a high for several days or even weeks.' She doesn't want to think about sport, though. 'I've had enough for a while then, and all I want to do is yoga. Especially

mentally, I cannot bring myself to do anything tough. You have pushed yourself so far that you can't cope with the pain anymore.'

FLOW

The Wageningen student sports association Thymos declared Von Gruenigen Student Sportswoman of the Year for the second year in a row this year. She has her cycling mates from the club *Hellingproof* to thank for her nomination. 'I often train alone but I enjoy cycling in a group, because you can have a bit of a chat along the way.'

Although she gives up a lot of her spare time for her the sport, Van Gruenigen does not see it as a burden. 'I enjoy getting a lot of exercise. You see a lot of the country when you're cycling and if the running goes well you get into a flow, and that feels so good.' She never feels under pressure. 'I choose to do this myself and I can stop whenever I want. Of course I don't go to as many parties, I don't drink much and I don't stay up all night. But at the moment there is nothing I would rather do with the time I spend on sport.' 



WAITERS

Wageningen now has a new rare species which deserves protection: the waiter. Especially those at the Vlaamsche Reus on the Hoogstraat and the Poorthuys on the Beuningstraat, who are in danger of being run over when they cross over from the café to the terrace. The culprits are cyclists. So the café owners have put up signs: waiters crossing.

MIRROR IMAGE

Food tastes better in company. This effect holds true even if your company at the table is... yourself. Japanese researchers at Nagoya University discovered that if they sit in front of a mirror, people eat more and enjoy their food more. It even works if you substitute a photo of yourself for the mirror. The researchers hope to use the findings to tackle the eating problems of lonely seniors.

SMELL

Freshly mown grass is the loveliest smell in the countryside, according to a survey by Bionext, the organic farmers' branch organization. The public could choose from nine smells, not including the smells of fresh cow pats, a wet horse's back or silage. Suspicious omissions: we smell a rat. In second place was a rain shower on a summer's day. Now, does that smell any different on an organic farm?

PARTRIDGE

Unifarm staff have the death of a partridge on their conscience. The animal died during mowing, says the Binnenveld Oost Field Bird Group. It shouldn't have happened. The agreement is that WUR trial fields are only mown after 1 July. The partridge is a protected bird. WUR has apologized, says the aptly named spokesperson Vink (*vink* = chaffinch).



PHOTO: GUY ACKERMANS

Food Technology student Rosanne Groot is joining the national board of Dwars, the youth wing of the GroenLinks party.

Scientist in politics

At a time in which scientists are rare creatures in politics, Rosanne Groot, who is close to completing her Bachelor's in Food Technology, is turning into quite a political animal. On Sunday she was chosen as a member of the national board of Dwars, the youth wing of the GroenLinks (Green Left) party.

Just as other students join a student society when they arrive in Wageningen, so Groot became an active member of Dwars on getting here three years ago. 'I found politics interesting, wanted to develop my views further and was looking for a challenge alongside my studies. I have ideals about what the

'I have ideals about what the world should look like'

world should look like and they are closest to GroenLinks and Dwars. Politics is one way of achieving those ideals.'

In her studies, Groot found a challenge in the honours programme. That is why this food technologist now also knows all the ins and outs of the Paris Climate Accord. 'In that programme, I did a project on the government's liability for complying with the Paris climate agreement.'

In politics, she benefits from the approach to thinking that she has developed through her studies, says Groot. 'As a food technologist you learn to first read the literature and test your knowledge with other people. Then the solution to your problem automatically becomes clear. There is never one single solution to political problems but it's still important to give supporting evidence for your opinion.'

Groot also used the day spent with a manager (part of the leadership track) for her political development: she recently spent a day out and about with the Wageningen GroenLinks councillor Lara de Brito. 'It's an interesting managerial position in which you face lots of restrictions but can still achieve a great deal. And I saw that you can be friends with the people you work with but still be a leader at the same time.'

Rosanne even used her internship in Denmark for Dwars by playing an active role in the federation of young Greens in Europe, the FYEG, in addition to her research work. During that period she attended the climate conference in Marrakesh (COP22).

