

## **Plant Sciences**

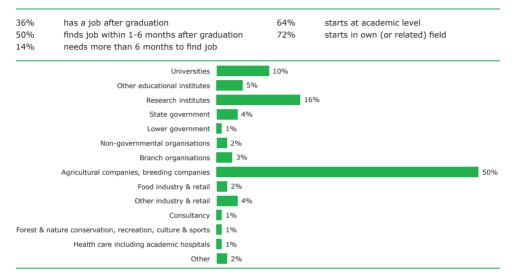


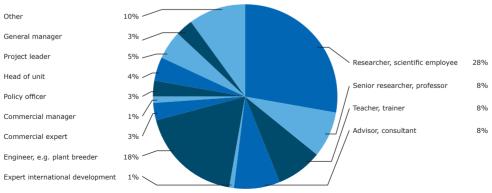
### A flourishing career?

Check the careers of Plant Sciences alumni in this booklet and see in which directions you can go!"

### Graduates & Labour Market

Master Plant Sciences, 2019





# Working for a world market leader

This booklet contains brief descriptions of the employment that Wageningen University alumni have found since graduating in Plant Sciences. Their experience shows that a Wageningen degree in Plant Sciences is an excellent foundation for an international career.

A Master's Diploma in Plant Sciences, Plant Biotechnology or Organic Agriculture is highly sought after in the business world. And with good reason: we pride ourselves on the high-quality courses we offer. Our programmes have scored high in the rankings for many years. Another key to our success is that we work together with one of the strongest economic sectors of the Netherlands. Dutch plant breeding companies are world leaders. We conduct our research in close cooperation with these companies and many of our graduates find an international career with them too.

As a plant scientist you'll not only work in a flourishing sector; you'll also be tackling issues that are of crucial importance for our future. We believe that in the coming decades the world's population will need twice as much food as we currently produce on the planet. In this same period we also need to greatly reduce the impact that food production has on the earth. This will not be possible without new crops and smart cultivation methods. And to devise these we need plant scientists who are willing to work in innovative companies and research institutes towards a brighter future.

Ernst van den Ende, Director Plant Sciences Group, Wageningen University & Research



### Master in Plant Sciences

### WIM AMMERLAAN | 2007

AMMERLAAN ROSES B.V. / AQ ROSES, MANAGING DIRECTOR (OWNER) Ammerlaan Roses grows roses in the Netherlands and Ethiopia. At the nursery in Ethiopia we produce about one hundred million roses a year on 40 hectares of land. My brother and I jointly run the nursery in Ethiopia and the processing and marketing of the roses grown there in our own storage facilities at the flower auction in Aalsmeer. My brother is responsible for running the business while I focus more on the technical side. There's never a dull moment in this job, as we have to deal with all aspects of horticulture: cultivation in Ethiopia, the chain right up to the customer, and marketing our products. My academic background helps us to react quickly to new developments and changes in technology, which puts us at the forefront of the flower growing business in Ethiopia.

#### MAARTEN DE MILLIANO | 2007

MONSANTO VEGETABLE SEEDS, PLANT PATHOLOGY SPECIALIST After graduating I got a job in the plant health department at Monsanto Vegetable Seeds. I'm responsible for phytopathology research projects for cucumber crops in the Netherlands and abroad. My work helps to make new robust, disease resistant cucumber varieties commercially available. This means more harvest security for growers and a healthy pesticide-free product for consumers. IRIS STULEMEIJER | 2002

NETHERLANDS CANCER INSTITUTE, POSTDOCTORAL RESEARCHER After finishing my master Plant Breeding and Crop Protection in 2002, I studied signalling cascades in tomato plants that were triggered by invasion/detection of a pathogenic fungus, at the Laboratory of Phytopathology of Wageningen University & Research. After obtaining my PhD degree in 2008, I started as a postdoc at the Netherlands Cancer Institute (NKI). Here, I perform experiments in yeast cells to study how packaging influences usage and readability of DNA. Again, I'm mainly interested in the signalling cascades in cells. In 2011, I obtained a personal grant that I'm using to unravel how signalling in the cell changes when DNA packaging is altered, and importantly, how this translates to usage and readability of the DNA.



