From track tractors to tyres
▶ A British farmer converts his tractor fleet

Vintner of the Year, Andrea Wirsching
▶ A woman managing the family vineyard in Franconia

Simply a great cut
▶ Tips on Fendt forage harvesting

Plant protection for professionals

June 2018
In 1943, a production facility was established in Linnavuori, Finland not far from Nokia, initially in poorly equipped rooms. The originally planned production of aircraft engines had to be deferred. The first product during the war years was the assembly of 30 fuselages for the Finnish fighter plane VL Myrsky II (Storm). Shortly afterwards the airplane propellers were redesigned, and the foundry closed its doors at the end of the summer. Assembly of aircraft engines only began in 1947. A few years later, the main brand produced in Linnavuori was the Valtra.

75th anniversary: From small engine manufacturer to global producer

Since 2004, the engine manufacturer has belonged to the AGCO Group. Since then, the manufacturer has constantly invested in development of new products, innovative engine technologies, and in increasing production capacities. The engine plant was modernised in 2013 for €20 million. AGCO Power now manufactures 3, 4, 6 and 7-cylinder diesel engines, which are produced in four plants in different countries: Linnavuori (Finland), Changzhou (China), Mogi das Cruzes (Brazil) and in General Rodriguez (Argentina). The production volume has increased exponentially in recent decades, and now comprises more than 100,000 engines each year.

More than 70% of all AGCO products are fitted with an AGCO Power engine. Fendt machines are also powered by the high-performance engines ranging from 70 to 598 HP. Alongside the new Fendt IDEAL 7 high power combine harvester, E-, L- and C-Series combine harvesters also benefit from the powerful engine. The low diesel consumption of the AGCO Power engine benefits Fendt Rogator 600 field sprayer owners, as well as the Fendt 200 and 300 Vario tractors, and the tracked Fendt 900 Vario MT.

DEAR READERS,

Around six months ago, our Fendt plant protection sprayers made their debut at Agritechnica 2017. The self-propelled Rogator 600 has been developed for European operating conditions, and has become a popular machine on the market since 2010. The trailed sprayer, the Fendt Rogator 300, benefits from the smart features of the self-propelled machine and its continuous development. To give you a better picture of the Fendt sprayer range, this issue will focus on plant protection.

We also want to spotlight the Fendt 1000 Vario story. Personally, I am delighted to see the success of this series, and am also rather proud of how the 1000 model has become a firm favourite around the world. At the end of last year, we produced the 1000th Fendt 1000 Vario, which is currently in service on a farm in Canada. The reason for this high-power tractor’s success is also discussed in our interview with farm manager Michael Balls from Great Britain, who has just replaced four tractors with two Fendt 1050 Varios.

Finally, I want to invite you all personally to our big Fendt Field Day. Come to Wadenbrunn on 23 August and see for yourself the quality of our Fendt Full Line range with a totally new show concept.

Kind Regards

Peter-Josef Paffen
Chairman of the AGCO/Fendt Executive Board
Find out why pests have good reasons to fear Fendt sprayer equipment on page 14.

PLANT PROTECTION DUEL

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PLANT PROTECTION DUEL

Just as long as I’m not up against the Xaver with the sprayer...

Yes, it’d be pure herbicide!

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June 2018
Farmers must also constantly educate themselves when it comes to plant protection, in order to keep up with the latest developments each year. All the better if they can move the training ground to the field, and experience plant protection and equipment at first hand. During harvest season, BASF invites farmers, dealers and interested parties to their field days. We were there to report on the field day in Grucking, Bavaria!
On the morning of 26 April in Grucking near Munich, there’s little sign of the warm weather we enjoyed in late spring, in fact it’s cold. Flags flutter in the chill wind, and the young shoots of wheat dance in the breeze, nothing to worry a farmer. They have long been used to the unpredictability of the weather.

Deep in thought, they stand among the small wheat plots on the Grucking BASF test site, softly stroking the wheat leaves, and peering at the ground. Detecting Septoria tritici takes a keen eye and intense concentration. That’s why they are here at the field day. Together they can inspect the crops, listen to information on the current pest situation from consultants, and discuss new pesticides and strategies. In order that strategies can be implemented in the field, the new Fendt Rogator 344 trailed sprayer is also on show. This is plant protection close up.

Face-to-face discussions are central to the event
One of the consultants is Markus Maylandt. He walks through the trial plots with the visitors, discussing and highlighting issues, and dispensing advice. “Personal contact with customers is at the very heart of what we do,” says the advisor. “People can read all they like, but face-to-face discussions are extremely important in such a sensitive field. In the end, plant protection is not just about having the knowledge, but looking at regional requirements in order to make best use of the spray.”

In order to achieve this, BASF have held field days over decades in several federal states. The information events are designed to keep farmers, dealers and interested parties abreast of the latest developments in the industry. On this Thursday in April, around 240 field day visitors have made their way to the small Bavarian village of Grucking. The 12 hectare site has been used by the Group since 2009 for fungicide trials. Trial crops here include not only wheat, winter oats and oilseed rape, but also triticale, rye, sugar beet and potatoes.

You’re never too old to learn
One of the consultants is Johann Wippenbeck. The retired farmer has been attending field days for many years. His son has now taken over the pig breeding and fattening, and the cultivation of winter oats, oilseed rape,
winter wheat and maize. Spraying the fields is always a job for dad. “He’s happy for me to do it,” says Bavarian Johann Wippenbeck, smiling. But he also knows that education is very important, if you want to make progress. The Fendt fan is very happy to see a Fendt tractor exhibited at the field day. The family farm has long put their trust in Fendt tractors. “Once you’ve driven a Fendt, you won’t want to drive anything else,” says the farmer.