As the international secretary of Dwars, Groot will be spending the coming year looking at the opportunities for Dwars members to find challenges abroad, as she did. 'I will also represent Dwars abroad.' In addition, she plans to continue with a Master's in Wageningen. 'But that won't be full time,' she laughs. **YdH**

CSF regains seat from VeSte

The Christian party (CSF) will once again have two seats on the Student Council next academic year. The seat that the party lost last year to VeSte is back in CSF hands. VeSte has gone down from eight to seven seats and S&I remains unchanged with three seats.

Rector magnificus Arthur Mol announced the Student Council election results on 6 June during the lunch break. The elections were held from 29 May through to 1 June. The turnout this year was 40.84 percent. 'A great result,' said Mol. In his opinion, such figures demonstrate the council's legitimacy. The turnout last year was also relatively high, at 39.6 percent. In the past, the proportion of Wageningen students who voted was always only about 35 percent. The simplification of the voting system was mentioned as one possible reason.

Joanne Rink, number two on the CSF list, was delighted to get a seat. 'I can't really believe it,' she said. One of CSF's greatest achievements last year was the change to the university's refugee policy. Next year, CSF wants to defend the position of students living at home in the discussions about the extended timetable. The par-



The members of the 2017-2018 Student Council pose with the rector Arthur Mol.

ty will also make the case for maintaining Wageningen's small-scale teaching approach.

VeSte is still the largest party, with seven seats. It stands up for the interests of active students, for example by opposing lectures in the late afternoon or evening and shorter lunch

breaks. S&I (Sustainability & Internationalization) plans to use its three seats next year to call for better preparation of international students before their arrival in Wageningen, for example. The party will also carry out a survey on depression among students. **LvdN**

MEANWHILE IN... TAIWAN

'China should accept Taiwan in the Paris agreement'

When US president Trump announced the US's withdrawal from the Paris climate agreement, the Chinese government responded by showing their climate ambition. Ties with the European Union were strengthened and a deal was made with the state of California. However, some people question China's true intentions, among them Taiwanese student Lena Chang.

'Personally, I am a big fan of environmentalism and therefore I consider the recent messages from the Chinese government as a good thing. It is important to note that just the message itself is important for mobilizing companies and citizens to act more sustainably. Also, Trump's politics are really immoral. After his election, when I was disappointed about the future of the environment, my dad told me: 'These elections may shape the next years, but your dream for the environment will last a lifetime.'

On the other hand, China has been the key reason why Taiwan has not been included in the international climate negotiations. Ever since Taiwan had a sovereign government, the Chinese do not want us to en-



Smog in Taipei, the capital of Taiwan.

ter UN bodies. Last month, for example, tensions rose again around a conference of the World Health Organization. Despite this exclusion, our politicians have set rather ambitious national climate targets and we are one of the few countries in the world to have secured this in a national law. The Taiwan economy is the 22nd biggest emitter of greenhouse gasses and the island is vulnerable to climate change. Public awareness of the climate has been increasing a lot in Taiwan, as I notice among my acquaintances. The difficulty for the Taiwanese climate policy is to connect internationally, for example to the global market in greenhouse gas emissions.

To me, for China to show that it is honestly striving to limit climate change more than it is striving for international power, it is crucial that the geopolitical barriers are set aside. The participation of Taiwan in the Paris Agreement should then be made possible for the sake of the global climate.' **TF**



Lena Chang is a Master's student of Climate Studies from Taiwan. She responds to the news that China had taken the lead in the international climate debate.

YOU ON CAMPUS

Daniel José Maceiras Rijo (23) was known as lazy at secondary school. Which is quite funny, really, because he hardly ever sits still. It was probably because he sometimes found it difficult to concentrate on studying. And he still does. There are so many other nice things to do.

Sport, for instance. 'I love it and it helps me to calm down too,' says Daniel. Here in Wageningen he has taken part in a lot of different sports: football, hockey, gymnastics, boxing, juditsu, athletics, cycling, rowing and swimming. 'I always go swimming with a friend, sometimes four days in a row or three times a day.'

Cycling, on the other hand, is more of an occasional form of recreation for Daniel. He recently cycled all the way from Amsterdam to Wageningen. 'I enjoyed it but when I arrived in the Nude, I was happy to know I

would be home in ten minutes.'

