

SCROFA

WHAT YOU ALWAYS WANTED TO KNOW ABOUT PIGS

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Imprint

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We care about pigs



EuroTier 2018

Several weeks have passed since the last EuroTier took place in Hanover, Germany.

In November this year, preparations for EuroTier 2020 will already begin, lo-

yal to the motto „After EuroTier is before EuroTier“.

But before we start planning for EuroTier 2020, we take a look back at last year's EuroTier,

sharing our highlights with you.

Due to the current political situation and the African Swine Fever, experts feared a low visitor rate at EuroTier 2018.

Luckily it was not nearly as bad as some feared. We were able to welcome many interested visitors and customers to our exhibition stand and the very first booth party in the

history of WEDA was a total success!

More on page 4

Agriculture entrepreneurs' days Many visitors and praise for the WEDA fair booth

This year's agriculture entrepreneurs' days (German exhibition „Agrarunternehmertage“) in Münster, North Rhine-Westphalia, were again a total success! Many visitors were interested in our suckling piglet feeding system Nutrix, as well as in our motion pen. „Once again, the show has shown that our products are close to the needs of pig producers“, says Ralf Meyer, Head of

Development at WEDA. „A vital element for this are our customers which give us great support for the development of our products and help us realize new ideas.“

Our booth got praise as well: „The booth looks exactly like the one at EuroTier, open and welcoming“, as our booth visitors told us. And indeed we have used the identical booth design from

EuroTier. After all it has proven itself several times.

We hope to see you again at the next agriculture entrepreneurs' days in two years.





Image: Fotolia / vkphotos

Latvia

A modern country with 1.9 million great personalities

During the planning process of every issue, the SCROFA+ editorial department is faced with the same questions: Which country would we like to present? How do we make the report interesting for the reader?

In this issue we tried a different approach by asking our representation in Latvia to tell us something about their country. Read for yourself!

„After the end of the Russian Revolution and World War I, Latvia declared their independence on November 18th, 1918. This event was proudly celebrated by us recently in honour of its 100th anniversary.

Latvia is a member of the EU since 2004, is situated in the north of Euro-

pe in the heart of the Baltic and borders the Baltic Sea.

With 704,476 citizens, the capital Riga is the biggest city of the country.

Downtown Riga, which is now UNESCO world heritage, stand approximately 4,000 unique wooden buildings from the 18th century.

Among the modern buildings in Riga, the building of the national library stands out, which is also known under the romantic name of „castle of light“. The building is the masterpiece of the world renown American-Latvian architect Gunnar Birkerts and has been referred to several times as one of the most beautiful libraries of the world.

The central market in Riga is the biggest mar-

ket for food in Latvia. It is located in a former zeppelin hall from World War I and is the perfect place to discover the delicacies of the Latvian kitchen.

Latvia is a green and modern country with cultural treasures and an innovative spirit. It is the home of 1.9 million people with great personalities, which love to sing and dance.

Latvia is one of the greenest countries in Europe. 50% of its territory is covered with forest, which means for everyone of us there is 1.4 hectare of forest. With this Latvia is the fourth biggest „forest country“ in Europe.

With 12,500 rivers and springs and more than 3,900 lakes, Latvia is on the fourth place of countries with the biggest fresh

water resources. Speaking of water: One of the greatest landmarks is our Venta-Waterfall. With 239 metres it is the broadest waterfall in Europe.

The african swine fever was detected in Latvia in 2014 for the first time.

Between 2014 and 2016 the Latvian government has invested 13.3 million Euro to fight the African Swine Fever. The last outbreak was reported in the autumn of 2018.

In comparison to 2016, the pig stock declined in 2017 by 3%.

The amount of pig farms has been reduced by 18%. Small companies with 1 to 100 pigs make up 98,4% of the total number of companies whereas bigger companies with at least 101 pigs make up only

1,6%.

Fun fact: Latvia is part of the top 10 countries in regards to internet availability and speed. In Riga wireless LAN can be used almost everywhere.

For this reason Riga got the nickname „Europe's capital with free wireless LAN“.

We are looking forward to welcoming every visitor who would like to get to know our beautiful country!“

Report: Erika Karro



Venta-Waterfall

Image: Fotolia / R.Babakin

CULINARY DELIGHTS FROM LATVIA

Hearty and sour

The Latvian kitchen is considered to be particularly grounded and rural. From vegetable soups and sweet flour- and curd dishes, all the way to hearty dishes like grey peas with bacon and cassarole with buckwheat and barley, there is something for everybody's taste.

Meat and potatoes are a basic component of the Latvian kitchen, as well as food from the Latvian forest: honey, berries and mushrooms.

The Latvian population loves to refine their dishes with caraway to such an



Source picture & recipe: www.internationalcuisine.com/latvian-pork-cutlets/

extent that it is now referred to as the national spice.

Sour cream also plays an important role in the Latvian kitchen. For example

the national dish Putra, a cooked barley porridge, only tastes good after it was seasoned with a lot of sour cream.