To give visitors a chance to experience plant protection and equipment first hand, guided tours are conducted throughout the day. Interested visitors can walk through the various trial plots, and not only look at the current crops, but also discuss the current pest situation by putting plants and pests under the microscope. A Fendt 516 Vari and the Fendt Rogator 344 trailed sprayer were demonstrated to visitors. Plant protection and sprayers go hand in hand. The trailed self-propelled machine is a source of fascination with its rigid yet lightweight aluminium boom and single-beam chassis. Fendt sprayer expert Jim Ubaghs gives visitors a personal view into sprayer technology. “In my view, it’s always good to show the sprayer equipment close up to farmers and dealers,” explains the expert who was born in the Netherlands. “Visitors get the opportunity of scrutinising and inspecting everything,” says the sprayer expert.

Visitors also include a number of young farmers, who want to take home some industry knowledge from the day. Johannes Friedrich is one of them. He comes from the Traunstein district, where his family runs a farm with dairy cattle and arable crops. The hands-on approach and personal contact are what he loves best about the field day. “Not only do you get good information, you also get to see the machines at close quarters. I think it’s much better when you can see and hear these things for yourself.” He finds the information that he gleaned very interesting, not only because he needs to report back to his father later, but also because he would like to run a farm himself at some point in the future. “This hap-
pens in any other job as well," says Johannes Friedrich, "There’s always new specifications and information, and we farmers must constantly educate ourselves."

That is what the two dealers, Wilhelm Brenner and Dieter Mautz from Asam intend to do. "Yes of course, we need to find out what’s new and what is currently recommended with regard to plant protection," says Wilhelm Brenner, who is attending his first field day this year. Naturally, he’s looking forward to experiencing plant protection up close. "I spend most of my day in the office," says the dealer. "That’s why it’s hugely interesting and helpful for us to get out there for once, and to see these machines in action."

In the end, this is exactly what attracts farmers, dealers and interested parties to field days. It’s all about seeing, experiencing and feeling plant protection, regardless of whether it involves wheat, yellow rust, or the new Fendt technology.

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To maintain the golden splendour: Markus Maylandt explains to visitors how oilseed rape can be protected.

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BASF AND FENDT SEARCH FOR THE BEST STRATEGIES

The following also applies to plant protection: Only the right strategy will help you reap the rewards! Together with Fendt, BASF is looking for the best strategy in Germany through the "No one harvests more!" campaign. Which fungicide strategy do you use?

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Prizes to be won
With the right strategy and a bit of luck, you can win a Fendt 828 Vario, or put together your own Future Farm package to the same value.

Terms and Conditions at: www.keiner-drischt-mehr.de
Campaign ends 30 June 2018

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Through the "No one harvests more!" campaign, BASF aim to compare Ceriax and Adaxar in the field at 42 German sites, with fungicides of other manufacturers. The analysis will be conducted after the 2018 harvest using professional and independent yield mapping.

What is your success strategy?
Do you have an ambitious strategy in mind? Then register online at www.keiner-drischt-mehr.de and choose your personal success strategy for your region. Track your colleagues’ strategies and at the end of the campaign, give your assessment of the yield prospects in the individual regions. Select your strategy by 30 June and accumulate points to increase your chance of winning the grand prize.
Self-propelled or trailed? We give customers the choice. Since 2018, the new trailed Fendt Rogator 300 model has been added to the Fendt Rogator 600 self-propelled series, and provides the ultimate in application quality with its advanced technology. We present the highlights of Fendt plant protection equipment.

**FENDT ROGATOR CONCEPT**

- Lightweight aluminium boom
- Perfect boom position and ground following
- Low centre of gravity
- Induction hopper with OptiFlow control centre
- Up to 35° steering angle
- Smooth undercarriage with up to 120 cm ground clearance for maximum plant protection
- Circulation pump with max. 785 l/min pump capacity

**PLANT PROTECTION FOR PROFESSIONALS**

Self-propelled or trailed? We give customers the choice. Since 2018, the new trailed Fendt Rogator 300 model has been added to the Fendt Rogator 600 self-propelled series, and provides the ultimate in application quality with its advanced technology. We present the highlights of Fendt plant protection equipment.
Smart boom design
All Fendt sprayers come as standard with rigid, lightweight booms. The boom has been designed so that the diffusers are protected, though it is easy to change the nozzles. Optional LED headlights ensure good visibility of nozzles, and illuminate the boom and nozzles from behind.

Innovative boom control
Adaptability and precision characterise the high-tech boom control in our Rogator series. Up to five OptiSonic ultrasonic sensors guide the boom arm separately on the left and right over the target areas, and ensure perfect ground following. The extremely fast boom reaction also ensures that the distance to the target areas remains the same, and guarantees exceptional application quality.

Outstanding weight distribution
Thanks to the combination of advanced single-beam chassis and the lightweight aluminium boom, the Rogator models shine with their outstanding weight distribution. Horizontal boom movements which can be attributed to the terrain or acceleration or deceleration of the combination, can be compensated using the Rogator system. The system effectively minimises the chance of over and under-application thanks to the stable boom.

High capacity, short filling times
With the same design in all models, Fendt Rogator sprayers are equipped with a hydraulically powered and quick-reaction centrifugal pump. With a pump capacity of 785 l/min, it provides high capacity during application and optimal agitation power for the spray liquid circuit, and ensures short filling times thanks to its high suction power.

Fast quantity adjustment
Whether you're looking for very high, low or fluctuating application quantities – the flow rate sensor with a test range of 5 to 430 l/min gives the electronics the necessary information. This and the pump speed control allow very quick quantity adjustment with variable application rates (VariableRateControl), and ensure best application results.
The trailed self-propelled machine: Fendt Rogator 300

The Fendt Rogator 300 represents a completely new development. The new trailed sprayers have been developed on the basis of the successful self-propelled Rogator 600 series, and stand out from the crowd with a nominal volume of up to 6,600 litres and a working width of 24 to 30 metres. The innovative boom control, the smart chassis concept, the perfect handling and the high level of operational safety have been carried over to the new trailed sprayers.

