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Veterinary News & Views

Faisalabad

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**National
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THE ISLAMIC VALUES AND EASTERN CULTURE MUST BE INCULCATED IN THE YOUTH, AS IT IS SHOWING A DECLINING TREND HERE IN PAKISTAN



Faisalabad: The Islamic values and eastern culture must be inculcated in the youth, as it is showing a declining trend here in Pakistan. Therefore, different literary and Islamic values-driving activities must be made a regular part of all educational institutions, said University of Agriculture Faisalabad Vice Chancellor Dr Zafar Iqbal Randhawa. He addressed students at an event of Senior Tutor Office at Iqbal Auditorium, UAF. He said that there was need of the hour to illuminate the people hearts with the Islamic teachings so that we can make the development leaps and bounds. He added that the hardworking was a guarantee of a bright future. He added that Sufism taught us to love humanity, something which would help us in difficult times. He termed the Sufis as scholars who preached love of God, of His prophets and of humanity. He said as per Sufis, offering prayers and keeping fast were important aspects of faith, but human beings demanded to go beyond that they should serve and love their fellow creatures. He said that students should be encouraged to show their mettle of their talents which Allah Subhanotallah has blessed them. He urged the teaching staff to refurbish their skills of the students in extra curriculum activities also for a progressive society. He urged the participants to follow in the footsteps of the Last and Final Messenger (Peace Be Upon Him) that guides us in the every sphere and circumstances of life.

THE KNOWLEDGE BASED-ECONOMY, SKILLED MANPOWER AND QUALITY EDUCATION WOULD PAVE THE WAY TO COMPETE WITH THE REST OF THE WORLD AND TO ALLEVIATE THE POVERTY FROM THE SOCIETY



Faisalabad: The knowledge based-economy, skilled manpower and quality education would pave the way to compete with the rest of the world and to alleviate the poverty from the society, said University of Agriculture Faisalabad Vice Chancellor Dr Zafar Iqbal Randhawa. He was talking to a delegation comprising an organization titled Emerging Vision Chief Executive Officer Rizwana and Emerging Vision Regional Manager Thomas Austin at VC Chamber. The Vice Chancellor said that out of 700 faculty members of UAF, more than 450 faculty members were foreign qualified. He added that the UAF was enjoying good relations with educational and research institutions across the globe. He viewed that in the 21st century, the world was facing serious challenge in term of climate changes, increasing populations, food security and unemployment likes issues. He stressed upon the need to carry out collaborated efforts in this regard. Director Financial Assistance and University Advancement Dr Manzoor Ahmad said that 30 percent of the university students were getting merit or need based scholarships to continue their journey of education. Rizwana urged the students to put their all efforts for getting education and to refurbish their entrepreneurial skills for a bright future. Thomas Austin briefed the students about the Aston University Birmingham and tells them the way to get the scholarship there. He said that it was one of the best universities.

4-DAYS NATIONAL WORKSHOP ON "PATHOLOGICAL READINGS FOR CLINICIANS" CONCLUDES AT UVAS

Lahore: The Department of Clinical Medicine & Surgery (CMS) of the University of Veterinary and Animal Sciences (UVAS) Lahore organised 4-days national workshop on "Pathological Readings for Clinicians" under Pak-US Science & Technology project titled "Capacity Building of Neglected Vector Borne Diseases in Livestock" funded by Higher Education Commission (HEC). UVAS Vice-Chancellor Meritorious Prof Dr Talat Naseer Pasha presided over the concluding ceremony of workshop and distributed certificates and shields among participants and resource persons while Prof Dr Irshad Hussain, Prof Dr Aneela Zameer Durrani and a number of postgraduate students and faculty members from UVAS and different institutions of all over Punjab, clinicians, stakeholders from poultry sector were present. Speaking on the occasion, Prof Dr Talat Naseer Pasha appreciated the efforts of faculty and stressed the need of developing clinical leadership in veterinary profession. He lauded the orga-



nizers for arranging such an informative workshop for the capacity building of veterinarian. He said such workshops are necessary for networking with renowned experts and sharing innovative knowledge with each other. He also said UVAS also conducting one month internship dairy training for professional at Dairy Training and Research Center Ravi Campus Pattoki. Speaking about the workshop objectives, Prof Dr Aneela Zameer Durrani emphasized the need of use of clinical reasoning and team work for reliable solution of disease problems in field. She also presented the vote of thanks. The aim of the workshop

was to enhance skills of interpretation for lab tests and evaluate cells organs and tissues for reliable and appropriate disease diagnosis. The workshop comprises on 6 modules, which covered the major areas related to blood tests for disease diagnosis, haemopoiesis sample required & sampling techniques, blood chemistry tests, renal physiological correlation in relation to the disease picture, brucellosis antibody rapid test kit, liver function test (LFT) of different parameters in relation to the disease picture, significance of (CFS, fecal sample, vaginal fluid) in disease diagnosis, postmortem & ELISA interpretation in poultry disease and small animal ultrasonography etc.

UVAS holds 2-days National Training Workshop on "Cell Culture Techniques for the production of Biologics"

Lahore: The Institute of Biochemistry and Biotechnology of the University of Veterinary and Animal Sciences (UVAS) Lahore arranged two days training workshop on "Cell Culture Techniques for the Production of Biologics" funded by Punjab Agriculture Research Board (PARB). Associate Professor Dr Ali Raza Awan was the principal organizer of this workshop. This training workshop aims the practical demonstration and hands on training of different cell culture techniques which would make the participants familiar with culturing of different types of cells including bacterial, fungal and mammalian cells. This workshop comprised on 02 technical and 05 hands-on training sessions, featured by 09 key-notes of scientists.

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THE LACK OF ADOPTION OF FOOD SAFETY MEASURES IS DENTING OUR FOOD EXPORTS AND IT IS ALSO RESPONSIBLE FOR THE OUTBREAK OF DISEASES

Faisalabad: The lack of adoption of food safety measures is denting our food exports and it is also responsible for the outbreak of diseases. It was stated by Faculty of Food Nutrition and Home Sciences University of Agriculture Faisalabad Dean Dr Masood Sadiq Butt at the inaugural session of training on food safety. It was arranged by the National Institute of Food Science and Technology, UAF in collaboration with the Pakistan Institute of Food Safety and Nutrition. Dr Masood Sadiq Butt said that food safety was a process of producing, handling, storing and preparing food in such a way to thwart infection and contamination in the production chain, and to help ensure food quality for a healthy society. He



said that food-borne diseases were one of preventable public health issues affecting a large proportion of population around the world. He was of the view that tremendous initiatives are being taken on the governmental level including establishment of Food Authority and others to address the issues. He said that lack of availability of potable water and pure foods were areas of concern that were aggravating the issues. He said that plenty of food/high caloric intake, dependence on impure environmental pollution, and unsafe foods were posing the serious disease threat for the people. Dr Nuzhat Huma said that the county had a lot of potential to earn foreign exchanges by exporting its food. She said that at the time of China Pakistan Economic Corridor, we have to



AGRI TOURISM DEVELOPMENT CORPORATION OF PAKISTAN

put a special focus on meeting our export standards to grab the international market. She said that the people right from selling food products on carts to a high quality food processing units must ensure the safety measures for a healthy society. Pakistan Institute of Food Safety and Nutrition Director Muhammad Tanvir, UAF Assistant Prof Dr Ali Hassan and other notable also spoke on the occasion.