The national drink of Latvia is an export hit and black as the night: The Balzams is a traditional liqueur made out of herbs, blossoms, oils and berries. The liqueur has an alcoholic content of 45%. The precise recipe which consists of supposedly 24 ingredients is top secret.

Another popular beverage is beer. Latvia is also well known as a beer country and the Latvians are very proud of their living beer traditions.

Source:
www.sueddeutsche.de/reisefuehrer/lettland/essentrinken

Karbonade for 4 people:

- 8 thin pork cutlets
- 2 eggs, scrambled in a bowl
- 60g flour, on a plate
- vegetable oil for frying and 2 table spoons of butter
- 1 small onion, sliced
- 100g chanterelles
- 80g sour cream
- Pepper & salt
- 1 table spoon fresh lemon juice
- 2 table spoons fresh dill, sliced

Season the meat with salt and pepper and heat up the oil in a medium sized pan.
Cover the pork cutlets in flour and then in egg, put them into the pan and fry them until they are golden brown. Keep the cutlets warm in the oven at 80°C.
Then fry the onions with the butter until they are soft and golden brown. Add the chanterelles and fry them approx. 5 minutes. Add the sour cream and cook it for a few minutes. Add the lemon juice and the dill and season it with salt and pepper.
Serve the cutlets on a plate and pour the chanterelles over them.

Living on several levels

South Korea is breaking new ground in terms of pig farming with modern farming.



At the Hyojin farm, 17,100 pigs are housed in two buildings on 3 levels each. The farm features 2 freight elevators for the animals and one bridge for moving.

An archipelago west of the South Korean mainland is home to the object of today's farm report: the pig farm Hyojin. For us as Europeans, the facility is quite special since pigs are kept on several levels of two opposi-

Pig farming on 3 levels

te buildings. Plus: there is a bridge connecting both buildings and even an elevator for the pigs!

But let's start from the beginning. Mr. Park, the facility director, has agreed to speak to us about the unusual farm. "For Europeans, this type of pig farming may be unusual – for us in South Korea this method is increasingly becoming the standard in pig farming. Since we have relatively limited arable surface at our disposal here – large parts of South Korea are covered in woods and hills – we started building vertically some time ago. Two-storey pig houses have become

the standard at this point; however, three to four-storey buildings are still relatively rare. From this perspective, we are indeed still an exception with our three-storey buildings."

Hyojin consists of two buildings of 115 m length and 29 m width. Each building has 3 levels. Building 1 houses the sows, building 2 houses piglets and finishers. Each build-

Closed system

ding is equipped with a freight elevator which facilitates transporting the animals. Both buildings were connected via a bridge to facilitate moving the piglets from the farrowing area in building 1 to the piglet raising area in building 2 quickly and conveniently.

Farm staff can reach the levels using staircases on the outside of the buildings.

The sow area as well as the piglet and finishing

areas are supplied using one WEDA liquid feeding system each. The liquid feeding systems are equipped with WEDA-Hy.Light and alkaline cleaning to ensure maximum hygiene. Hy.Light, a tank cleaning system based on UV light, devitalises bacteria and germs on the liquid feeding system's tank walls efficiently and prevents the emergence of yeast and fungi. The alkaline cleaning system rinses tanks and pipes of the liquid feeding system with acid and lye to remove harmful organisms for the system or prevent their emergence.

Furthermore, the liquid feeding systems are all equipped with electromagnetic flow meters, which significantly increase dosing precision in the sys-

Maximum hygiene

tem. This prevents any additional accumulation of service water during feeding.

Hyojin houses 576 farrowing spaces supplied via three WEDA Nutrix systems. "We are very satisfied with the Nutrix system," explains Park. "The sows are treated with care, the piglets grow and prosper and our house staff has a significantly reduced workload. Just imagine the workload and costs it would cause to manually co-feed each of our 576 farrowing spaces."

Other facilities are also part of Hyojin. A finishing plant for 2,000 animals is

located nearby, and a new 10,000-animal finishing plant is due for delivery soon. "We have opted to cooperate with WEDA once more since we are very satisfied with their

Nutrix: reduced workloads

quality. WEDA enjoys an excellent reputation world-wide", says Park.