### MARTIJN EGGINK | 2007

### RIJK ZWAAN, TOMATO BREEDING MANAGER

During my master in Plant Breeding and Genetic Resources I did a six-month internship at the seed company Rijk Zwaan. I enjoyed it so much that I started immediately afterwards as a pre-breeder. Pre-breeding involves crossing cultivated plants with wild strains. Breeders can use the hybrid progeny to create new commercial varieties. Since 2008 I've combined my work with PhD research on taste in pepper at Wageningen University & Research Plant Breeding. The research and my experience as a pre-breeder were ideal preparation for my current job. I'm now a tomato-breeding manager in charge of over 30 people, of whom about half work abroad.

### MICHIEL KLAASSEN | 2010

### KNOWLEDGE CENTRE FOR AGROFOOD & ENTREPRENEURSHIP, RESEARCHER

During my internship I rolled into my first job. I was an advisor on sustainable agriculture for a firm of consultants, Schuttelaar & Partners. I advised multinationals, governments and knowledge institutions on matters related to sustainability and health. I now work at the Knowledge Centre for Agrofood & Entrepreneurship, which is part of the Vilentum University of Applied Sciences in Dronten. As a researcher in the field of bio-based product development my team and I do applied research aimed at stimulating innovation in small and medium-sized enterprises. Meanwhile I've also started PhD research at Wageningen University & Research.



### REINOUT PENNINGS | 2012

### ENZA ZADEN, PRODUCTION SPECIALIST

During my study I chose the specialisation Greenhouse Horticulture, as I like to be in the field surrounded by plants and not in a laboratory. Due to excursions to breeding companies, I became interested in this international world of continuous innovation for new varieties. My internship at the department of seed production at Enza Zaden was a big success, and I was offered a job there afterwards as a production specialist. I coordinate the production of hybrid seed for melon, squash and pumpkin worldwide. This means lots of travel: I visit all the growers as we try to maximise yields and quality. It's the perfect way to put into practice all the knowledge and understanding of plants that I gained in Wageningen! NIEK HOEBE | 2009 CORN. BAK B.V., PLANT BREEDER

After working briefly in chrysanthemum breeding in South Africa I started to work as a breeder for Corn. Bak at the end of 2010. The company is a tropical houseplant breeder that specialises in bromeliads and carnivorous plants. We also love new challenges in the world of exotic plants, and I was lucky enough to have the honour of being allowed to start breeding work on a new cultivar in the Medinilla family. In addition to breeding I'm closely involved in all sorts of activities for the company: from gathering new planting material to organising breeders' rights and helping customers with their breeding. Now we're a few years down the line, and our first cultivars are set to conquer the world.

### ERNEST ALLICHE | 2013

PLANT BREEDING, WAGENINGEN UNIVERSITY & RESEARCH, PhD STUDENT

I'm doing PhD research in Wageningen on drought tolerance in potatoes. On the journey towards feeding the world, our ultimate goal is to develop methods and techniques that breeders can use to grow potatoes that can withstand arid conditions. My work is very varied. I look at the molecular aspects of drought tolerance in the laboratory, I do greenhouse research and field trials, as well as using bioinformatics and performing data analysis. The master's degree prepared me well for the research I'm doing now. Coming to Wageningen has been a blessing for me.

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### FRANS TETTEROO | 1986

#### INCOTEC, TECHNOLOGY INTELLIGENCE MANAGER

For the past two years I've been working as a technology intelligence manager at Incotec. I'm responsible for discovering new technologies and coming up with new ideas that can add value to genetic parent material. Our products improve seed quality. Innovation is very important for my company, which is why ideas need to be assessed carefully and followed up in innovation projects. My first contact with the seed industry was during my plant breeding study. I ended up at my present employer via Royal Sluis, which was originally the parent company of Incotec. I started as a researcher in the plant tissue culture laboratory where the aim was to propagate healthy genetic material. While working there I was given the opportunity to do a PhD research project at Wageningen University & Research. After that I became a senior researcher on seed pelleting before being promoted to my current position.

### KIBROM BERHE ABREHA | 2011

SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES, PhD STUDENT I studied Plant Sciences at Jimma University in Ethiopia. Wageningen was my first choice for a master because of its international reputation, well organised MSc programmes and international academic environment. After obtaining my MSc in Wageningen I first returned to work in Ethiopia. I later moved to Sweden where I'm now working on my PhD project. I'm using Next Generation technology to try to unravel the complex molecular interactions between *Solanum* species and *Phytophthora*.