Daniel is a fourth-year BSc student of International Land and Water Management. He still enjoys the degree programme, although he finds some courses harder than others. What he likes about the programme is the many field trips, the practical side of it. 'That makes the subject matter much more interesting.' For his internship Daniel went

'I always do a lot of sport, whatever the weather. Rain is no excuse'

to Portugal to interview farmers about sustainable farming.

With field trips and lots of sport as his favourite activities, it is clear that Daniel is the outdoor type. He spends an average of ten hours a week on sport and doesn't let much

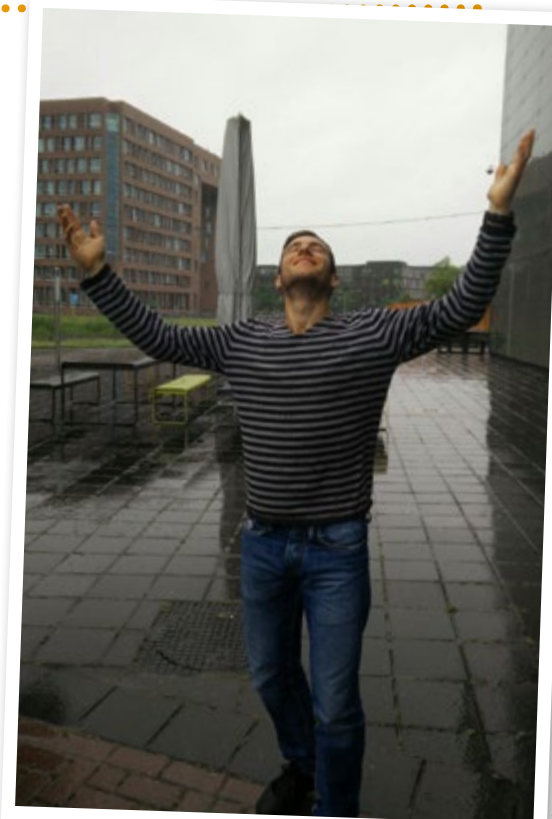
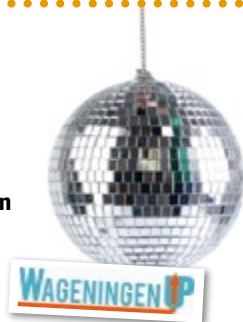


PHOTO: ANNIE BEREDSEN

stand in his way. 'I always go, whatever the weather. Rain is no excuse.' He is on his way to the swimming pool now. To swim lengths and also for the sauna. 'That is very important too, to really be able to relax.' **AB**

PARTIES

In the party mood? Wageningen Party Promotion (WUP) tells you where to find one. See too www.wageningenup.nl.



TORCKPARK - WOETSTOK WAGENINGEN 2017

Saturday 24 June from 13:00 to 01:00

Before you go off home or to an exotic holiday destination, you can enjoy the fourth edition of Woetstok Wageningen. A relaxed festival with food, drinks and good music. Wageningen musicians cover the work of 13 bands and artists from the 1970s and 80s, such as Chaka Khan, INXS, Bill Withers, Blondie, Sex Pistols and Bon Jovi. Admission free and, weather permitting, a long day of chilling out in the park.

CAMPUS - SSR-W: SUMMER SWITCH FESTIVAL!

Saturday 8 July from 15:00 to 23:45

Student Society SSR-W is celebrating its 85th anniversary and to do so has joined hands with Popcultuur Wageningen. Together they will host a festival on campus with local bands and a feast of DJs. Nice timing: the last exams will just have finished. The perfect start to your holiday. **AB**



PHOTO: SVEN MENSCHER

The seventh Belmondo festival in the Belmonte Arboretum featured a lot of artists, including the duo Yahmani Blackman (photo) and Dorothy Blokland of Poetry Circle.

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.

'It couldn't get more Finnish'

'When I arrived in Helsinki I didn't have anywhere to stay yet. That was a risk but I had done it that way on purpose. If you look for a house from a distance you don't know where you'll end up and this time I thought it was extra important to have somewhere nice to live because I didn't think I could base my social life on my work. In the end I found a terrific house, which felt good right from the start.


I got on particularly well with one of my housemates. During a long spring weekend I went walking with her and her friends. It couldn't get more Finnish than that because we first went to the supermarket to buy sausages and we grilled them over a camp fire in the forest, just the way loads of Finns do. The whole country comes to life in the spring and everyone goes out picnicking. Sunset was at 11.30 and sunrise at 3 o'clock, with twilight in between. It's impossible to describe how strange that feels; it's something you have to experience for yourself.