Data and Facts:

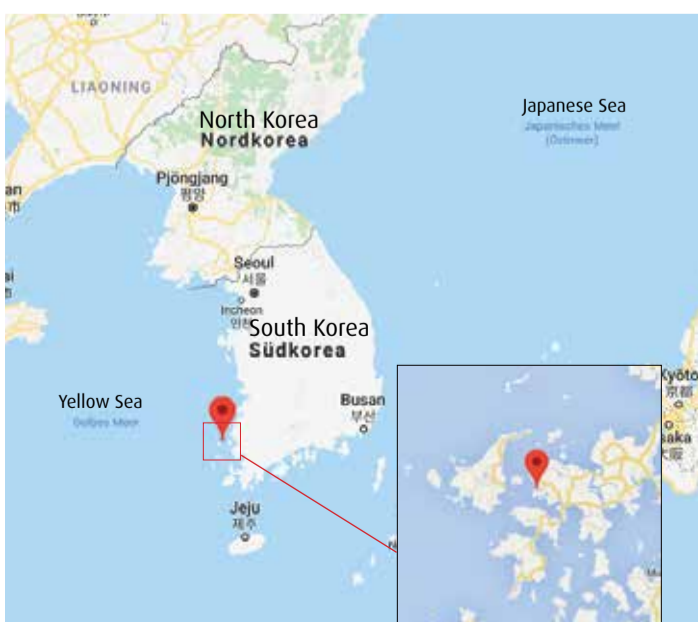
- 2,100 sows
- 10,000 piglets
- 5,000 finishers
- 3 liquid feeding systems
- 3 suckling piglet feeding systems Nutrix

Building 1

- Ground & first floor: farrowing
- First floor: service area
- Second floor: gestation area

Building 2

- Ground & first floor: piglets
- First floor & second floor: finishers



All production areas are supplied with a total of three WEDA liquid feeding systems.



The WEDA booth party with a friendly get-together was a total success: more than 500 guests found their way to our fair booth.

EuroTier 2018

Many visitors from Asia and a „full house“ at the WEDA booth party

The African Swine Fever, an unstable legal situation in Germany regarding the service area of sows and other topics were omnipresent in the press

Many visitors from Asia

before EuroTier 2018. A fear of a massive loss in visitors was mentioned by various experts. Then came the fair and the forecast was modified: we were able to welcome many visitors on our booth and showed our new products to an interested audience. „We are satisfied with the results of the fair“, said Klemens

Westerkamp, Director of WEDA.

„Even though the number of German visitors has decreased, the number of Asian visitors has risen drastically. And we are especially happy to hear about all the positive feedback about the optics of our booth and the good mood on our booth party. The latter was particularly praised by our visitors, as well as the ham sandwiches from our Schinkeria of course.“

The suckling piglet feeding system Nutrix, now with exchangeable troughs, was also a public attraction on this EuroTier. The new generation of suckling piglet feeding impressed our visitors of all ages. With the fully automatic and sensor con-

trolled liquid feeding, a fast and healthy growth of the suckling piglets is ensured. Simultaneously the sow and the farmer are being relieved.

Crowd puller: suckling piglet feeding Nutrix

Nutrix enables a micro-dosification of 30 to 40g per trough feeding and is able to feed all kinds of feed, starting with piglet milk, all the way to yoghurt and prestarter. Thus, the feeding of suckling piglets can be perfectly adapted to their growth.

Thanks to the exchangeable trough, the piglets

can stay in the farrowing pen for a few more days to facilitate the transition to piglet rearing. In order to supply the piglets optimally during this period, the small trough is taken out and replaced by a large stainless steel trough.

„The great interest in our Nutrix was again very noticeable this year“, says Ralf Meyer, Head of Development at WEDA.

„With the Nutrix, feeding costs can be saved even when using high quality

Due to exchangeable trough: easier transition

feed. The piglets grow well and are healthy and

they reach a high weaning weight. The animals are fine, the farmer is relieved and at the same time saves money on feeding. And the acquisition costs for the Nutrix pay for themselves within a very short time.“

More information about the suckling piglet fee-

Rising animal health with lower feeding costs

ding system Nutrix can be found on the WEDA website www.weda.de, section liquid feeding or by scanning the QR code below:

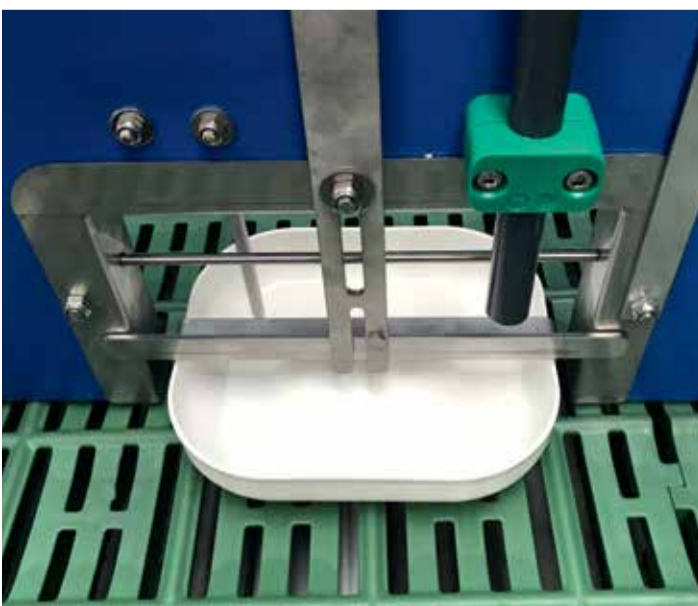


Our freedom farrowing systems also got very much attention from our visitors. Especially one of our EuroTier novelties, the freedom farrowing system FiT, attracted our visitors in particular. The pen offers a maximum of animal welfare and safety. Due to the integrated control corridor, as well as the new arrangement of the functional areas, important work can be carried out at the trough as well as at the animals without any risk for the stable staff. The staff can enter the pen quickly through a special door without a prior fixation of the sow, for example, to assist the de-

FiT pen causes a lot of excitement

livery or to save a piglet from being crushed. Due to the triangular shape on the front of the piglet protection cage, the sow is kept from rolling over quickly. Position changes can, therefore, be slow and the piglets have enough time to get to safety.