### GEERT VAN GEEST | 2012

DELIFLOR, PLANT BREEDER

I did an MSc in Plant Sciences, for which I combined a specialisation in Plant Breeding and Genetic Resources with one in Greenhouse Horticulture. I recently started working for Deliflor, a chrysanthemum breeding company that develops new varieties. My job is to develop molecular markers for chrysanthemums. These markers enable you to see at a very early stage in the DNA of a young plant the characteristics it has. This means we can select much more efficiently to create improved varieties. My job is challenging and varied: on the one hand I'm involved in creating innovative products, and on the other I'm working with biological processes.

### BRAM LOKKER | 2006

### INTERPLANT, PLANT BREEDER

Based in the Netherlands, Interplant Roses develops new rose varieties for the international floriculture industry, both garden roses for landscaping purposes and cut flower rose varieties for commercial growers. The company was the first to develop Spray Roses and remains the market leader worldwide for this kind of roses. At our headquarters in the Netherlands my colleagues and I are responsible for crossing parent plants and seedling selection. After first selection promising seedlings are propagated and send to our test locations in East Africa (Kenya) and South America (Ecuador) for further testing and selection under local conditions. I also run our post harvest research. From our subsidiary company in Kenya weekly test shipments of roses are sent to The Netherlands by plane. After transport vase life and quality are monitored. The results of these tests are important selection criteria in our breeding programme.

NADINE RIJK | 2013 FIDES, PLANT BREEDER

I work for Fides, a pot plant company that breeds chrysanthemums, geraniums, dahlias and petunias. My job is to try and predict demand, for example whether a particular colour is going to be in fashion or whether disease resistance will help sell a plant. I then cross plants and test whether the results are viable by cultivating them under different conditions, for example in very arid or very humid climates. The resulting product is then launched on the market. I have the best job I could wish for. It's a fantastic challenge to work on creating new plant varieties.

#### RICHARD IMMINK | 1997

WAGENINGEN UNIVERSITY & RESEARCH, SENIOR RESEARCHER/ ASSOCIATE PROFESSOR

I work four days a week at Plant Research International, part of Wageningen University & Research. I'm a senior researcher at the Bioscience business unit. Here I supervise research assistants, manage projects and help acquire funding. The institute carries out mainly contract research in collaboration with the private sector. We perform research on the molecular mechanisms underlying the regulation of flowering and growth in plants. My focus is on the effects of temperature on the onset of flowering. I'm also an associate professor of the physiology of flower bulbs, for which I work one day a week at Wageningen University & Research.

### PRAXEDIS DUBE | 2010

### MINISTRY OF AGRICULTURE, DEPARTMENT OF RESEARCH AND SPECIALIST SERVICES, RESEARCHER

I work for the ministry of agriculture in Zimbabwe, where I am a principal research officer in the seed technology department. It's a really varied job. I supervise young researchers, advise farmers and provide scientific input for policy making. I'm also responsible for granting plant breeders' rights for new varieties and for checking seed production. We carry out inspections to ensure that farmers conform to prescribed standards. My MSc course has enabled me to carry out research in my field of expertise. Last year, thanks to Wageningen, I completed a research project and had an article published in a scientific journal.



### LUKE VAN DER WINDT | 2012

#### DRISCOLL'S, PLANT BREEDER

I was attracted to Plant Sciences because of the international opportunities it offers. I now work for Driscoll's, an American company that specialises in breeding, growing and marketing soft fruit. Driscoll's operates on all continents so it supplies fruit all year round. We develop our own varieties of strawberries, raspberries, blueberries and blackberries. I'm an assistant breeder and help develop high-quality varieties in terms of taste and shelf life, working closely with our nursery locations in the UK, Spain and Portugal.

### Master in Plant Biotechnology

### BULLO MAMO | 2007

### UNIVERSITY OF MINNESOTA, RESEARCHER

Before coming to Wageningen I got a bachelor in Plant Sciences at Harayama University in Ethiopia in 2007. After obtaining my master's diploma I first worked for a year at the University of California Davis in the United States. I then joined the PhD programme at the University of Minnesota, in the Plant Pathology department.

I now do research on barley, mapping the genes involved in certain diseases such as stem rust, spot blotch and *Fusarium* head blight. I'm also studying the genes related to the nutritional value of this crop, in particular zinc and iron, using bi-parental and association mapping approaches to determine the location of the genes involved and to link these to DNA markers. If you want my advice: go to Wageningen!