پاکستان کی بنیادی طور پر زرعی ملک ہے اور یہاں زراعت پر مبنی صنعتوں کے قیام کے وسیع مواقع موجود ہیں، وفاقی وزیر خزانہ اسد عمر نے کہا ہے کہ لائیو شاک اور پولیٹری کے شعبے میں سرمایہ کاری کیلئے حکومت نے ٹیکس سہولتیں فراہم کر دی ہیں۔

اسد عمر نے کہا کہ لائیو شاک اور پولیٹری کے شعبے میں سرمایہ کاری کیلئے حکومت نے ٹیکس سہولتیں فراہم کر دی ہیں۔ انہوں نے کہا کہ لائیو شاک اور پولیٹری کے شعبے میں سرمایہ کاری کیلئے حکومت نے ٹیکس سہولتیں فراہم کر دی ہیں۔



ویٹرنری نیوز اینڈ ویوز

چیف ایڈیٹر: ڈاکٹر خالد محمود شوق
 ایڈیٹر: ڈاکٹر محمد جاسر آفتاب
 ایگزیکٹو ایڈیٹر: ڈاکٹر نذیر خان
 ڈیزائنر: ڈاکٹر خالد محمود شوق

جلد نمبر 13، 24، 31 اکتوبر 2018ء صفحات 12 قیمت 150 روپے شمارہ نمبر 48 ABC سے تصدیق شدہ

0332-1620616

اعلیٰ تعلیمی درس گاہ کا پروفیسر اسی من کرپشن کا آغاز کر رہا ہے

زرعی یونیورسٹی فیصل آباد کے وائس چانسلر پروفیسر ڈاکٹر ظفر اقبال رتھو کا قومی احتساب بیورو اور ای بی سی کی کرپشن کے متعلق تحقیقات کے دوران ایک واک کے شرکاء سے خطاب

ای سی من کرپشن کے متعلق تحقیقات کے دوران ایک واک کے شرکاء سے خطاب کرتے ہوئے وائس چانسلر ڈاکٹر ظفر اقبال رتھو نے کہا کہ انہوں نے اپنے عہدے کیلئے اپنے پیشے کے تقاضوں کے خلاف سیاسی لوگوں کے ذریعوں کا طواف کرتا ہے اور اس کا پلٹنے کے بعد انہیں سیاسی آقاؤں کی مرضی اور خواہش پر بیروت پر مجبور ہونا پڑتا ہے۔

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لائیو شاک کو ورپیش مسائل کا حل نکالنا ہے، سردار حسین بہادر دریشک

صوبائی وزیر لائیو سٹاک کی ویجنجن یونیورسٹی ہائیڈر سے وفد سے ملاقات



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حکملہ لائیو شاک کا پنجاب کا 4 سالہ ایف ڈی ایف پروگرام سے صاف انکار

اسی ایف ڈی ایف پروگرام سے صاف انکار کرتے ہوئے لائیو شاک کو ورپیش مسائل کا حل نکالنا ہے، سردار حسین بہادر دریشک نے صوبائی وزیر لائیو سٹاک کی ویجنجن یونیورسٹی ہائیڈر سے وفد سے ملاقات کی۔

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برف نہیں چلے گی دودھ والی گاڑیوں پر کوئلے کا حکم

گاڑیوں کو چھاپنے والی گاڑیوں کے پاس رتھو ڈی جی کے پاس دودھ والی گاڑیوں پر کوئلے کا حکم

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پنجاب نوڈ اتھارٹی کو پی ایس کیوس اے کے ماتحت کرنے کا فیصلہ

قانون سازی کا اختیار ختم پاؤں سے دودھ بنانے والوں کو کیوس اے کے ماتحت کرنے کا فیصلہ

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کابینہ سٹیڈنگ کمیٹی برائے قانون سازی میں بلانگ اینڈ ڈیولپمنٹ بورڈ کا نام تبدیل کر کے بلانگ اینڈ ڈیولپمنٹ بورڈ دینے کی منظوری دے دی گئی۔

کابینہ سٹیڈنگ کمیٹی برائے قانون سازی میں بلانگ اینڈ ڈیولپمنٹ بورڈ کا نام تبدیل کر کے بلانگ اینڈ ڈیولپمنٹ بورڈ دینے کی منظوری دے دی گئی۔ انہوں نے کہا کہ لائیو سٹاک کو ورپیش مسائل کا حل نکالنا ہے، سردار حسین بہادر دریشک نے صوبائی وزیر لائیو سٹاک کی ویجنجن یونیورسٹی ہائیڈر سے وفد سے ملاقات کی۔

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A UNIQUE EXHIBITION FOR A CAUSE

By Farman Ali

Islamabad: A unique fundraiser exhibition of animal portraits by filmmaker and photographer Umar Riaz opened on Monday. Serena Hotel General Manager Michel Galopin inaugurated the show titled 'Virtue Without Vice: Portraits from ACF Animal Rescue'. Over 20 portraits of dogs, donkeys, cats and kites rescued and rehabilitated by a Karachi-based organisation went on display at the Nomad Gallery.



There are moving and uplifting stories behind every animal shown in the portraits taken by Umar Riaz, who is also a volunteer of the Ayesha Chundrigar Foundation (ACF) perhaps the first of its kind initiative in Pakistan launched in 2013 by a young animal lover, Ayesha Chundrigar. Curator and director of the gallery Nageen Hyat, in her introductory remarks, appreciated the photographer for his work and for bringing to the limelight the mistreatment of animals in our society to evoke empathy among people and sensitise them about animal welfare. She hoped that there were many sensitive people who could respond to and contribute towards good causes like animal welfare, disasters and rehabilitation. She said photography and film were the most effective medium to highlight such issues.

'The portraits of animals, especially the donkeys, are very moving,' commented Galopin.

In a lighter vein, he said that he first saw a donkey six years ago when he visited Faisalabad.