Owners of the trailed sprayer can also look forward to flexibility and maximum manoeuvrability. Thanks to a universal drawbar solution, you can choose at any time between top and bottom hitch, allowing it to be adjusted to suit different tractors and tyre sizes. The streamlined single-beam chassis in the OptiSteer steering axle concept also allows a steering angle of up to 30° depending on tyre size and width. This ensures maximum manoeuvrability and crop protection.

The Fendt Rogator 300 is fully ISOBUS-compatible and AEF-certified. An optimised OptiControl joystick is available to the operator in the cab, which allows the Rogator to be operated conveniently and safely. The standard fitted electric single-diffuser switch with flexibly-adjustable partial widths meets the needs of even the most demanding professionals. Up to 900 litres of fresh water can also be carried in two weight-optimised tanks depending on the model.
# FENDT ROGATOR 600

<table>
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<tr>
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<th>Max. power according to ISO 14396 kW/hp</th>
<th>Nominal capacity Litre</th>
<th>Boom widths Metre</th>
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<td>178/242</td>
<td>3,850/5,000/6,000</td>
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Self-propelled machine with the full package: Fendt Rogator 600

With a wide range of filling, boom and diffuser technologies, the Rogator 600 sets new standards, and is the ideal sprayer for large farms and contractors. The combination of an AGCO Power engine with 175 to 242 HP, the continuously-adjustable drive concept, and the smart traction control provides the necessary power to guarantee reliability. Alongside the unique chassis concept and the innovative boom control, the 600 models also feature a range of steering variants, right up to 4WD for the perfect turning circle. To protect high crops, the self-propelled machine offers infinitely-adjustable ground clearance of up to 120 cm. The Rogator 600 also proves its flexibility through a hydraulic track width adjustment of up to 2.25 m. Maneuverability, efficiency, and power make it the perfect self-propelled sprayer for professionals.

The Fendt Rogator 600 with its smart boom design comes in a working width of 24 to 36 metres.
With an extended warranty, Fendt also offers Fendt Rogator 600 customers a comprehensive product to cover the repair risk.

Fendt meets the requirements of customers for calculable machine costs and minimises the failure risk through reliable service and regular maintenance, with a manufacturer’s extended warranty. Full cost control and planning certainty for each customer. Fendt offers maximum flexibility regarding term and coverage. Two low-cost excess tariffs are available alongside the full warranty.

### Fendt Rogator 600 maximum warranty cover:

| Max. hours | 8,000 |
| Max. years | 1+4 |
| Cover       | Full cover (except wear) |
| Excess      | €0 |
|            | €190 |
|            | €490 |
Andrea Wirsching is “Vintner of the Year 2018”. With her “Hans Wirsching” wine, she is carrying on the success of her forebears, who have been growing wine in Iphofen in Franconia since 1630. But as the native Franconian stresses, success and the quality of Wirsching wines are a real team effort. 

“For us, healthy grapes determine the quality of the wine.”

Andrea Wirsching with Dr Uwe Matheus, Head of Sales, Administration and Representation, and Sales Manager Armin Huth.

When you meet Andrea Wirsching, you immediately feel like you have known her for ever. The 54-year-old historian has a real zest for life. Straightaway, the conversation turns to putting the world to rights – but eventually we get onto the subject of wine. Wine has always been part of Andrea Wirsching’s life. She was brought up on her parents’ vineyard, and helped out there as a young girl, both during the harvest and in selling the wine. Her father, Dr Heinrich Wirsching, a cautious and circumspect vineyard owner and visionary, turned the vineyard into one of the leading producers of Silvaner in Franconia. Andrea Wirsching has managed the vineyard, which covers an area of 90 hectares, for the past year.

“For generations, our family has overseen a cultural asset: Franconian wine,” says Managing Director Andrea Wirsching. “We don’t compromise when it comes to quantity, and reduce it if necessary. Alongside hand picking, we also select by taking photos. For us, healthy grapes determine the quality of the wine. If you have a healthy raw product, nothing much should wrong in the cellar,” says the vintner, with a smile.

If you follow that advice, you won’t go far wrong. At the start of the year, she was named “Vintner of the Year 2018” in a blind testing by the food and drink magazine "selection". The vineyard itself received the award of “Silvaner Vineyard of the Year 2018”.

“Our vineyard has grown to the extent that I can appoint...
Silvaner – the genuine taste of Franconia

Hints of the rich soil can be detected in this traditional variety. Its medium-sized, juicy grapes deliver a robust, full-bodied wine with a neutral bouquet, and delicate, mild acidity. Thanks to its understated character, it is an ideal companion to many dishes, both as a simple table wine, as well as a fine wine for haute cuisine.

Silvaner is one of the key grape varieties on the Hans Wirsching estate with 40% of the crop. The healthy stock of old grape varieties, some of which are up to 40 years old, produces a very high yield. In good years, it surprises with its interplay and elegance. The Wirsching vineyard is as environmentally-friendly as possible, and conventional as necessary. For some years therefore, they have managed to work without insecticides and herbicides. This also means that more machine tillage is required under rows, and Fendt tractors are used here.

Mechanical tillage: Fendt 210 Vario with a cultivator for loosening the soil to a depth of approx. 10 cm, and a flat share implement for removing weeds.

specialists in every position. I really can draw on virtually limitless expertise,” says Andrea Wirsching of her fantastic team. “Everyone on our team has the space to develop his own skills. We have a team in which everyone has a say, and brings their experience to the table, and I find that a very productive approach.”

For the past four years, Dr Klaus-Peter Heigl (53) has worked as an oenologist at the Wirsching vineyard. The 53-year-old is responsible for wine production, vine management, and the aging process. With his many years of experience in wine growing, he knows exactly is needed to manage the Keuper soil. “This soil from the Triassic era is rich in minerals due to the deposition of shell limestone sediments. The mild climate and long growing season allow the vines to absorb the minerals within the Gipskeuper soil. This gives our wines their high-quality and delicate character.”

The Wirsching vineyard is an environmentally-friendly as possible, and conventional as necessary. For some years therefore, they have managed to work without insecticides and herbicides. This also means that more machine tillage is required under rows, and Fendt tractors are used here.