The freedom farrowing system FiT causes a lot of excitement: in 2018 WEDA has sold 1,000 units to Finland.



Changeable Nutrix troughs in the sizes small (left) and big (right) allow a smooth transition for the piglets.

Another favorite was our EuroTier novelty Dust Control that was ordered in advance numerous times on the fair.

With Dust Control the development of dust in the liquid feeding systems is reduced by 95%. This reduction is done through the use of a new fastening, which causes a pressure equalization in the feed tank.

And this is how it works: Dust Control is equipped with a metal disc that has three or more „legs“.

Dust Control ensures an almost dust-free feeding kitchen

disc lays on top of the vent pipe. During the dosing of dry components, the fastening is shut. Thus, significantly lower amounts of the flour dust that develops during dosing, reach the environment. The dust stays almost completely in

Due to the negative pressure, the small disc is pulled down against the spring force and unblocks the holes in the closure disc on the top.

The air from the feeding kitchen can now enter the tank.

As soon as the emptying process stops, the negative pressure decreases. The spring pushes the small disc back up and closes the holes. Finally, the feed tank is tight again.

The winner in terms of popularity and interest at our fair booth was the feed doser OptiMum.

OptiMum makes it possible to take care of every sow individually and to achieve optimal performance.

OptiMum: Winner in terms of popularity

OptiMum is a computer-controlled dosing system for farrowing pens and

dosage according to the individual needs of sows and thus to maintain their individual body conditions such as lactation, number of piglets and date of birth. To optimize the feed intake, the OptiMum doses the feed regularly in small

Excellent 4PX. The animals can be supplied with food by means of a vibrating sensor or according to predefined feed curves. Thus, for example, the feed requirement can be retrieved by means of the vibrating sensor installed in the



EuroTier-Noveltiy: OptiMum



EuroTier-Noveltiy: FiT freedom farrowing system

the feed tank.

When dosing liquids quickly, the air in the closed tank is compressed, causing overpressure. The air in the tank tends to escape through the vent pipe and the air pressure is high enough to lift the disc. Thus, the necessary volume flow is achieved for pressure compensation.

The „legs“ prevent the metal disc from falling down. At the top of the vent pipe, a limiter is also attached, so the disc is not pushed out of the pipe at high overpressure. When emptying the tank, the air must flow in. Otherwise, a negative pressure is generated. For this reason, holes are cut in the disc which is lying on the vent pipe.

These holes are in turn closed with a smaller disc and a spring from below.

can be installed under the volumetric dispensers for every existing dry feeding system and can be used flexibly every day.

The system makes it possible to manage the feed

quantities.

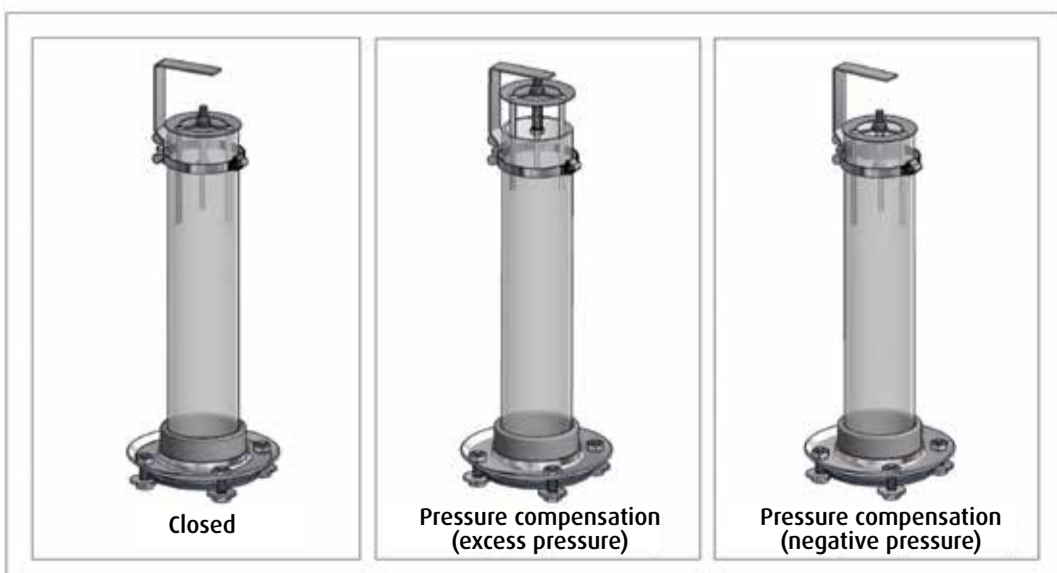
It is advantageous that the food in the trough always remains fresh.