Mr Galopin said there were not such stringent laws in Pakistan to protect animals from abuse and cruelty. This could be gauged from the fact that the British colonial-era laws of Animal Protection Act 1890 were still in

vogue which envisaged only Rs50 fine for abuse or cruelty to animals. However, he said that it was encouraging that a bill had been presented in the parliament suggesting increasing the fine to Rs200,000. A Senate standing committee in July passed 'The Prevention of Cruelty to Animals (Amendment) Bill, 2018', suggesting increasing the fine for cruelty to animal from Rs50 to Rs300,000 along with imprisonment.

The Ayesha Chundrigar Foundation was founded in 2013 with the vision to assist and empower marginalised communities, people and animals alike, giving them a chance to live a better life. She said the foundation's CEO who could not make it to the exhibition, ACF undertook the task of rescuing street animals that had been injured and abused from all over Karachi.

Talking to Dawn about ACF's vision, Ali Chundrigar, Ayesha's father, said it was a holistic approach to assist marginalised communities of fisherfolk and don't (owners, enabling them to improve their livelihood as well as their animals).

'Now we have a state-of-the-art animal shelter where we provide safe refuge, medical treatment and food to 500 animals. Our 30 employees actively work with animals such as donkeys and aim to empower the donkey

owners as well,' said Mr Chundrigar. Ms Ayesha has won a WWF-Pakistan project from among 10 contestants for providing training to poor Escherfolk women how to make a better and cheap harness by reusing ghost fishing nets and polythene bags for donkeys.

'Many of donkey owners are the least cared for and often ignored community who live at to the baseline of poverty. With the use of a humane harness, a donkey's injuries can be reduced by 70%,' he added.

The foundation has three vets and volunteers in Islamabad who visit Fatchang bricks kiln and rescue donkeys and provide them treatment,' said Mr Chundrigar. Umar Riaz, a Lahore-based filmmaker and photographer, and currently living in New York, became a volunteer of the ACF three years ago. Being an animal lover, he felt its work closer to his heart and expressed his interest in making portraits of the rescued animals.

In 2009 he graduated with a degree in English Literature and Cinema Studies from New York University's College of Arts and Science. He then graduated from the Graduate Film Programme at NYU's Tisch School of the Arts where he was awarded an Ang Lee Scholarship for 'exceptionally talented graduate film students'.

He gave free hand to tax officials to block *bona fide* refunds, take huge advances, use negative measures like raising illegal and exorbitant demands and freezing bank accounts even before appellate orders. Exporters and other taxpayers are still waiting for refunds and the PTI government, like its predecessors, is delaying the same. Had Ishaq Dar and others concentrated on growth of 6 per cent and above, as done by China, India and Bangladesh in the region, we could have avoided the present fiscal and economic mess taxes are a byproduct of growth and harsh taxation

FOOD FOR THOUGHT!

HUZAIMA BUKHARI AND DR IKRAMUL HAQ

GROWTH SLAYER

The sordid story of figure-fudging and over-reporting of revenue collection by FBR continues unchecked



An in-depth analysis of *Year Book 2017-18* of the Federal Board of Revenue (FBR) exposes the tall claims of expanding tax base, extraordinary growth in collection and improving tax-to-GDP ratio to a satisfactory level (9 per cent in FY 2013-14 to 11.2 per cent in FY 2017-18). The reality is known to all reporting of higher (sic) collection figures by FBR was due to over 65 withholding tax provisions and enhancement of their rates, blocked refunds of taxpayers and advances from billers.

It appears that the sordid story of figure-fudging and over-reporting of collection will continue even under the new government of Tehreek-e-Insaf (PTI) unless action is taken directly by the Supreme Court. In the past, International Monetary Fund (IMF), Standing Committee of Senate and National Assembly and Public Accounts Committee, even after confession from the FBR's bosses of wrong doings, failed to take any action.

FBR has been single handedly destroying Pakistan's business climate, especially between 2013-18 when the then finance minister, Ishaq Dar, gave free hand to tax officials to block *bona fide* refunds, take huge advances, use negative measures like raising illegal and exorbitant demands and freezing bank accounts even before appellate orders. Exporters and other taxpayers are still waiting for refunds and the PTI government, like its predecessors, is delaying the same. Had Ishaq Dar and others concentrated on growth of 6 per cent and above, as done by China, India and Bangladesh in the region, we could have avoided the present fiscal and economic mess taxes are a byproduct of growth and harsh taxation

only hampers expansion and discourages fresh investment and expansion of existing businesses. The main reliance of FBR since 1991-92 has been on indirect taxes, even under the Income Tax Ordinance, 2001 that contains over 65 withholding tax provisions, many of which constitute full and final tax liability. Out of total collection under withholding provisions of Rs1047 billion in FY 2017-18, the element of full and final taxation (indirect tax in substance) was 64 per cent!

For the fiscal year, 2017-18, revenue target was Rs4013 billion that was later revised downward to Rs3935 billion. FBR collected only Rs3842 billion. It collected six-and-a-half per cent less against the target of Rs1562 billion (deficit of Rs121 billion). Sales tax collection at Rs1491 billion against target of Rs1541 billion witnessed shortfall of Rs50 billion. Shortfall of Rs26 billion was under the head Federal Excise Duty, collection was of Rs206 billion against the target of Rs232 billion. Only collection under Customs exceeded the target by Rs8 billion against the assigned target of Rs600 billion as hundreds of items were subjected to regulatory duty. The overall shortfall of Rs93 billion vis-a-vis the revised target of Rs3935 billion and that of Rs171 billion from original target pushed the fiscal

deficit to a record Rs2.5 trillion as on June 30, 2018. The total revenue collection in 2016-17 was Rs3368 billion. FBR missed the original target by a wide margin of Rs250 billion. In 2015-16, FBR, despite imposing additional taxes of Rs360 billion, allegedly blocking over Rs220 billion refunds and taking Rs30 billion as advance failed to meet the third-time revised target showing shortfall of Rs222 billion vis-a-vis original target of Rs2810 billion, which was first reduced to Rs2691 billion and then to Rs2605 billion.

FBR has a long history of overstating revenue collection by manipulating figures through blocking bona fide refunds and taking enormous advance payments from banks and other large taxpayers. Way back in 1999, 'revenuecracy' (term borrowed from Dr. Pervez Tahir) inflicted shame on the country by gross misreporting of data to the IMF. Subsequently, a commitment was made to the IMF to review fiscal data from financial year 1989-90 onwards.