Although Simon Ender is only 33 years old, he has already been working for the vineyard for the last 11 years. As a field manager, he oversees the tending and management of the slopes and coordinates the employees. When it comes to deciding which machines should be used, he discusses this with the operators. He has been a keen advocate for the 200 series for many years. “For us, the key factor is machine reliability, in other words, not prone to breaking down. Machines should also be easy and comfortable to operate,” says Simon Ender. “Generally speaking, ride comfort is important to our operators, because, well, they want to be able to get back in the machine and work the next day. The Vario transmission provides us with safety. We don’t have to worry about what gear we need to select when driving down a slope, so we can concentrate solely on the implement and our work.”

Eight Fendt tractors are used on the slopes of the Wirsching vineyard. A Fendt 313 Vario for transport work, and seven Fendt 210 Varios with different implements: Line trimmer for trimming shoots in summer, leaf vacuum for removing leaves, trunk cleaner and various tillage implements such as rotary harrow, cutter, mulching equipment and seeders. In winter, soil loosening implements such as spading machines and subsoilers are used, as are trailers which bring in hand-picked grapes. White wines are aged in stainless steel tanks and in a large wood barrel, while red wines age in an oak barrel. A small percentage of white and red wines are also barrique aged.

A special Wirsching wine from the large wood barrel is the Silvaner “Sister Act”, which has been created by the two sisters, Lena and Andrea Wirsching.

“The wine industry is very much male-dominated. There are some up and coming women who have studied hard, but there are still very few women in positions of power,” says Andrea Wirsching, describing the current situation. “In order to be heard, you need persistence, and sometimes you really need to bang on the table. I’m not actually like that, but I’m learning,” laughs the likeable vintner.

“FOR US, THE RELIABILITY OF THE MACHINE IS KEY.”
Dr Prochnow, as head of product development for cereal fungicides, you know the diseases very well. Which of these are currently causing the biggest problems for farmers?

With regard to cereals, the main group of diseases are those which produce fungi. Over the last 20 years, Septoria in particular has become the most serious disease affecting wheat crops. In addition, highly aggressive strains of yellow rust have spread like wildfire over the last three years. In contrast, Ramularia leaf spot has been the dominant disease in barley over the last 10 years. Diseases constantly change however. Farmers must actually be permanently on their guard, and ensure that they take plant protection action at the right time and against the right pathogens.

What can be learnt from the development of diseases over recent years?

Several factors play an increasing role in the development of pathogens: Management method, crop rotation, fertiliser intensity, the varieties used, and of course the way in which pathogens adapt. Then of course, we have the major influencing factor, the weather. However, if we look at what has made life difficult in the past, we see that a lot of it was homemade, in other words, caused by us. The spread of DTR/HTR leaf spot fifteen years ago was the main factor in moving away from ploughing and soil tillage, and the increase in growing stubble wheat. The pests can therefore be a result of our management methods.

What makes a successful strategy, and why is resistance management so important?

The key points regarding plant protection by Dr Jochen Prochnow, Head of Product Development for plant protection at BASF SE.

The keyword here is climate change. What kind of impact can farmers expect?

In my view, climate change will have a serious impact on combating crop diseases. All development processes in nature are linked to temperature. An increase in temperature means that diseases develop more quickly, just like the host plant! That goes for insects just as for fungi. What’s more, the range of fungi will change somewhat. Warmer weather with more sunshine will mean an increase of airborne diseases. Which diseases this specifically refers to, no one can say, so we wait and see!

At present, BASF is looking for the best plant protection strategies in Germany. What is for you a successful plant protection strategy?

A good strategy is always multidimensional. It is important for example that we combine all measures which are available for controlling diseases. It all starts on the date of sowing, selection of varieties, and ends when the yield target determined by fertiliser application is met, and of course you must have the right combination of active ingredients with a lasting curative effect when selecting pesticides. A resistance management system to retain the active ingredients should also be operated, and the pathogens treated according to their significance and importance. And then there’s the question of performance, for plant protection and technology must always be seen as a single unit. Only if I have the right technology which allows me to ride even under difficult conditions, can I be sure that the spray is always in the right place at the right time.

Resistance management is a subject which lies close to my heart as a product developer. Why?

I believe that resistance management means above all that active ingredient efficacy is retained in the long term. It’s a subject which farmers need to look at more closely in future. It is important in practice that we select the
right product and strategy and for example, only use the SDHI active ingredients (carboxamides) once a season, and do not select products with excessive carboxamide content, so that the active ingredient and therefore the high yield is retained for as long as possible.

“Use active ingredients sparingly, because something this good can be slow to come around again.”

Remember, the first farmer to encounter resistance to these ingredients on his land is also the first to suffer reduced yields. I therefore stress once again: Use active ingredients sparingly, because something this good can be slow to come around again.

The “something this good” doubtless includes your cereal fungicides Adexar® and Ceriax®. How do they differ to other cereal fungicides? Adexar® and Ceriax® are high-performance fungicides, which simply offer the farmer outstanding features. It is the exception rather than the rule that fungicides combine excellent curative power so well with long-lasting performance, and against all relevant cereal diseases. The top performer in both products is one of the most effective carboxamides, Xemium, which has a very reliable effect on all key fungal diseases. They are particularly successful at combating the main wheat diseases such as Septoria and yellow rust. The excellent curative power already effectively controls existing outbreaks, and also reliably protects new growth with its lasting effect.

Why do you think many people still have misgivings about using pesticides? I think it also has much to do with a lifestyle which is currently in vogue. Many people believe that they doing something beneficial by purchasing the products that they do. According to surveys, the majority of Germans are of the opinion that pesticide residues are one of the biggest risks involved in food. Although this is unjustified, we take this perception seriously, as do policy makers, and we work constantly on educating the public.

In no other European country is food tested as intensively for plant protection residues as in Germany. My aim is to protect crops, which have been grown through tremendous hard work by our farmers, to prevent them from spoiling, to supply people in our country with good, safe food.