The complete system control is done by the WEDA feeding computer

troughs and then dosed in portions. In addition, the feeding times are freely adjustable. This allows the food to be absorbed throughout the day, which has a positive effect on the health and milk production. All feed quantities are registered in the computer. In case of larger deviations, the farmer gets a message via email upon request.

The absolute highlight of the fair week was a premiere for us at the same time: our booth party to which we were able to welcome over 500 guests! With food, drinks and good music there were many opportunities to exchange ideas and to review the first days of the exhibition.

We thank our customers and the numerous interested people who paid our booth a visit and we hope to see you again in 2020.



EuroTier-Noveltiy: Dust Control (Image description: Closed; Pressure compensation (excess pressure); Pressure compensation (negative pressure))

Impressions from the WEDA booth



Problems with liquid manure? Here is the solution!

Kumac, the system for the processing of manure and fermentation residues

The essential problem in the regions with intensive livestock breeding is the serious oversupply of liquid manure. For the accumulating amount of nutrients the available area in such regions is often not large enough to be made use of and the new manure regulation makes the current situation even more difficult. Not without a reason liquid manure is transported to regions which still have free capacities on their fields. This is not only difficult but also quite expensive because of the large amounts of manure that must be transported. A solution is urgently needed which improves the worthiness of the transportation and reduces the oversupply of nutrients. The solution is named Kumac.

Kumac is a product of WELTEC BIOPOWER which is located in Vechta in Lower Saxony.

We arranged an interview with Thomas Sextro to explain the Kumac system and its benefits.

SCROFA⁺: What exactly is Kumac and for how long has Kumac been on the market?

T. Sextro: Kumac is a cutting-edge processing system which separates

Separation of liquid manure & fermentation residues

manure and fermentation residues into water as well as into solid and liquid fertilizer. The share of water amounts to approx. 55%. The solids make up around 25% and the liquid nutrient concentration comply with only 20% of the initial volume.

Since 2007, the first plants have been running in the Netherlands and Belgium. Meanwhile, 15 processing plants are successfully in operation. In 2019, the first plants in Germany will follow.

The scalable modular system can be used from an amount of 70,000t/year. If processing needs are higher, a combination of several Kumac lines can easily be implemented.

SCROFA⁺: How does Kumac function exactly?

T. Sextro: In the first step the manure or fermentation residues will get acidified and thickened. In the next step, the substances are drained in a special belt filter process. The drained solid matter has a dry matter content of about 30% and can subsequently be used as fertilizer, compost,



Thomas Sextro

- Industrial engineer
- Product manager for Kumac manure and fermentation residue processing

litter or biogas substrate. The benefit of this product is its high transportation worthiness. Furthermore 99% of the phosphor and approx. 60-70% of the

Multi-level process

nitrogen are bound in the solid.

The remaining liquid phase is first treated in a stainless flotation tank. In there, small organic particles and suspended matter are separated and then re-transferred to the treatment process. After this follows the three-stage reverse osmosis procedure which separates 95-99% of the dissolved salts and nutrients. The remains are a

100.000 tonnes capacity per Kumac-Line

liquid nutrient concentrate and water. The nutrient concentrate can be used as an optimal liquid fertilizer and can also be inserted into the ground through injection technology because of its condition.

The remaining water is treated with an ion exchanger after the reverse osmosis. It can be used in

the farm or returned to the water cycle

SCROFA⁺: What quality does the water have?

T. Sextro: The water can be used as receiving water and in combination with well water it can be used as drinking water for animals.

SCROFA⁺: Are there any specific requirements for the manure to be processed by the Kumac System?

T. Sextro: The manure must have a minimal dry substance content of 3-4% and maximum dry substance content of 12%.

SCROFA⁺: How much space does one need for the construction of the system?

T. Sextro: With a yearly performance of 70,000-10,000 tons of manure or fermentation residues, a hall of 20 x 45m is needed. In addition storage space

Needed space: 20 x 45m

for the solid and liquid fertilizer is required.

SCROFA⁺: Which farms are your target group?

T. Sextro: We appeal to a broad audience with our technology. For one thing,

these are of course livestock owners and biogas plants that have a nutrient surplus. Kumac is also interesting for nutrient mediators and contractors.

Because of its entry level size of 70,000 tons per year, Kumac is especially interesting as a cooperation or cooperative project. But no matter if you realize it by yourself or together in a group, the benefits are always lower transportation and output costs.