The data compiled for financial years 1994 to 2000 confirmed that tax revenues were inflated by billions of rupees. The tax collectors data manipulators is a more appropriate term for them showed higher tax collections through fudging of figures and the nation had to pay a heavy cost for it (not

only in terms of fine paid to the IMF but further tarnishing the image of the country in the international community). The persistent manipulation of revenue collection figures by FBR is a serious, but neglected matter. Time and again independent analysts and foreign institutions have expressed their indignation over this malpractice, but the successive governments have never ordered any inquiry into the matter. Never ever has FBR disclosed how much undisputed and established refunds remained unpaid on the closing date of the fiscal year, which must be subtracted from the gross revenue receipts to portray the correct net revenue collection. It only mentions the actual refunds issued, whereas accrued and ascertainable liability of refunds should also be taken into account to reflect the true picture of net revenue realised during a financial year. Will Asad Umar, who claims to believe in transparency, make the facts public for 2013-18?

According to a report of Group Special Mobile (GSM), there were 90 million unique mobile users in 2017-18 that had been paying advance adjustable income tax of 12 per cent. However, about only 1.23 million filed income tax returns till October 15, 2018 (see Table). According to FBR's own admission, it received only 1.39 million returns in 2017. An earlier disclosure by FBR confirms that return filers in 2016 were 1.02 million. It is pertinent to mention that in 2011 this number was 1.57 million.

Jorge Martinez-Vazquez and Musharraf Rasool Cyan in their book, *The Role of Taxation in Pakistan's Revival*, mentioned at page 676 [Figure 36] that 2.1 mil-

lion Pakistanis (individuals) filed income tax returns in 2006-07. This shows that FBR has lost one million return-filers since 2007 despite prescribing higher withholding tax rates for non-filers. FBR needs to conduct a study to find out what has gone wrong after penalising non-filers (sic) who are happier to pay more by way of advance tax rather than file returns!

This year, despite spending huge money on media campaign "threatening non-filers" and extending the deadline for filing income tax returns from September 30, 2018 to November 30, 2018 the FBR until 10.10.2018 received merely 482,275 income tax returns for the tax year 2018. According to FBR, it was 170,208 more than the 312,067 returns received for tax year 2017 by the same date, "registering an impressive increase of 55 per cent". If this is an "impressive" increase then one can only lament and laugh at FBR's performance. The position of returns filed from 2007 to 2018 is as under:

It is also shocking to note that FBR has skipped publishing *Year Book for 2016-17*. What are they afraid of? Why for a particular year, they want to keep secret collection figures and quantum of refunds? Obviously, it will reveal how 20 per cent plus growth was maneuvered by blocking refunds and nearly 90 per cent collection was through withholding or voluntary compliance or advances taken though not due. If the incumbent finance minister and state minister on revenue master course and make these figures public on official portal, the real performance of FBR would be exposed.

AGRI TOURISM DEVELOPMENT CORPORATION OF PAKISTAN

PROTECT YOUR FEED QUALITY DURING HARVEST MONTHS

Harvest time is here. During this busy time, remember to not only monitor what's coming in from the field, but also to think about what could be happening in other regions from which you may be purchasing feed ingredients.

Moulds and yeasts can grow very rapidly as the weather warms in the spring and in the heat of the early summer months. But what about the end of summer and early autumn? The weather across North America was extremely variable this summer from extreme drought to floods, week after week. How do these weather patterns affect the crops, and what should you be looking for in your feed this fall?



Several moulds are typically found during summers of heavy rain, including *Fusarium*, *Penicillium*, *Monascus*, *Rhizopus*, etc. *Fusarium* is commonly found in both normal growing conditions and during wetter months. Many times, this mould first appears white and will change to a reddish-pink colour. Under stress, both in the field and during storage, this mould can form many **mycotoxins**, including the trichothecenes family (DON or Vomoxitin, T-2, etc.), fusicaric acid, **fumonins**, and **zearalenones**. Clinical signs that these are present include immune suppression, bowel haemorrhaging, reduced intakes, poor milk production, reduced weight gains, abortions, conception challenges, vasodilation and even mortality. The *Penicillium* moulds will typically show blue to greenish in colour, or potentially white, depending on the host crop. *Penicillium* moulds will typically infect feed during storage, but abnormal weather patterns such as heavy rains or, sometimes, cooler temperatures can cause more mould to form. Certain tillage practices can also influence mould growth. When stressed, *Penicillium* moulds can form **patulin**, **penicillic acid** and **ochratoxin**. Clinical signs that these are present include oedema, rumen upsets, loose manure, bowel haemorrhaging and increased rates of mortality.

Minimising mycotoxin risk

This is a minute sampling of the **mycotoxin** challenges that can exist during harvest in your fields. Remember: the commodities or other purchased feedstuffs that are shipped in by boat, train or truck may present their own mould and **mycotoxin** challenges. Check the origin of purchased feed to determine what stress or abnormal weather was experienced in that region. Your local dealers, nutritionists or Alltech representatives can put together information on mycotoxin results from other regions. If you want to be especially diligent in lessening mycotoxin challenges, an on-farm Ralpacid mycotoxin test or Alltech 37+ mycotoxin test will check your feeds for any concerns. Remember, more information on **mycotoxins** is always available online at knowmycotoxins.com.

Earlier this year, I became so frustrated by these dumb claims that I promised myself not to engage in debates about them. Don't these milk-hating folks know about cats? I've dedicated my life to the dairy industry. As a 5th generation dairy farmer, I've been at it full-time for a decade, working alongside my father (a veterinarian) and my brother (an agronomist) on the farm that was built by my great-grandfather in central Mexico. Each day we produce more than 14,000 liters of milk and I love to tell the story behind every glass that our customers sip. That's one of the reasons

effit the most because milk aids in human growth and development. I am a firm believer that a glass of milk a day has the potential to change a person's life. A well-nurtured childhood is a game changer, so access to safe, affordable food is key to a better future. Unfortunately, people hear a lot of myths about dairy farming. Those who want to stop the dairy industry spin a false tale about how we treat our animals. What nonsense. It takes healthy cows to produce good milk, and so we take great care of the animals on our farm. We give them plenty of food to eat

and lots of water to drink. We make sure they receive enough rest. We protect them from predators. We give them the best medicine when they're ailing and only when the cow needs it. We use technology to track every cow's health and performance, identify individual problems and treat them accordingly. We take special care of them as they prepare to calve, putting them on a diet that makes them strong. When they're pregnant, we perform ultrasounds to make sure everything is ok. You might say that our cows have their own gynecologists. The calves also receive their own regimen. Pediatricians like to say that the first 1,000 days of life for human children are critical, and the same is true for baby cows. We want them to become healthy and strong. One of my main jobs on our farm, in fact, is to make sure that our inventories are well stocked and up to date so that we can follow a nutritional plan designed by my