More than ever, the main currency in our society today is trust. In an age where facts are seemingly afforded less importance, or people are unaware of them, our actions and ideas are based on assumptions or apparent truths. Science and research are fed by data and facts. As a company, we feel bound to follow this principle, for trust always comes about when you keep your word. In this respect, we can make a key contribution to the future, by sticking to our principles and yet listening to the emotions of our customers. I believe it is this transparency and integrity which are important, and we must also try to project these values to people outside farming, so that we can start to correct misconceptions and afford farming the attention and appreciation it deserves!

Many thanks for the interview!

ABOUT THE PERSON
Dr Jochen Prochnow, Head of Product Development for Plant Protection Germany at BASF SE.
• Born near Leipzig
• Farmer on a large agricultural enterprise
• Studied in Halle, focusing on plant protection and breeding for resistance
• In 1997, he went to BASF where he worked in a variety of positions, e.g. in sales and technology
• Working since 2007 in BASF SE development

“More than ever, the main currency in our society today is trust.”

Digitisation has also changed the agricultural landscape when it comes to application of plant protection spray. Do you see a window of opportunity in digitisation to develop sustainable plant protection? At BASF we see real opportunities in digitisation, and this is why we are putting investment into this area. The smart data analysis has also given us the tools to make better strategic decisions, for example, optimising the application time or applying onto the field exactly at the point where weeds or pests are found. Digitisation is also allowing us to become more cost-effective in our processes.
SIMPLY A GREAT CUT

The horizon is the interface between the sky and the earth, and it is also literally the interface for Fendt forage harvesting technology. To make all your cutting work run without a hitch this year, here’s a few tips and advice on Fendt forage harvesting equipment from grassland expert Johannes Grötsch.

1. The Fendt Katana 85 with the Kemper P3002 grass pickup and new HD drive also achieves high output under extreme harvesting conditions. The centrally integrated gauge wheel ensures better ground following. The continuously variable header drive allows you to adjust the pickup speed to precisely match the harvesting conditions and the forage harvester’s forward speed.

2. Fendt grassland expert Johannes Grötsch adjusts the contact pressure of the Fendt Slicer 3670 TLX KC disc mower via the hydropneumatic TurboLift system. The grass sward is protected by the floating cut which produces optimal forage quality. The forage always stays free of dirt even in wet and damp places.
Fendt round balers ensure that farmers don’t have to spend a lot of time on maintenance. Perfect accessibility allows knives on the Fendt 4180 V round balers to be changed in a matter of minutes.

A Fendt Vario and the Fendt Tigo XR75 D loading wagon are a perfect team. Using ISOBUS, the operator can control the loading wagon via the Varioterminal and put the key functions onto the joystick. In parallel to this, or with older tractors without ISOBUS, the loading wagon can also be operated via the loading wagon terminal. This is flexible operability.

On the Fendt Tigo XR75 D the operator can quickly and easily remove the knives. The table bars can be easily swung out for full accessibility. All knives can be unlocked at the same time by the central knife release, and removed individually at each point in the frame.

With FlexHigh, the raking height of the Fendt Former 14055 Pro hay rake automatically adjusts to match the road speed of the tractor, so that no stalk is left behind. When standing, the rotor immediately lifts to reduce soil in the forage, and protect the grass sward.

As with all Fendt Former hay rakes, the cam track can also be easily adjusted without tools on the Fendt Former 14055 Pro. This coordinates the lifting point of the tines precisely with the relevant forage, and produces an optimal swath.

The farmer can place the Fendt Former 14055 Pro control onto the joystick, and therefore have all key functions in one spot. Using the Fendt multi-function joystick, he can control the hay rake comfortably and customise its controls.

The operating height of the Fendt Twister 13010 T is easily and quickly adjusted using a crank. Thanks to the right setting, the forage is completely grasped, the forage contamination minimised, and the grass sward protected.

If you want to see Fendt forage harvesting in action, come to the big Fendt Field Day in Wadenbrunn on 23 August 2018.
Courland, a region of Latvia: The tractors and implements come from Germany. The latest technology for large areas of arable land, which are managed today by German farmer Christoph Brünger.

Christoph Brünger from Lower Saxony set off for greener pastures in 2009. His destination: Liepaja on the west Baltic Sea coast of Latvia. Chance sent him there, yet the location – close to the global market – was crucial to him, with the port being just 7 km away. The 42-year-old farmer started with 150 ha, and continued to expand his farm through leasing and purchases. His acreage grew exponentially in the first few years. Now he manages 1,200 ha of arable land, which is divided into 70 individual plots. No more than 15 km away are the business premises, a former collective farm with fattening pigs.

The breadbasket of the Baltic still holds some potential. Every year, Brünger adds acreage through renaturing, but the area’s climate is not especially favourable: Spring is often too wet, summer too dry, and there is a tendency towards heavy rains towards harvest time.

Autumn begins in the middle of September with rain, and transitions seamlessly into the harsh, four-month winter. The Baltic Sea is a blessing, and at the same time, a curse: In winter, it acts as a heat sink, and ensures that the location can produce winter crops. The problem of a coastal location is that the
In winter, the Baltic acts as a heat sink. Benefit: Winter crops can be grown. Problem: No snow to insulate the crops.

Lack of snow leaves crops without insulation. At very low temperatures, crops soon die.

**Action stations!**

For arable farming in Latvia, this means that there is just a short window between harvesting and sowing. Everything that needs to be done must be completed between the start of August and the middle of September. This requires the appropriate technology, and Christoph Brünger is well equipped here. 3 Fendt 936 Varios support the farm manager. Optimal conditions regarding time window, accessibility and ground conditions must be utilised, and it’s normal for the Marktberdorf tractors to run around the clock, six weeks long.

To find the right start time each day is often a major headache for the farm manager. When can he send his seasonal workers into the field with the technology without damaging the soil? Oilseed rape may replace winter wheat in the same field within the same day. How is that possible? During harvesting, the Varios drive behind the combine harvesters over the stubble with ploughs. Tractors are equipped with VarioGuide (Trimble RTK) guidance system, automatic Section Control partial width control, VariableRateControl (VRC), Fendt Variodoc Pro documentation and ISOBUS.