SCROFA⁺: WEDA produces parts for WELTEC that are part of Kumac. Which are they?

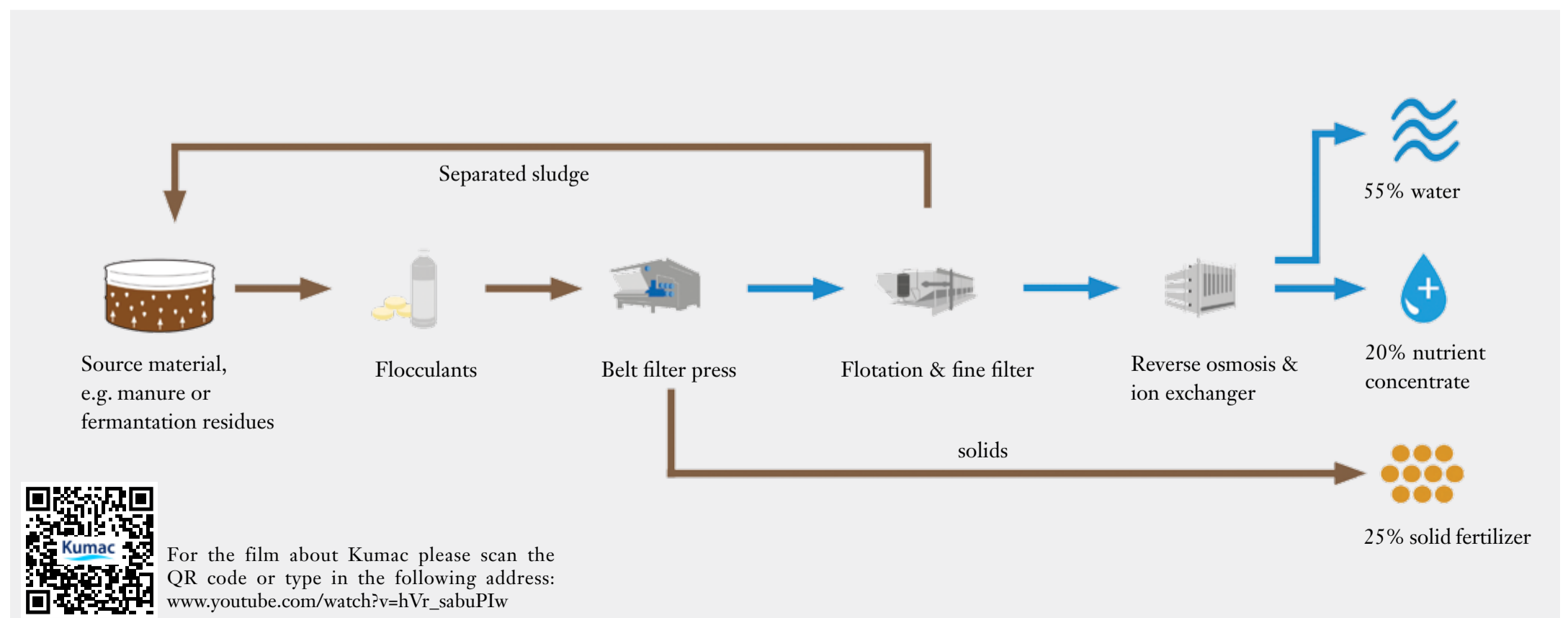
T. Sextro: WEDA builds the flotation tanks and paper belt filters.

SCROFA⁺: Before the interview we spoke on the phone about two big current Kumac projects. Can you tell us more about them?

T. Sextro: One of the two projects is the agricultural cooperative Reichenbach in Saxony. The dairy farm has 2,500 animals and a 1.6 megawatt biogas plant. 70,000 tons of fermentation residues are accumulated there per year which will be processed by the Kumac system starting in the late summer of 2019. The solids as well as the concentrate can be utilized on their own land. Kumac's water is added to the drin-



Belt filter press



For the film about Kumac please scan the QR code or type in the following address:
www.youtube.com/watch?v=hVr_sabuPIw

king water for the animals. The agricultural cooperative has opted for Kumac because they wanted to operate independently, to reduce the manure storage area and to comply with the new manure regulations.

The second current project is the agriculture-goods-agency from Kettenkamp. It is a cooperative project with over 80 shareholders. The corporation plans to install a seaweed greenhouse, a biogas plant and the Ku-

30km. But other projects are also planned in Germany and we are looking forward to reporting about them soon.

SCROFA+: Thank you very much for the interview.