father and use the feed crops grown by my brother. I don't believe in reincarnation, but if I did, I'd possibly want to come back as a dairy cow on my family's farm. That's how well we treat them. We have economic incentives to do these things, but for us it's much more than a mere matter of money. We really do love our cows, the dairy industry and our communities. Dairy farmers have worked for many generations to improve local livelihoods and contribute to economic prosperity because we create jobs inside and outside our farms. For many years, towns were settled around farms. A lot of infrastructure was built in communities by and for the local farmers. My great-grandfather built a school for his employees' kids because we lived in the middle of nowhere! That school is still there and has grown quite a bit. We can't do this alone. We depend on innovative technologies in all areas of our operation. On my farm, we

chose solar panels (access to electricity is key for milking and cooling the milk) and compost (for soil improvement and bedding material) to recycle and turn waste into worth. We rely on trade to access many of our supplies from buying corn, soy and canola to purchasing machinery, farm management software and so much more. Finally, we count on our customers, whose support makes our business possible and whose trust and confidence in our food is essential to our success. As you can see, the impact of the dairy sector is huge because it is present all over the world and through many layers of society. I hope the Kleckner Award helps me reach those layers so we can all work together to improve nutrition and have a better quality of life. That's the story behind your glass of milk. I hope you enjoy drinking it as much as I enjoy producing it. This first appeared at the *Des Moines Register*. www.facebook.com/VetNewsViews

AGRI TOURISM DEVELOPMENT CORPORATION OF PAKISTAN

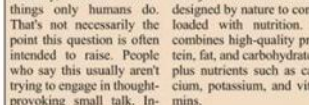
THE STORY BEHIND YOUR GLASS OF MILK

GEORGINA GUTIERREZ

I'm a dairy farmer who loves to tell the story behind a glass of milk! Every story this year at the events surrounding the World Food Prize in Des Moines, Iowa. It will give me another opportunity and another platform to tell our dairy story to the global audience. The first thing to know about milk is that it's more than just a drink. It's a food designed by nature to come loaded with nutrition. It combines high-quality protein, fat, and carbohydrates, plus nutrients such as calcium, potassium, and vitamins. Milk is quite simply one of the healthiest foods you can consume. Children may ben-

efit the most because milk aids in human growth and development. I am a firm believer that a glass of milk a day has the potential to change a person's life. A well-nurtured childhood is a game changer, so access to safe, affordable food is key to a better future. Unfortunately, people hear a lot of myths about dairy farming. Those who want to stop the dairy industry spin a false tale about how we treat our animals. What nonsense. It takes healthy cows to produce good milk, and so we take great care of the animals on our farm. We give them plenty of food to eat

and lots of water to drink. We make sure they receive enough rest. We protect them from predators. We give them the best medicine when they're ailing and only when the cow needs it. We use technology to track every cow's health and performance, identify individual problems and treat them accordingly. We take special care of them as they prepare to calve, putting them on a diet that makes them strong. When they're pregnant, we perform ultrasounds to make sure everything is ok. You might say that our cows have their own gynecologists. The calves also receive their own regimen. Pediatricians like to say that the first 1,000 days of life for human children are critical, and the same is true for baby cows. We want them to become healthy and strong. One of my main jobs on our farm, in fact, is to make sure that our inventories are well stocked and up to date so that we can follow a nutritional plan designed by my



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AGRI TOURISM DEVELOPMENT CORPORATION OF PAKISTAN

EXPORTS OF FOOD COMMODITIES UP BY 16.9PC

Islamabad - Food group exports on month basis, the exports of food group also increased by 31.25 percent in September, 2018 as compared to the month of last year. The food commodities worth \$297.23 million were exported as compared to \$228.456 million of same month of last year, it added. During the period from July-September, 2018, exports of fruit and vegetables increased by 49.34 percent and 19.17 percent respectively. In first quarter, 130,747 metric tons of fruit worth \$101.884 million was exported as compared to exports of 83,073 metric tons valuing \$68.210 million of same period of last year. Meanwhile, 132,546 metric tons of vegetables valuing \$32.828 million were exported during last 3 months as against the exports of 81,413 metric tons worth \$27.546 million of same period of last year. In last three months, about 437,832 metric tons of wheat valuing \$92.781 million was also exported as compared to exports of 173 metric tons costing \$1,555 million of same period of last year. During the period under review, the country earned \$16.129 million by exporting about 4,289 metric tons of spices, which was recorded at 3,558 metric tons and \$13.314 million of same period of last year, registering an increase of 21.82 percent. However, in last 3 months, exports of rice decreased by 2.58 percent, whereas basmati rice by 8.94 percent respectively. It may be recalled that food import into the country during first quarter decreased by 10.31 and was recorded at \$1,454 billion as against \$1,621 billion of same period of last year.

AJK IN-SERVICE LIVESTOCK PROFESSIONALS COMPLETE ONE-MONTH REFRESHER TRAINING COURSE ON ARTIFICIAL INSEMINATION AT UVAS

Lahore: The Department of Theriogenology of the University of Veterinary and Animal Sciences (UVAS) Lahore in collaboration with Livestock & Dairy Development Department Azad Jammu & Kashmir (AJK) organised a one-month "In-Service Artificial Insemination (Refresher) Training Course" for livestock assistants from AJK. UVAS Pro Vice-Chancellor Prof. Dr. Masood Rabbani and Director General Livestock & Dairy Development Mian Abdul Sattar, Chairman Department of Theriogenology Dr. Amjad Riaz, Course Coordinator Dr. Aijaz Ali Channa and many Artificial Insemination (AI) professionals from AJK were present.



Speaking on the occasion, Prof. Dr. Masood Rabbani urged the trainees to apply their knowledge in practical field and contribute to the uplift of livestock sectors in AJK. He said that the aim of the training was enhancing livestock production in Pakistan through Artificial Insemination techniques. He also asked to participant about the skill and knowledge which they learnt from this training. He asked the participants about the precautionary measures adopted during AI to control zoonotic diseases. Dr. Matloob Hussain Raja acknowledged the UVAS role to conducting training for the capacity building of AI professionals which is the key to increasing livestock production for the poverty elevation of poor masses of AJK. He said Dr. Masood Rabbani and Director General Livestock & Dairy Development Mian Abdul Sattar, Chairman Department of Theriogenology Dr. Amjad Riaz, Course Coordinator Dr. Aijaz Ali Channa and many Artificial Insemination (AI) professionals from AJK were present.