Preparation of this equipment is essential for the huge tasks which lie ahead in summer. Christoph Brünger spends many hours on planning field work, and preparing the machines for it. The mixed soils require constant adjustment of the fertiliser supply to suit the crop’s need for nutrients.

He uses VariableRateControl (VRC) in base fertiliser supply with phosphorus and potassium. The application maps and data are stored in a field database, which he transfers to the tractor from the PC via Variodoc Pro online and regardless of location. VRC ensures that the quantity calculated by Brünger is applied to the area. The system was used for the first time by this experienced farmer in the season that has just been completed. His conclusion: Up to 25% of the costs for fertiliser can be saved.

**No risk involved**

The young farm manager sets great store by reliability, technology and user-friendliness. In the time-critical phases, he relies on help from seasonal workers, who must very quickly come to terms with the technology. That’s why he chose Fendt. He began in 2009 with a rented machine, a 718 Vario combined with a 3 m drill, and bought his first 718 Vario in 2012. At the time, he received funding from the EU pot: Agricultural equipment came with generous subsidies for technological development. “That helps us tick optional equipment off our wish list,” says the Lower Saxon, indicating his willingness to invest in cutting-edge technology.

“UP TO 25% OF THE COSTS FOR FERTILISER CAN BE SAVED.”
This provides motivation for employees in their everyday work, is a unique selling point, and creates the perfect conditions for food production.

“IT TOOK SEVERAL YEARS AND DISCUSSIONS WITH THE NEIGHBOURS TO GET THE CROOKED LINES STRAIGHT.”

From the start he has based his fields on a 30 m tramlines system and has acquired the matching technology from fertiliser spreaders to cultivators. The goal is to establish himself in the long term in CTF (Controlled Traffic Farming). Today, he’s pleased that he can control all the assembled technology from his Fendt Varioterminal. SectionControl, application maps, wayline management, machine control and documentation are stored in a single operating instrument, the Variotronic. Brünger recalls his first experience with the 0-lines with a grin: “Sometimes a metre was left out, sometimes a metre missing. It took several years and discussions with the neighbours to get the crooked lines straight.” The correction signal is received faultlessly via the Trimble receiver. The signal is delivered via the Latvian phone network, which can be rented by the day. For tillage, he sources a signal for 1 1/2 months only during the harvest and sowing period, and a signal from the middle of March to the middle of September for fertilising and plant protection. The costs are manageable at 53 euros per month.

The task for the year was wayline management. Lines drawn for fertilising, plant protection and sowing were used. Partial fertilisation also takes place alongside harvesting. VRC and the created tracks accelerate the process. Winter oilseed rape and winter wheat is then sowed. Brünger has no room for manoeuvre: SectionControl helps the farmer in ensuring there are neither overlapping nor missing patches. If the weather doesn’t play along though, the harvest can end in disaster.

Good harvests can normally be brought in however: 7 tonnes per hectare for winter wheat or just over 4 tonnes for winter oilseed rape. If the relatively low leasing rates are then taken into account, then the financial returns are reasonably good.

Maintenance in Germany
At season’s end, completion of base fertilising and initial herbicide treatment are on the agenda for early autumn. Sarcely has the final field work been completed when the Fendt tractors go for a long trip. The annual maintenance is carried out in Germany, for Christoph Brünger says that agricultural equipment and Latvia don’t go together: “The tractors are taken by road to the port and shipped. During maintenance of the tractors in Germany, I’m always on-site in the workshop as an “apprentice”. I know my tractors now, and know the pitfalls. If a problem occurs during the season, I just have to phone Germany. I get videos via WhatApps to tell me how to fix the problem,” explains Brünger.

Spring follows the same pattern as autumn: Sometimes, all areas cannot be covered due to the frequent heavy rain. Things are moving once again in the Latvian countryside, over the 30 m tramlines which are stored in the software, always with the hope that no visible or hidden damage is left behind. Plant protection and fertilising must be completed exactly to schedule. The farm manager cannot imagine being without VarioGuide. He knows very well what the system does for him and his employees, and not only in 24 hour shifts throughout the summer. ❄️
At the end of December 2017, the 1000th Fendt 1000 Vario was built in Marktoberdorf. It is a Fendt 1038 Vario with 380 HP, which was delivered to the dairy farm by Jeremy and Herman Terpstra in Canada. A brief outline of the success story that is the largest standard tractor in the world.

THE FENDT 1000 VARIO STORY

A coronation for the largest standard tractor in the world. The Fendt 1000 Vario was unveiled to the press in July 2014, in the former residence of King Ludwig II of Bavaria from 130 years ago. Having obtained a special exemption, the large tractor drove into the inner courtyard of the famous Neuschwanstein Castle as part of the international Fendt press conference.

Production of a Fendt tractor begins with assembly of the continuously-variable Vario transmission. Step by step, a tractor emerges through fitting of the many components and parts, such as engine, radiator or hydraulic lines. With 14 fittings, the tractor hull and cab are connected in a marriage made on the production line. On completion of the tractor assembly, a visual inspection is carried out in a light tunnel at 2,400 lux. A countercheck is then performed again to determine whether the 1000 model has been assembled in the correct customer configuration. Using special UV lamps, the technical condition of the machine is checked, e.g. seals or functionality. In addition, quality checkers inspect the visual condition of the machine, e.g. the paint or gap sizes. Finally, the operating manual is enclosed and the machine goes to the dispatch area.

No compromise on quality – regardless of how long the shipping route to the customer!

By the end of 2017, the Fendt 1000 Vario had been delivered to 34 countries on 5 continents. Half of these models up to 2017 went to customers in Europe, Africa, Australia/
New Zealand and Asia. Especially if these high-horsepower tractors are embarking on a long voyage across the Indian Ocean or Atlantic, they are prepared once more in Marktoberdorf. A washable and extra layer of wax which is compatible with the paint "impregnates" the machines. No snow, no grit, and no seawater should harm the 1000 model.