### LAURI REUTER | 2012

VTT TECHNICAL RESEARCH CENTRE OF FINLAND, RESEARCHER I graduated from the Plant Biotechnology program with specialisation in Plants for Human and Animal Health in August 2012 after finishing my bachelor's degree in Life Sciences at the University of Eastern Finland in 2010. I did the last internship of my master studies at VTT Technical Research Centre of Finland in the group of plant biotechnology and continued working there after graduation as a research scientist. I am simultaneously doing my PhD studies at the Helsinki University. My research focuses on the expression of high-value recombinant proteins in tobacco cell cultures.

#### JACKIE ATIM | 2010

### NATIONAL AGRICULTURAL RESEARCH ORGANIZATION,

### PLANT DISEASE SPECIALIST

I'd already got degrees from the University of Halle in Germany and Kyambogo in Uganda before starting a master in Plant Biotechnology in Wageningen. I now work on plant health for the National Agricultural Research Organization NARO in Uganda where I do research on disease and disease control in the regions around Lake Victoria. I'm also involved in debates and campaigns to promote the use of biotechnology in agriculture. I think that genetically modified crops are needed if we are to find solutions to climate change and the increasing demand for food in the coming decades. I am lobbying to have legislation passed that will make it possible to study and use GMOs.

### THOMAS LIEBRAND | 2010

UNIVERSITY OF CALIFORNIA DAVIS, POSTDOCTORAL RESEARCHER After obtaining my bachelor in Plant Biotechnology at Van Hall Larenstein University of Applied Sciences, I did a master in Wageningen, specialising in Plant Pathology and Pest Control. In my current job I'm studying plant immune systems at the University of California Davis. This work is a continuation of the PhD research I did at the laboratory of Phytopathology of Wageningen University & Research. I studied the immune response of tomato plants to *Cladosporium fulvum*, the fungal pathogen that causes leaf mould disease. My research in California has been funded through a Rubicon grant from the Netherlands Organisation for Scientific Research (NWO).

The work is varied and I enjoy it as it enables me to make use of the molecular science and phytopathology knowledge I gained during my work, study and internship."

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### JOJANNE PETERS | 2012

NUNHEMS, MOLECULAR DIAGNOSTICS RESEARCH ASSISTANT In January 2010 I started the master in Plant Biotechnology, specialising in Molecular Breeding and Pathology. In June 2012 I started to apply for jobs with horticultural and ornamental plant breeding companies. I sent my CV to Balans, a recruitment office, and they put me in touch with Nunhems, the vegetable seed company of Bayer CropScience. I started here in October 2012 as a Research Assistant Molecular Diagnostic. I develop molecular assays for detecting plant pathogens. The work is varied and I enjoy it as it enables me to make use of the molecular science and phytopathology knowledge I gained during my work, study and internship.

### LOTTE WESTERHOF | 2007

WAGENINGEN UNIVERSITY & RESEARCH,

#### POSTDOCTORAL RESEARCHER

I started my study in Leeuwarden where I did a first degree in Biotechnology. Because I decided to specialise in plant biotechnology I did an internship at Plant Research International. I worked on a project in which edible vaccines were being developed. I was fascinated by the idea of producing proteins in plants and I knew then that I wanted to continue doing this kind of research. That's why I chose to do an MSc in Plant Biotechnology at Wageningen University & Research. I found a group in the University that did research on synthesising animal-based signal proteins in plants and I started my thesis there. I stayed there and continued in one go for my PhD. I'm about to complete my dissertation, and after that I plan to continue with post-doctoral research, hopefully with a Veni grant.

### LORENA DA PONTE | 2014 (expected)

### KEYGENE, SENIOR RESEARCH TECHNICIAN/MASTER STUDENT PLANT BIOTECHNOLOGY

Before I came to Wageningen I did my BSc at the National Agrarian University in Lima, Peru. After graduating I worked for two years as a research assistant at the International Potato Centre in Peru. In 2007 I decided to gain some work experience abroad and in 2008 I got the job at Keygene, a research company in Wageningen with a main focus on plant molecular biology, genetics and trait research.

I'm doing an MSc in Plant Biotechnology and right now I'm working on my thesis in the Laboratory of Nematology. I hope to be finished in September 2014. I've continued to work at Keygene, doing research on tomatoes and eggplant. I expect that my work experience and the master I'm now doing will provide me with the know-how that will help me further my career.