VETERINARY EDUCATION IN PAKISTAN: A WAY FORWARD DR. MASOOD RABBANI

Presidential Award of Academic Distinction "Izzat-i-Fazeelat", Tenured Professor/ Pro-Vice Chancellor/ Dean, Faculty of Veterinary Science, University Of Veterinary and Animal Sciences (UVAS), Lahore- Pakistan
 Interviewed and written by Dr. M. D. Mumtaz a private Pets Practitioner
 Cavalry Ground Lahore- Cantt. E. Mail: petvet047@gmail.com Cell No. 0300-4684988

Introduction and Achievements: Prof. Dr. Masood Rabbani started his career as a Graduate Research Assistant at Quaid-e-Azam University, Islamabad, and completed his research in the electron microscopy lab. Later on in 1995, he was appointed as a Lecturer in the College of Veterinary Sciences, Lahore. Then in 2001 he was selected as Assistant Professor of Microbiology, in 2003 as Associate Professor and in 2004 as Professor/ Director, University Diagnostic Lab (UDL), UVAS, Lahore.



In early 1990s, he got intensive training of Quality Control under ISO 9000, 9001 and 14000. By virtue of the background, he initiated the drive of bringing quality control culture in veterinary disease diagnostic and quality control labs. With his day and night efforts and struggle in 2009, University Diagnostic Lab was strengthened and internationally accredited under ISO 17025 (Lab Management System). Since then all animals whether large or small pets, which were exported or earned personally, got authenticated certificates, and recognized worldwide. Moreover, in case of any disease outbreak or epidemic, microbial samples were previously sent for diagnostic confirmation to foreign diagnostic labs: are now a-days facilitated to be checked in the UDL, Lahore.

isms through application of molecular biology tools like preparing various gene deleted vaccines. Past Secretary L&DD Department Mr. Nasim Sadiq constituted various committees under the convensorship of Dr. Rabbani for developing long-awaited drafts of legal framework especially for Punjab Poultry Production Act 2016 and Regulations in 2017. After a rigorous process of editing by staff of L&DD and Punjab Law Department, these drafts had been approved by the Punjab Assembly and now operational. Similarly Punjab Animals Health Act has been drafted and under final process of approval by the Punjab assembly. Now-a-days he is also helping the department in finalizing the Punjab Animal Welfare Act 2019. Celebration of World Rabies Day is a regular event at the UVAS, Lahore and elsewhere. This day is typically celebrated with a walk to raise awareness about rabies, which is followed by a few talks on the importance of this disease. Various Students' Clubs and Societies take an active part in celebrating this day. Additionally, a vaccination camp is organized by the Pet Center of the university. This year a special training session has been organized for DVM undergraduate students and professionals from 13th through 17th September for hands-on training on safe handling of stray dogs, vaccinating them and neutering of adult male dogs for creating a "Rabies Free Lahore". In this respect, a pilot project has already been conducted by Indus Hospital in collaboration with Karachi metropolitan and now a similar pilot project is being initiated at Lahore with the collaborated efforts of UVAS and the Indus Hospital. Vaccine for vaccination of stray dogs would be made available by Dr. Naseem Salah-ud-Din of Indus Hospital, Karachi, who has got reasonable number of rabies vaccine doses under the auspices of World Health Organization. Rabies free Lahore is a brain child of Dr. Rabbani. This initiative will go a long way in decreasing the prevalence of rabies and in this way academia and veterinarian will participate in efforts of serving the society in a big way.

FAUJI FOODS AIMS TO KEEP AT LEAST 25% SHARES

Lahore: Fauji Foods Limited, a sister concern of the Fauji Group, is looking to keep at least 25% shares in a forthcoming deal with Chinese food giant Inner Mongolia Yili Industrial Group. Fauji Fertiliser Bin Qasim Limited (FFBL) officials said talks between the two sides for acquisition of up to 51% voting shares and control of Fauji Foods by the Yili Group are now at the advanced stage. However, Fauji Foods aspires to keep 25-35% shareholding, in a bid to stay engaged in the dairy business both in domestic and export markets. "Business models, based on joint ventures, are becoming successful globally and we also want a joint venture with the Yili Group through this acquisition," said FFBL Company Secretary Syed Mujtaba Tirmizi while talking to The Express Tribune. He revealed that the Chinese company wanted a significant shareholding in Fauji Foods, adding "we also believe in long-term partnerships". "This will be the biggest foreign investment in recent times in Pakistan; though Yili will have majority shares in the company, we will still make a great impact



Chairman Fauji Foods Lt Gen (ret) Khalid Nawaz inaugurated the newly revamped Fauji Foods Limited's dairy processing facility, which is the first of its kind in Pakistan, with our remaining shares." Tirmizi added. The Yili Group had acquired the food company by purchasing 51% shares from the Noon Group in September 2015 for Rs700 million. Total shares acquired by the Fauji Group now stand at 63.34%. The Noon Group still has 11% stake in Fauji Foods. Company executives believe Yili will also have to buy shares from the open market (different funds) to get controlling rights in the company. This, they said, would merely leave around 10% shares in the open market. Fauji Foods has made an additional investment of Rs12 billion for equity and plant upgrade, which may have helped generate Rs6 billion in first three quarters of the current calendar year. The Yili Group is the largest dairy producer in Asia and the eighth largest across the world. The Chinese company is principally engaged in the processing, production and distribution of Halal dairy products and mixed feedstuff. Its market capitalisation as of December 2017 was 210 billion Chinese yuan or \$30.3 billion, with annual sales of \$8.66 billion. Yili expressed interest in acquiring up to 51% shares in Fauji Foods from FFBL and other shareholders in July this year. Last month, a high-level delegation from the Chinese company, led by its strategy head, visited Pakistan. It conducted a market survey by visiting milk plants, urban markets, farmers, etc. to see what Pakistan market could offer. Similarly, a high-powered delegation of FFBL will visit China at the end of October whereas in mid-November Yili's top management will come to Pakistan for meetings to discuss the future and modalities of the transaction. **Future strategy** The Yili Group has global expertise and a research and development wing. The company wants to establish dairy farms for future expansion to feed its growing supply chain. Fauji Foods is looking to take advantage of Chinese expertise, which will help it remain competitive in the presence of two multinational food giants Nestle and Engro Foods (Frieslandcampina Pakistan). Tirmizi said through the acquisition, they found a bigger scope. "Pakistan's domestic market is still open as 90% of the market has to shift to UHT milk by 2021. It is a big market with the Middle East as a potential export market of dairy products from Pakistan." "We as a company will do for better business practices after the acquisition," he added.

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UVAS HOLDS ALL PAKISTAN BILINGUAL DECLAMATION COMPETITION

Lahore: The University of Veterinary and Animal Sciences (UVAS) Lahore arranged 3rd All Pakistan Bilingual Declaration Competition "Decreedo 18" here in City Campus Lahore. Total 34 institutions from all over the Pakistan participated in this Bilingual Declaration contest. The Government College University Lahore won the team trophy while the winner of this contest. In English debate category contest, Farhan Ahmad (Lahore Garrison University) won 1st position and Romaisa Tauseef (Government College University Lahore) got 2nd position while Ali Shahid (Allama Iqbal Medical College) got 3rd position.