**Hat trick for the Fendt 1000 Vario in the PowerMix test**

Verified by an impartial body: nothing pulls more and yet is so efficient. The German Agricultural Society (DLG) and the profi magazine editorial team tested three 1000 models, and determined the fuel consumption on the new DLG PowerMix roller test bench. The result: The Fendt 1042 Vario consumes on average a total of 236 g/kWh diesel over the twelve different cycles, and the Fendt 1046 Vario 2 grams less: 234 g/kWh.

The top of the range Fendt 1050 Vario even consumes just 233 g/kWh. These are three new world records in fuel consumption. The low speed concept and many new technical details make all the difference when it comes to fuel consumption and to overall cost-efficiency.

Arrival in Canada: The successful Canadian dealer Maple Lane Farm Service Inc. has been selling Fendt tractors here since 2000. A freight ship takes around 20 days to cover the route between Hamburg and Baltimore, as it calls at a number of ports. Together with 9 other Fendt tractors, the 1000th 1000 model was shipped to North America at the start of 2018.

More information on the Fendt 1000 Vario success story can be found at: [www.fendt.com/1000-Vario-Story](http://www.fendt.com/1000-Vario-Story)
The performance and productivity of a track tractor must be compared with that of its equivalent with tyres under “ideal conditions”, but these conditions occur increasingly rarely. “I always look at what we can make better, and when we can do it. That means of course that we have to keep a close eye on logistics and efficiency,” says Michael Balls, arable manager on the “Albanwise Farming Hill” in Barton Bendish. “The track tractors have served their purpose. We ran an analysis though, which showed that we almost always need an additional tractor for work where we wouldn’t or can’t use track tractors, and this involves additional costs of course.”

Four full-time staff form the small Albanwise Farming Hill team, working an area of more than 2,430 hectares. Crops include oilseed rape, winter barley, summer barley, broad beans, rye, sugar beet, corn and peas on soil types which range from sandy to chalky and heavy clay loam.

Areas which were recently worked by six tractors, are now covered by just four. “We were using two Challenger track tractors and four John Deeres”, says Michael Balls. “A 400 HP MT 775 E and a 350 HP MT 765 D were used for tillage and drilling, whilst a John Deere 8310R, a 6190R and two 6150R did the rest of the work.”

Searching for more power, lower costs, and better versatility, Michael Balls and his team looked at all their options to find a cost-effective solution for their farm. “Most of our tillage is done by a 5.4 metre wide Simba SLD cultivator and a 6.6 m wide UniPress disc harrow. We also use rotary ploughs, but our processes are not set in stone,” says the farm manager with a smile. “We choose crops to suit the growing conditions, the soil types, and weather conditions.”

“WE LOOK VERY CLOSELY AT LOGISTICS AND EFFICIENCY.”

When it comes to implements, the farm uses an 8 m Vaderstad drill and three Lemken ploughs with nine shares, and two with seven shares. “We often have to take the last share off the large plough in winter to make it easier for the 775E,” says Michael Balls, describing the field work. “Our second track

WE LOOK VERY CLOSELY AT LOGISTICS AND EFFICIENCY.”
The turning point in favour of the new Fendt high-horsepower tractors came in late autumn 2016, when the local dealer, TNS, put a Fendt 1000 Vario onto the forecourt for demonstration purposes. “We tried out the 500 HP Fendt with a 6 m Simba SLD on oily chalk soil, and off the tractor went with the cultivator,” recalls Michael Balls with a smile. “The track tractors would have had problems due to the slippery ground. Those are not normally the conditions we work in of course, but it showed us that we could extend our working windows if we needed to,” explains Balls. “VarioGrip is the game changer! We had to think out of the box so to speak, and be open to the various options available. Part of the process involves getting our employees on board.”

Another key argument in favour of the 1050 was the VarioGrip fully-integrated tyre pressure monitoring system. Electronic engine transmission management allows continuously-variable use of high-horsepower tractors, while always providing the power required to maintain the selected speed. The two 1000 machines are also used at harvest time for transporting work with trailers whenever the farm’s combine harvesters work in far-flung parts of the farm and the farm needs additional power. “It might seem a bit extreme, using a 500 HP tractor with a cereal trailer, but a 50 km/h fast tractor, which can carry it efficiently on 30 mile round trip, also means that we don’t need to own another tractor. You couldn’t do that with track tractors. With large-wheeled tractors, it is much easier for us for the several days a year when we have to ride with six trailers in convoy.”

Michael Balls now wants to reduce the number of machines, to run just two Fendt 1050 Varios and two John Deere tractors this summer. “Reducing the number of traction machines has had a positive impact on our running costs despite the purchase price of the 1000...
The model is also used with a 9-share Lemken plough.

On the job with the 8 metre wide Rapid seeder from Vaderstad.

The manager says positively: “Our long-term plan is to ride the Fendt tractors for up to 8,000 running hours.”

With regard to fuel consumption, he expects few differences to the fuel bill between the Fendt 1050 Vario and the track tractor.

“We can’t use the 500 HP without consuming fuel, that’s obvious. We used this tractor change to analyse what we do and how we do it. If we have a bit more power in reserve, we can do more work in the same time – and therefore our costs per hectare fall.”

An additional benefit of changing to tyres can be seen on headlands. Here, separate waylines no longer have to be created by the cultivator in order to balance out deeper track grooves on headlands.

“We have reduced the soil compaction, and the headland is now completed in one pass, after we have adapted the 8 metre Rapid Lift RL800.”

Operators Angus Stuart and Allan Codling were both impressed by the two Fendt tractors. In the brief period from July to autumn 2017, the two Fendt tractors operate for 500 and 700 running hours.

Angus Stuart explains: “Compared with a Powershift gearbox, a CVT is a lot more adaptable. In many ways, it’s a big step forward. The 1000 Series power class has a very sophisticated management system for power and traction.” He especially likes the VarioGrip Assistant feature as well as the VarioGrip tyre pressure monitoring system, which he can best use with Michelin AxioBib tyres 900/65 R46 and 710/60 R38.