NO PHOTOCOPYING SLAVE

I helped on a European project called The Precious Project, in which an app is being developed for promoting healthy behaviour. The app concentrates on diet and exercise, and is based on scientific knowledge. I developed feedback, texts and questions. I was actually supposed to test the app for user friendliness too, but the project ran over time, so I didn't have time for that. It was nice for my internship experience that I did a lot of different things, but for my re-

port on user friendliness it made things difficult.

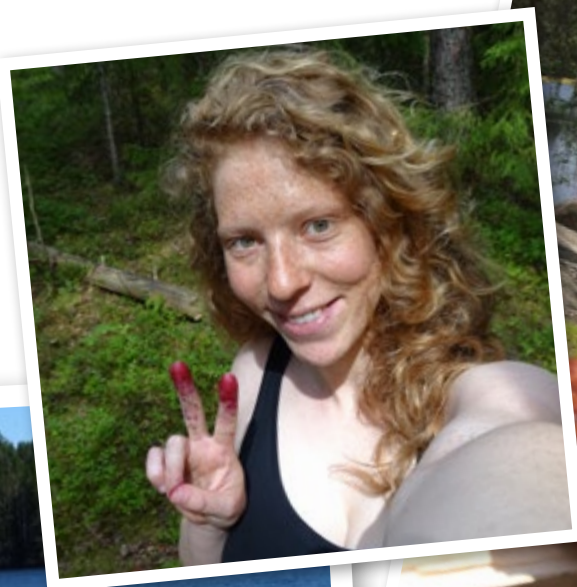
Finland has an individualistic culture but I didn't notice that much at the university, maybe because of the many internationals. And anyway, the people in Social Psychology are chattier than average and my colleagues were very open. They immediately included me in the team and I was allowed to join in everything. They always asked for my opinion too. So I never felt like a photocopying slave.

To begin with I was worried about whether I would meet enough people. And now and then I did get fed up, when I was alone in my room. That made me all the happier that there is only a one hour time difference from the Netherlands, and that friends could easily come and visit me. And I actively looked for nice activities such as salsa dancing. And there's nothing wrong with the odd quiet day to rest and enjoy your surroundings and what you are doing.'  MvdH

THE WORKS

Who? Mirte Reimerink, MSc student of Health and Society
What? Four months' internship at the University of Helsinki, in the department of Social Psychology
Where? Helsinki, Finland

Read all the interviews on resource-online.nl



announcements

STUDENT COUNCIL 2017/2018 - ELECTION RESULT

The results of the SC election were determined and announced on 06 June 2017. The 12 seats will be divided as follows: CSF 2 seats, S&I 3 seats and VeSte 7 seats. The following candidates have been elected as members of the Student Council 2017/2018: Jan van de Pol and Joanne Rink for CSF; Amit Choudhary, Yinru Li and Zhimei Li for S&I; Bregje de Regt, Jaap Kerr, Lisanne Kruiswijk, Isa Vroom, Menno Kasteleijn, Matthijs Harmsen and Tim van der Kuijl for VeSte.

CALL FOR APPLICATIONS: THE GREEN ALLEY AWARD

Are you a green startup or eco-entrepreneur with a brilliant idea for the green and circular economy sector? And are you based in Europe? Then apply for the Green Alley Award 2017 and become one of Europe's leading sustainable startups! All you need to do is to fill out a short startup profile and send us your pitch deck, introducing your business idea in more detail. Deadline for submission: 25 July 2017. GREEN-ALLEY-AWARD.COM

WEEKLY OPEN HOUR: TIPS FOR PARENTS AND FIRST-YEARS

From 14 June, when the High School results come out, we'll be hosting a weekly 'open hour'. Every Wednesday between 17.00 and 18.00, parents and students can put their questions about the choice of degree programme, credit points and student life to Hermien Miltenburg, responsible for information for parents issued by the national association of deans NS-VVL and higher education institutions. This service is not just for WUR students: all prospective students and their parents are welcome to get in touch. Parents can do their bit towards a good start to student life during the summer holiday too. Five tips for this and other information about studying, choices, gap years and financing can be found on www.studiekeuze-kind.nl. The student open hour is on Wednesdays from 17.00 to 18.00 on 0317-484455.