In Urdu debate category contest, Kashaf Iqbal (University of Karachi) won 1st position, Arslan Haider (Government College University Faisalabad) 2nd position while Usama Iqbal (Arid Agriculture University Rawalpindi) and Hassan Ijaz (Government College University Lahore) both stood on 3rd position. Chief Executive Officer of Punjab Educational Endowment Fund (PEEF) Dr. Kamran Shams was the chief guest of this declaration contest and distributed trophy, certificates and shields among the winner of the contests while UVAS Pro Vice-Chancellor Prof. Dr. Masood Rabbani, Senior Tutor Prof. Dr. Asim Ashraf, Prof. Dr. Kamran Shams and a number of students from different universities of all over Pakistan including UVAS were presents on the occasion.

IPS ARRANGED INFORMATIVE LECTURE ON "PRACTICAL SYNTHESIS OF BIOACTIVE COMPOUNDS ON PURINE ISOSTERIC SCAFFOLDS" AT UVAS

Lahore: The Institute of Pharmaceutical Sciences (IPS) of the University of Veterinary and Animal Sciences (UVAS) Lahore organised a lecture on "Practical Synthesis of Bioactive Compounds on Purine Isosteric Scaffolds" at University of Veterinary and Animal Sciences (UVAS) Lahore. The Institute of Pharmaceutical Sciences (IPS) of the University of Veterinary and Animal Sciences (UVAS) Lahore organised a lecture on "Practical Synthesis of Bioactive Compounds on Purine Isosteric Scaffolds" at University of Veterinary and Animal Sciences (UVAS) Lahore. The Institute of Pharmaceutical Sciences (IPS) of the University of Veterinary and Animal Sciences (UVAS) Lahore organised a lecture on "Practical Synthesis of Bioactive Compounds on Purine Isosteric Scaffolds" at University of Veterinary and Animal Sciences (UVAS) Lahore.



GOVT TO PROVIDE RS15B INTEREST-FREE LOANS TO FARMERS: MALIK NAUMAN

Rawalpindi - Punjab Agriculture Minister Malik Nauman on Monday said that government would provide Rs15 billion interest-free loans to farmers during current financial year. While attending a report launch, he said the credit available to these small farmers was mainly from informal sources, which was high in mark-up and resulted in escalating total cost of production. He said that small farmers represent a major portion of farming households in province and had little access to formal affordable finance during

past. The ultimate aim of the agriculture department is to facilitate the farmers through the usage of mobile wallets. The minister said there are a total of 55,000 active mobile wallet accounts, which eventually shows the success rate of this scheme. The government allocated budget of Rs93 billion for agriculture sector as compared to Rs81.30 billion in 2017-18. The event was attended by Dr Yusuf Zafar, Chairman PARC, Dr John Steen, Project Coordinator, The University of Queensland Australia and other officials.

MANY DAIRY INNOVATIONS AT EUROTIER 2018

At the upcoming EuroTier, there are many new products and solutions for dairy farmers on display. Some have won an innovation medal and some are just worth sharing. Here is Dairy Global's pick of what feed experts can look out for in Hannover.

Innovative bio-pass energy concentrate
Fasson in cooperation with GFT - Gesellschaft für Tiererkrankung mbH, Hall 20, stand B29 (silver medal EuroTier)
The energy supply of dairy cows, especially in the first third of lactation, can only be ensured by concentrated feed that does not burden the rumen digestion. The feed supplement Rapid Sardinia can provide protein and energy in the small intestine in rumen-protected form and subsequently can serve as an alternative to the use for palm oil. By using a new processing technique, a product was created that contains highly digestible nutrients, sulphated amino acids and an outstanding fat quality. The product is already being used and tested on dairy farms.

Next generation touchscreen system DairyMaster, Hall 13, stand B23 (silver medal EuroTier)

The shorter the milking time, the shorter dairy cows have to stand in the collection area prior to milking - a primary factor for reduction of lameness, and with a greater animal welfare. On a farm with a milking carousel, the duration of milking is in fact dependent on the running speed of the carousel. This is not easy to optimize, even for experienced milkers. This especially applies when a cow has to be treated during milking, which often makes it necessary to stop the carousel. For its DairyMaster Mission Control, the Irish milking technology manufacturer puts its trust in a next-generation touchscreen system. The QuestSense System is integrated in the DairyMaster Mission Control which, based on the milking history of each individual cow recognized, then it calculates the milk quantity to be expected and offsets it with the remaining milking time of the cows already being milked in the carousel. By using artificial intelligence and corresponding mathematical models, the carousel speed is optimized with self-learning.

Better adhesive bonding for hoof blocks, Albert Kerbl, Hall 11, stand D43 (silver medal EuroTier)

Two-component adhesives are often used to attach hoof blocks in hoof care. Their curing speed is, however, highly dependent on the ambient temperature which, in particular at low temperatures in winter, leads to poorer adhesive bonding qualities with a simultaneous increase in the treatment and working times. In the Heatsbox from Kerbl, which consists of 2 chambers, the adhesives can now be optimally tempered to a constant 20°C. The adhesive cures more quickly and considerably shortens the treatment duration and improves the durability of the blocks on the hoof.



The Heatsbox from Albert Kerbl.

Augmented reality and reproduction management
Nedap, Hall 17, stand F18 and Hall 13, stand C56 (silver medal EuroTier)
While data acquisition for individual animals via sensors and digital measuring tools has long since become a part of everyday life in busy dairy cattle farms, the availability of these data for daily work in the barn is far from an inflexible. Farm-

to-farmers often help themselves with penicillin, these tables are regularly combined or difficult to read. With CowControl, Nedap makes augmented reality available in the barn for the first time. Based on an app, the user is provided with herd information directly in the barn. The new technology combines the real world of farmers with digital information such that their position and line of sight are detected and integrated in animal-related data on fertility, health or the location of certain animals in the camera image for penicillin use.



The CowControl from Nedap.

Electronic milk quantity measuring system
Nedap, Hall 17, stand F18 and Hall 13, stand C56 (silver medal EuroTier)
A continuous milk quantity acquisition has been standard in dairy cattle farming for many years now. However, electronic milk quantity measuring systems had several design weaknesses up until now. On the one hand, the sensors reduced the cross-section of the milk line and, on the other, the electronic components and cable connections were prone to faults. With the ScanFlow, the Dutch manufacturer Nedap puts a further development in the area of milk measuring systems on the market that has been decisively improved in the points named. The system is designed to be completely wireless, i.e. both with regard to data transfer and in view of the power supply. The data are transferred via a USB radio connection, enabling an especially fast and simple data integration.