### BART NIJLAND | 2010

GENETWISTER TECHNOLOGIES B.V., PROJECT MANAGER After doing a bachelor's degree at Van Hall Larenstein University of Applied Sciences, I completed my master in Plant Biotechnology at Wageningen University & Research in 2010. In the same year I started working at Genetwister Technologies, a biotechnology company that specialises in in genomic breeding, green biotechnology and bioinformatics. I started as a researcher in molecular biology, and have since progressed to being a project manager, responsible for various research projects within the company. The knowledge I gained during my study in the fields of genomics, molecular breeding and sequencing is very important for the work I do now. It's a varied and challenging job!

### Master in Organic Agriculture

### LOES MERTENS | 2010 DE BOLSTER B.V., PLANT BREEDER

My passion for plants, food and rural development led me to choose the MSc in Organic Agriculture. I work for De Bolster, a plant breeding company that produces organic seed for many different types of vegetables, flowers and herbs. We develop varieties in response to the specific wishes of organic growers. In my job I need to be connected to growers and the market and involved in applied research and innovation. I feel we are leaders in the organic sector. It's very fulfilling to work in a company that is innovative and enterprising, while keeping to its ideals!

### XUESHI ZHANG | 2009

KOPPERT BIOLOGICAL SYSTEMS, PROJECT MANAGER

At present I work as a project manager at the Chinese branch of the Dutch company Koppert Biological Systems. I maintain relations with the government so that new ideas can be worked out and implemented quickly, and I'm responsible for maintaining good relations with important customers and organisations. Together with the Global Facilities and Planning Director, I'm developing the strategic plan for our company in China. When I received a scholarship to do a master, I chose to go to Wageningen University because of its good reputation."

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### KHAGENDRA RAJ BARAL | 2012

### AARHUS UNIVERSITY, PhD STUDENT

Before I came to Wageningen I had already worked for various organisations in Nepal after obtaining my bachelor's degree at Tribhuvan University. When I received a scholarship from the Church Development Service (EED) in Germany to do a master, I chose to go to Wageningen University & Research because of its good reputation. After gaining my MSc I left for Denmark, where I'm now working on my PhD at Aarhus University. I'm doing research on greenhouse gas (GHG) mitigation from soil-manure environments. My research focuses on the identification of potential sources of greenhouse gas.

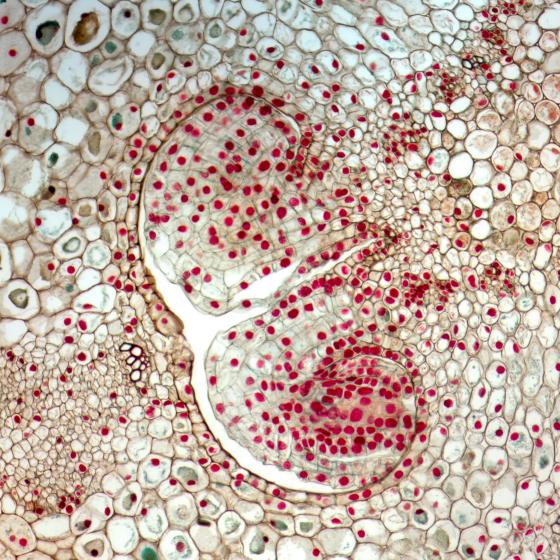
### NATASJA POOT | 2012

### BLGG AGROXPERTUS, PRODUCT MANAGER

I work as a product manager at BLGG AgroXpertus, a large agricultural laboratory. We perform analyses related to fertiliser use, nutritional value of fodder, soil and crop health, and food safety. I started as a technical account manager but soon took on more work and became a crop and horticultural product manager. Now I'm responsible for the soil health department. I try to translate scientific understanding into practical solutions, and our analyses provide farmers with options for obtaining optimal production. I also give regular presentations to agricultural advisors and study groups, and I try to keep close contact with farmers themselves. I have a wide range of tasks: marketing, communication, research and project leadership – all on the subject of soil.

### JOSÉ LOZANO | 2005 WAGENINGEN UNIVERSITY & RESEARCH, POSTDOCTORAL RESEARCHER

The time I spent studying in Wageningen was the most enriching experience I have had in my whole life. Not only academically speaking, but above all living with people from so many different countries really contributed to my personal development. Immediately after graduating, I started a PhD at the Laboratory of Nematology at Wageningen University. Here I study the immune reaction of plants and hosts to pathogens. Much of my work naturally involves research, but I'm also involved in education. I have supervised a number of students doing their thesis and I have also helped with various practical periods organised by the chair group.



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