agenda

Thursday 15 to Wednesday 28 June FILMS FOR STUDENTS

In the Crosswind: a film which transforms the appalling reality of World War II in the Baltic states into a poetic memory. *The Other Side of Hope*: a realistic refugee story about Khaled, a dishwasher in a Finnish restaurant, brilliantly combined with slapstick. *Sami Blood*: a coming-of-age story about a girl from the reindeer-herding community in Lapland during the racist 1930s. *Ascent*: an ode to Mount Fuji in Japan, by artist Fiona Tan. *Warehoused*: on World Refugee Day, a portrait of life in Dadaab, Kenya, one of the biggest refugee camps in the world. *El Ciudadano Ilustre*: a mordant tragicomedy about the Argentinian writer and Nobel Prize-winner Daniel Montovani. Location: Wilhelminaweg 3A, Wageningen. WWW.MOVIE-W.NL

Saturday 17 June, 14.00-16.00 SUMMER STROLL WITH INHABITANTS OF NURSING HOME DE NUDEHOF

Otherwise Foundation is organizing an activity to link up elderly people with university students. We will take a nice summer walk to the dyke with students and the residents in wheelchairs. At the dyke we will enjoy home-made apple pie and the nice view there. Save the date!

OTHERWISEWAGENINGEN.NL

Sunday 18 June, 13.00-19.00 KSV INTERNATIONAL FOOD FESTIVAL

On Sunday 18 June, a Food Festival will be organized on the initiative of members of KSV Franciscus student society, and all Wageningen residents are welcome. The Food Festival is called *Grenzeloos Genieten*, which implies boundless / borderless enjoyment. So there will be snacks from all around the world on sale for you to savour. Local restaurants will be present too, and you can sample their specialties. Various bands, dance groups and DJs will create the atmosphere throughout the day. And the Saturday before the festival, students will be preparing the food in a di-

verse group including children, seniors, disabled people and refugees. The festival takes place on the carpark by the bus station (Stadsbrink 373). So put 18 June in your diary and come and enjoy the yummy food and nice acts.

Tuesday 20 June, 13.00 'CHANGING ROUTES' MEETING FOR WORLD REFUGEE DAY

An integrated, holistic approach is best for the complex challenges posed by migration. Broad themes such as climate change, sustainability, environment, security and health will be tackled from the angle of different disciplines. Together we want to make a start on using science to achieve lasting positive results for refugees and the communities which take them in. The aim is to set up a shared scientific agenda with substantial coalitions and action. Keynote presentations by Bram Vos, director of KE Groene Ruimte; Jelte van Wieren, director of Stability & Humanitarian Aid at the Ministry of Foreign Affairs, and Ehab Jayyousi, WASH project coordinator at International Relief & Development (IRD). Registration: wur.nl/nl/activiteit/Changing-Routes-2017-1.htm. Location: Gaia, Droevendaalsesteeg 3.

Thursday, June 22, 16.00 WEES SEMINAR 'IDENTIFICATION OF A NEW SENSORY NEURON MEMBRANE GENE AND WHY PHYLOGENOMICS IS IMPORTANT'

Dr. Alexie Papanicolaou, from the Hawkesbury Institute for the Environment, Western Sydney University, will discuss bioinformatic and genomic methods in relation to both fruit flies and the silkworm. Before the seminar, there will be a workshop aimed at anyone working on genome projects. Afterwards, drinks and discussion! For more information: weeswageningen.nl. Venue: Orion C2030.

Saturday 24 June, 13.00 HEUVELRUG ROBOT EVENT

Young people can take part in all sorts of robot races and workshops. Visitors can also get stuck into some technical activities. One of the main events is the LEGO Mind-

storms Challenge in the theatre. Wageningen robot experts in Agro- and Food Robotica will be supervising the children. There are also loads of 'drop-in activities' for the general public, and WUR researchers will demonstrate agro&food robots. Info and registration on wur.nl/nl/activiteit/Wageningse-robotexperts-bij-Heuvelrug-Robot-Event-1.htm. Location: Allemanswaard 13, Amerongen.