Price securing nutrient utilization concept



mac system. The input for Kumac will be 150,000 tons per year. The agriculture-goods-agency wants to offer a price-assured nutrient utilization concept. This concept includes acquisition and purchase contracts over 10 years and a range of action of 25-

For more information about WELTEC please use the QR code above or visit their website: www.weltec-biopower.de

Advantages of the Kumac system

- Tried and tested technology with high plant availability
- Concentration of nutrients, results in an increase of the worthiness of the transport and the reduction of the fertiliser application costs
- Approx. 99,5% of phosphor and approx. 60-70% of nitrogen are bound in the solid phase
- Reduces the storage need of manure and fermentation residues
- Approx. 55% of starting materials turn into clean water
- Solid phase can be used as fertiliser, bedding, biogas substrate, compost etc.
- The process doesn't need heat, resulting in a low energy demand



	Source product	Products of the manure processing		
	Pig manure 100%	Solid matter approx. 25%	Nutrient concentrate approx. 20%	Water approx. 55%
Proportion of total quantity				
Dry matter content (%)	6.9	31.15	4.01	0.025
N _{total} (kg/t)	5.26	15.67	7.35	0.02
Ammonium (kg/t)	3.01	3.27	6.16	0.01
P ₂ O ₅ (kg/t)	3.10	14.94	0.10	0.01
K ₂ O (kg/t)	4.65	4.43	8.50	0.01

Mass balance (Independent study of LWK Lower Saxony, November 2015. Source: WELTEC)



Drainage with belt filter press



Flotation tanks



Reverse osmosis

Source for images and graphics: WELTEC

Always ahead by a nose

We care about pigs

Wanted (m/f):

Electrician
Project Manager
Internal Sales

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www.weda.de/en/job-offers

Our children puzzle page for grey days

Take part and win fantastic prices!

In this season of the year, when it's cold and uncomfortable outside, one prefers to stay inside keeping oneself busy. For this reason we have created a puzzle page for our young readers in this issue. And to make everything a little bit more interesting, there are fantastic prices you can win! The first price is a take along farm from Playmo-

bil, the second and third price an exciting puzzle block with many different puzzles and riddles.

How you participate? Solve the puzzles, take a picture of the page and send the colour photo with the information of your name via email to raetsel@weda.de.

The deadline is February 28, 2019. We wish you good luck!

Conditions of participation:

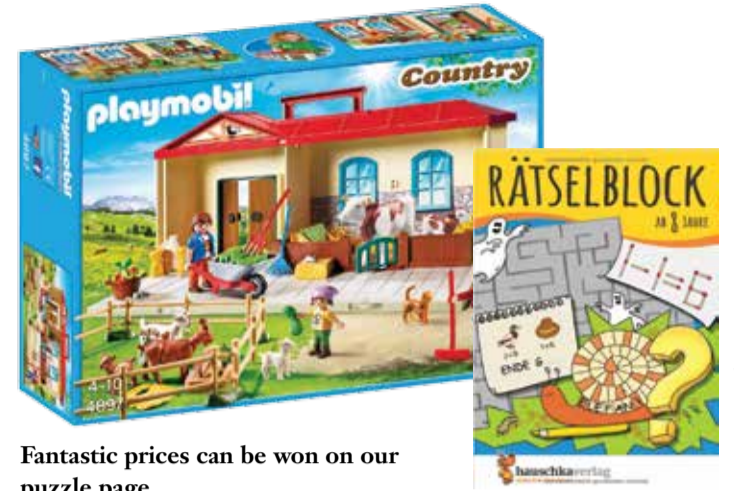
Every answer (picture) sent to us has to be readable.

In case of more than 3 participants, the winner will be defined by drawing lots. The legal process is excluded.

The participation of WEDA employees and their relatives is excluded.