“Parameters for weights and loads are integrated into the terminal, so that we can make proper use of the power and traction by adjusting the tyre pressure,” he says, describing his settings. “Personally, I tend to set it to 1.6 to 1.8 bar for road transport, and to use 0.9 to 1.1 bar for field work – it all depends of course on what I’m doing and how much ballast the tractor is carrying.”

In his experience, it takes some 15 minutes to switch between road and field pressure, all done from the convenience of the cab.

In order to reduce non-productive time to a minimum, the tyre pressure is adjusted during the ride at the edge of the field.

Hill Farm holds a large selection of weights for the two Fendt tractors, including a 3.3 tonne front-end weight and 1.2 tonne wheel weight. The operating weight can be set to any figure between 16 to 22 tonnes. “It’s easy to change the weights. The tractor surprised me though when I saw what it could do without ballast,” says the operator. “If conditions allow, I’ll try to drill without the front-end weight this season. That would mean that we’re able to work for longer and under conditions that are not ideal.”

Angus Stuart sees a big difference in comfort and space. “The track tractors were good machines at the time, but there are better alternatives around now. Compared with machines today, they’re loud, clunky and rough, especially on long work days – whereas the Fendt 1050 Vario is physically less stressful and runs much smoother. The 1050 normally runs between 1,200 to 1,400 rpm. I would say that the Fendt is probably the most comfortable tractor I’ve ever sat in,” smiles the experienced operator.
The Fendt IDEAL combine harvester came out on top as one of the best design products in the commercial vehicle category. "It is a great honour for the Fendt IDEAL to be among the Best of the Best at the Red Dot Design Awards 2018," says Peter-Josef Paffen, Chairman of the AGCO/Fendt Management Board. "The Fendt IDEAL was developed in close collaboration with global centres of excellence. It is therefore the product of international teamwork by AGCO staff. The result was a combine harvester, which features outstanding efficiency, power and innovative design. It is something we can be extremely proud of."


Fendt IDEAL received the ultimate accolade at the Red Dot Awards: Product Design 2018

The Fendt IDEAL received the ultimate accolade at the renowned Red Dot Design Awards – Best of the Best 2018. The expert panel only award the internationally recognised quality seal to the best products in a category. The IDEAL combine harvester came out on top as one of the best design products in the commercial vehicle category. "It is a great honour for the Fendt IDEAL to be among the Best of the Best at the Red Dot Design Awards 2018," says Peter-Josef Paffen, Chairman of the AGCO/Fendt Management Board. "The Fendt IDEAL was developed in close collaboration with global centres of excellence. It is therefore the product of international teamwork by AGCO staff. The result was a combine harvester, which features outstanding efficiency, power and innovative design. It is something we can be extremely proud of."

Designers and manufacturers submitted more than 6,300 items from 59 nations to the contest, and these were individually tested and judged within an evaluation process over several days. The 40-strong jury, consisting of independent design experts from around the world, judged the entries for level of innovation, functionality, ergonomics and durability. Just one percent of all entries won over the jury sufficiently to receive the title "Red Dot: Best of the Best."

"We believe that training and educating our employees is of vital importance," says Managing Director Frank Dohrmann. In August of this year, two young people joined us to do their training as agricultural and construction mechanical engineers. Trainees have been welcomed at the company since its foundation. Since then, many young mechanical engineers have successfully completed their studies at Pape. The company is today run by the second generation consisting of daughter Bettina and son-in-law Frank Dohrmann, who is also a certified agricultural machinery and car mechanic. "We have always enjoyed a close relationship with Fendt, and are totally convinced of the quality of their machines," stresses Bettina Dohrmann, who grew up in the business.

The big Fendt field day in Wadenbrunn: Future to the Field

Fendt brings the future to the field, and hopes to see you there. Come to the big Fendt Field Day in Wadenbrunn on 23 August 2018. The event will start at 9.30 am with a grand parade of machines.

The following awaits you:

- The complete Fendt Full Line range in practical use
- The high-power Fendt IDEAL combine in threshing action
- More than 100 Fendt tractors and self-propelled machines in use in the field
- Live demonstrations throughout the day on an area of around 100 hectares
- Five spectator areas (customer hubs) with product demonstrations and exclusive information from Fendt experts
- Fendt shop with selected Wadenbrunn items

We hope to see you there!
Your Fendt Team
The German Jumping and Dressage Derby in Hamburg is a major event on the national and international equestrian calendar. Held between 9 and 13 May, this unique competition attracts elite riders from across the equestrian world, as well as more than 90,000 spectators to Klein Flottbeck. Fendt tractors helped make sure that the arenas were in tip-top condition for the riders.

The event in Klein Flottbeck is always one of the highlights of the equestrian year, culminating in the 89th German Show Jumping Derby, which is the ultimate test of a rider’s skills. The world’s most difficult course is unusually long at 1,250 metres, and is extremely demanding of both horse and rider.

The best-known and most imposing obstacle of this course is the steep 3.5 m, 80° bank known as the “Great Wall”. Jumping off this bank takes not only enormous courage, but also confidence in its preparation. To ensure that the legendary bank and all other 16 obstacles are rideable, Fendt tractors use rollers on the grass arena.

Dear Fendt FOCUS reader,

To date, we have sent the Fendt FOCUS customer magazine directly to you after you have purchased a Fendt product. This time, we were unable to do so.

In accordance with the European General Data Protection Regulation GDPR which came into effect on 25 May 2018, we would like to ensure that we can send you this magazine in future. To do so, we require your personal consent.

If you agree, that AGCO GmbH can send you the Fendt FOCUS magazine direct to your home or place of work, then please open the following link online, and indicate your consent to receive Fendt marketing material:

fendt.com/datenschutz

You can of course revoke this consent at any time.

Regards,

Your Fendt FOCUS Team