Sunday 25 June, 11.30

SINT JANSTOCHT WAGENINGEN

A cultural procession from Saint John's church at the Market to the ruin of the old Saint John's chapel on the Westberg. This historical procession was reinstated when Wageningen celebrated 750 years as a city, and it is now taking place for the fifth time. Standard-bearers and musicians with old Dutch bagpipes will march at the head of the procession, which will stop several times for you to enjoy short cultural shows including music, a children's musical group and a contribution from the city poet. At the end there will be a festive potluck party on top of the hill. Children welcome! More information on Facebook.

Tuesday 20 June, 19.00 PIZZA KITCHEN (IXESN WAGENINGEN)

Join us for our unique Pizza Kitchen! For this kitchen, the pizzas will be prepared and baked on location by Pizza on Wheels. Unlimited amazing fresh-baked pizzas for only €5.50 per person (€6.50 for non-members)! You can eat as many pizzas as you like and you can bring your own drinks! The location is the amphitheatre between Impulse and Zodiac. Subscribe through Facebook.

Tuesday 20 June, 20.00

2ND OPEN MIND LAB LECTURE: 'HOW TO BUILD RESPONSIBILITY INTO ACADEMIC PRACTICE?'

A lecture in a series organized by Studium Generale in collaboration with Green office Wageningen. Are scientists and students taught how to be responsible? They may be taught to produce reliable knowledge but are they taught how to 'care' for the futures they are shaping? In an education system that tends to view science as an intrinsic good, students and aca-

demics are rarely taught how to anticipate the societal and ethical implications of their research. Sociologist of science Phil Macnaghten (WUR) will argue that this is both possible and necessary, not least due to the power of science and technology to produce both benefit and harm. He will explore how a forward-looking model of responsibility can be integrated into education courses as a core value, both in the

life sciences and the social sciences, using the concept of Responsible Innovation, and in particular the anticipate-include-reflect-respond (AIRR) framework. Venue: Impulse.

Wednesday 21 June, 18.00
INTERNATIONAL DIALOGUE (HOUSING, INTEGRATION, BUREAUCRACY)

Connect Wageningen is the new political party for students and univer-

sity life. In the current municipality of Wageningen, students, and especially internationals, are poorly represented. To properly represent you we need to know what your experiences are and where the problems occur. This evening will be all about discussing the problems and the solutions. Your experiences will be used for improving our election programme. Main topics of the International dialogue: housing - availability, difficulty of the search, living rooms; integration - culture shock, empty weekends, learning Dutch; bureaucracy - housing benefit (huurtoeslag), tax exemptions, healthcare. Admission: free. Venue: Impulse.

Tuesday 27 June, 20.00
3RD OPEN MIND LAB LECTURE: 'IS TECHNOLOGY OUR PLANET'S LAST RESORT?'

A lecture in a series organized by Studium Generale in collaboration with Green office Wageningen. It is argued that technology might offer potential solutions for sustainability problems: for example, storing surplus atmospheric CO₂ underground (geoengineering) or the possibility of going to Mars when the earth turns uninhabitable. However, how is the future of our education involved in this technological inventiveness? Philosopher Pieter Lemmens (Radboud University Nijmegen) gives his opinion on the role of technology in educating us to tackle the current sustainability problems. And in the context of the 'Anthropocene' he wonders: Is technology our planet's last resort? Imagine even education being transformed to the point where robots become our teachers. Venue: Impulse.