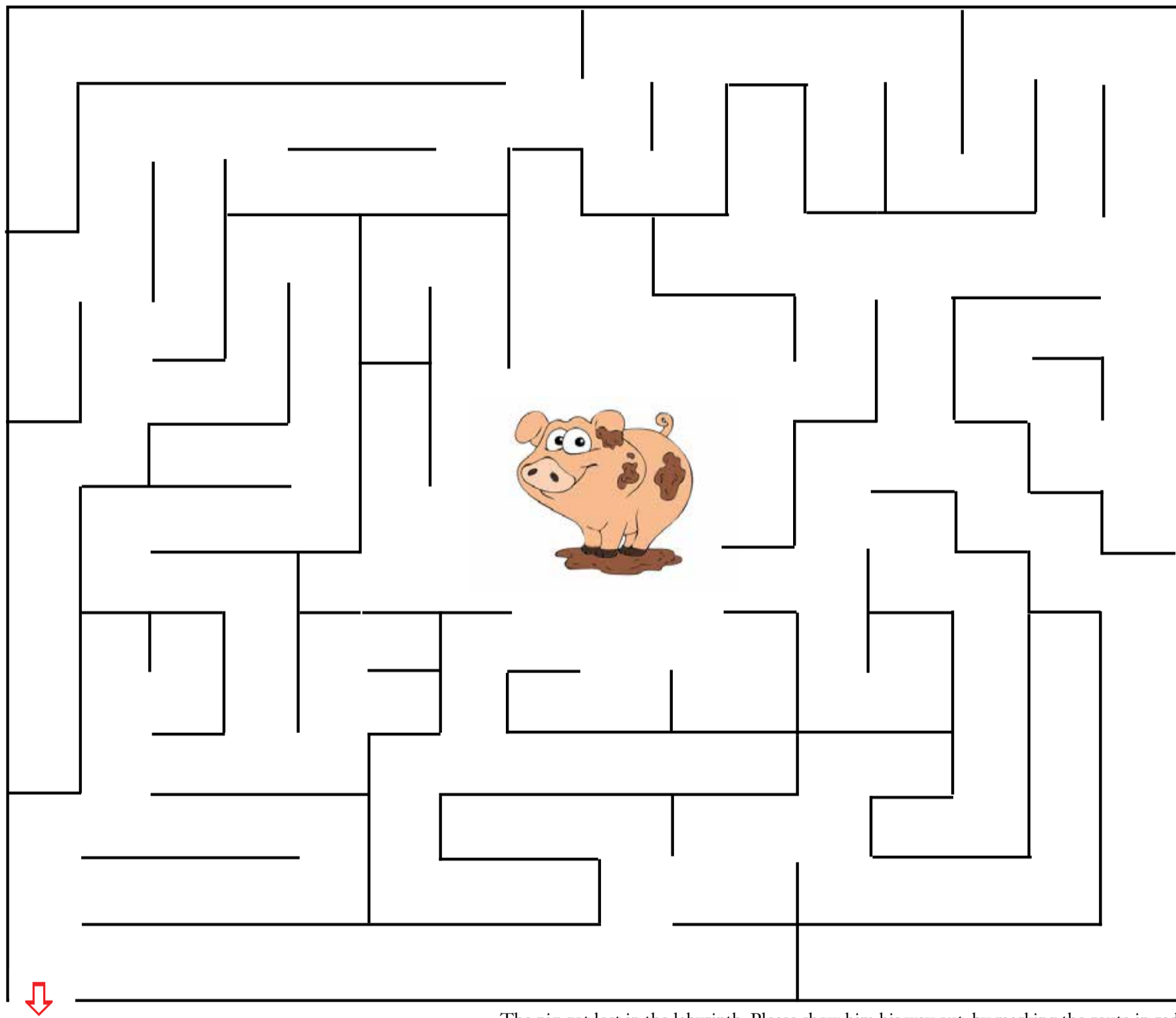
With the participati-

on in this lottery all participants agree that their email address is stored for the duration of the lottery. The data will be immediately deleted after the lottery has ended.



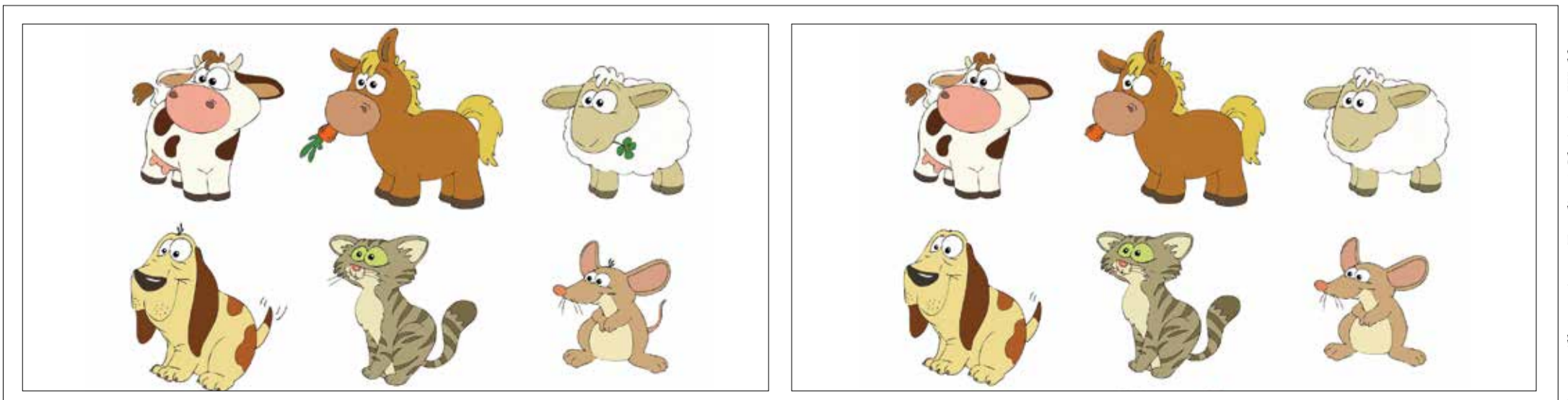
Fantastic prices can be won on our puzzle page.

Image: Amazon



Source pig illustration: Fotolia / Christine Wulf

The pig got lost in the labyrinth. Please show him his way out, by marking the route in red.



Source illustrations: Fotolia / Christine Wulf

There are 10 mistakes hidden in the picture on the right. Please find them and mark them in red.