colophon

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>>TYPICAL DUTCH

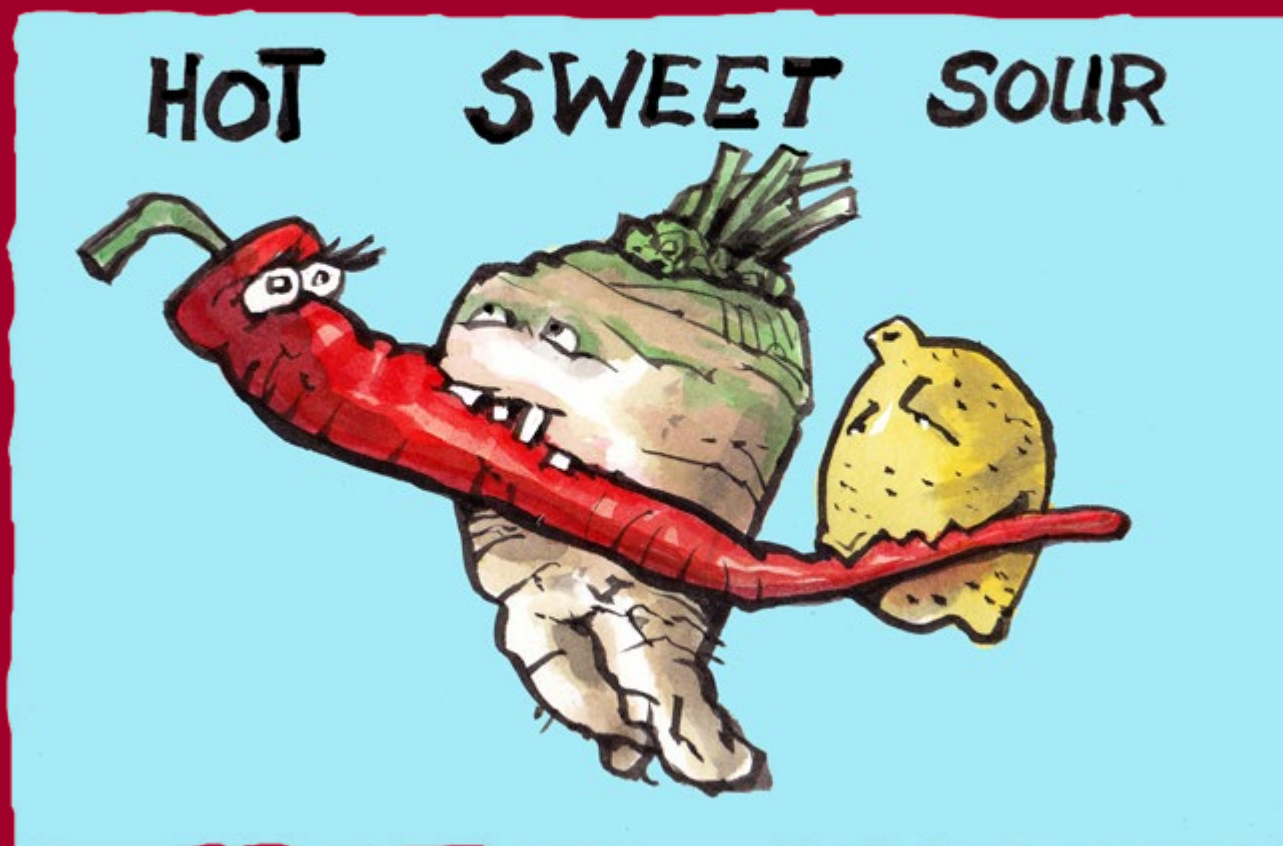


ILLUSTRATION: HENK VAN RUITENBECK

Spicy food: a false hope

Finding Indonesian food in the Netherlands is kind of easy, which is maybe due to the long history that these two countries shared. Indonesian restaurants can be found in many cities. In the supermarkets, there are various Indonesian foods which I did not imagine I would find in Europe: *tempe*, *kerupuk* (known as *kroepoek* here), and of course *sambal*.

The fact that it is called sambal, the same as Indonesians call it, was surprising for me. As a spicy food lover, it was a happy moment when I first saw so many varieties of sambals and spicy menus at Indonesian restaurants. I was so excited when I bought sambal for the first time. I was thrilled when I ordered a spicy menu at an Indonesian restaurant for the first time. I was so ready to experience the nostalgic feeling of being home. However, the second this so-called sambal or spicy food reached my mouth, my hopes were shattered.

Most of the time, what is defined as spicy here is actually sour to me and most of my Indonesian friends. Sometimes it is even just a sweet flavour. Ever since those first tastes, I do not believe anything that is labelled spicy anymore. Even though it is Indonesian food from an Indonesian restaurant, which is cooked by Indonesians, most likely the flavour has been adjusted to Dutch tastes.

The good news is that the pepper itself, in its raw form, is also available here and is as spicy as it should be. I will just have to be more creative in my kitchen then, to keep up my standard of spiciness. That way, I hope I will not be shocked by the real spicy food when I go back to my country. **R** Dea Putri Utami, MSc student of Food Technology, from Indonesia

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