Early feeding of colostrum
Martin Färber, Hall 12, stand C31a (silver medal EuroTier)



The All-in-One Colostrum Feeder from Martin Färber.

The All-in-One Colostrum Feeder from Martin Färber GmbH now combines major innovative developments for the initial provision of newborn calves with first milk. The innovative basic unit consisting of a special hermetic container is equipped with a lid with a hand-on-the-heel.

dic and a test for drinking. A central innovative special feature of this product is the possibility of freezing the container equipped with the described stainless-steel spiral tube in a space-saving manner for colostrum storage in order to gently and simply thaw the drinker as required.

New feed ingredient for rumen re-development
Palfrid, Hall 3, stand B32
Feed additive company



The 'NANO' feeding concept from Wasserbauer.

Palfrid will launch RumenReady at EuroTier. This feed ingredient is specifically designed to stimulate rumen re-development in

either 10mm or 40mm thick. The recommended retail price for the new system is € 68 per square metre for the 10mm foam mat option or € 73 per square metre for the thicker 40mm option. Both the foam mat and the top cover are covered by a 10 year warranty.

Electric stage feeder
Sibeking, Hall 25, stand L05g and Hall 27, stand F40
With increased focus on developing renewable energy machinery Sibeking is introducing its new electric powered stage feeder to the market. This self-propelled cylindrical container complete with a cab offering all-round visibility and is used for loading, transporting and discharging stages or maize. It has 2 speed options reaching up to 10km per hour or up to 20km per hour and will run for 2 hours on a full tank charge. Made in Germany this new machine is designed for farms that have larger distances between the silos and cow shed and comes with 2 load capacities, 3.8 or 4.6 cubic metres. The battery can last for up to 10 years, or 1,650 full cycles, after which it can be recycled. It has a 7.4 kW motor with 16 cubic metres such as in € 49,900 plus VAT.

Rumen bolus to measure what is happening in the cow

SmaXite animal care, Hall 11, stand C20 (silver medal EuroTier)
SmaXite 360 is a further development of the rumen bolus already commercialised in 2010 with a wireless pH and temperature probe. The bolus enables almost lifelong continuous monitoring of physiological, behavioural patterns of feed and water consumption, rumen acidity, rumen pH, activity and the heart rate of the dairy animal. Do not miss completely advanced options: recording the milk production in a service life of 4 years. The developers expect the next generation to last longer than 5 years. The bolus can therefore help farmers to manage their lactations more quickly and in better health.

Fully automatic feed removal in the bunker silo
Wasserbauer, Hall 12, stand D22 (silver medal EuroTier)

With the 'NANO' feeding concept, Wasserbauer has developed an autonomous feeding system for cattle. It consists of the Shuttle Eco manoeuvrable, autonomous, fully automatic feed robot and the new, unique lift for fully automatic feed removal in the bunker silo. The feeding robot moves freely and is rotated via magnets in the ground. As a result, it can easily be used in several barns and can move to several silos. In the silo the Shuttle Eco feeding robot is filled with the desired, fully automatic lift, an intelligent system comprising a milling and a blower unit.

New sealed cow mattress ready to launch
Huber Technik, Hall 12, stand C49
German company Huber Technik is proud to launch a new design cow mattress at EuroTier which has a unique sealing structure at both ends of the top cover. The HE R65-Wings mattress consists of a thick foam mat which is totally enclosed in a transparent plastic sheet which is then covered by a rubber top cover that has formed seals at both ends. Measuring 8mm thick and 1.8m wide the top cover rolls out along the cubicles to cover the underlying floor, which is available in

either 10mm or 40mm thick. The recommended retail price for the new system is € 68 per square metre for the 10mm foam mat option or € 73 per square metre for the thicker 40mm option. Both the foam mat and the top cover are covered by a 10 year warranty.

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Revolving the traditional feeding bucket
Call-Tel, Hall 12, stand D06
Assisted all the high-tech gadgets of EuroTier it is somewhat surprising to see a simple product that has such huge durability. US firm Call-Tel has now that created a revolving bucket to feed cattle and has created one that is virtually indestructible. You can even drive a tractor over it and the bucket simply springs back into shape. Remember all those annoying handles that fall off? The new Devcon Attach Pad from Call-Tel has no handle and simply attaches to a gate or door with its moulded lip. The new bucket has rounded bottom edges to allow the calves to lick a clean residue-free bucket. It is also designed to sit on an angle giving the animals better access. The bucket, available in black or grey rubber, holds 7.5 litres and is made from co-polymer polypropylene. Each bucket will cost € 8 plus VAT with discounts available on bulk purchase.

New variable length slurry pump
GEA, Hall 11, stand D42 and Hall 26, stand A06h
A new slurry pump that suits all pits as it can adjust to varying lengths has been developed by GEA. Its Super Slider Pump is a new 8-inch, adjustable length highly-variable slurry pump, specifically designed for use by pig and beef farmers with multiple pits and by contractors. It is available in 2 depth ranges: 80 to 120 (2,400 to 3,000) and 100 to 140 (3,050 to 4,800). The sliding frames of the pump frame means that 1 pump can replace 2 or 3 other pumps, thereby reducing costs and increasing

efficiency. The Super Slider Pump is equipped with GEA's exclusive dual nozzle design, enabling better and safer manure pit management.

Weighting calves forms vital part of herd management

Holm & Lenz, Hall 26, stand D07a and Hall 13, stand D03
Less than 12% of farmers weigh their calves regularly during the milk diet phase therefore the majority have no idea if the animals are achieving their daily weight gain goals of 800 to 1000g. German calf equipment specialist Holm & Lenz is encouraging farmers to weigh their calves often to ensure they are reaching growth goals for optimum herd performance in later life. The company has developed WeightControl, which is a mobile weighing scale that not only determines the calf's weight but also allows other data to be stored particular to each animal. This new system is based on 2 different types of animal scales combined with electronic animal identification and an additional user terminal. All the data is not only saved in the Weight Control animal scale but also transmitted automatically to the company's CallGuide management program. The cart option with software costs € 4,000



The WeightControl from Holm & Lenz.

New handheld thermometer designed to monitor animal health
Urban, Hall 12, stand B02 (silver medal EuroTier)

One of the silver medal winners at EuroTier is a handheld thermometer developed by German calf product specialist Urban. Vital Control is a hand-held device that can be used to monitor the health of calves. The device is designed for use in the milking parlour and can be used to monitor the health of calves. The device is designed for use in the milking parlour and can be used to monitor the health of calves. The device is designed for use in the milking parlour and can be used to monitor the health of calves.



The eKobakon from Sibeking.

3D image analysis to measure cows
Agri-View GmbH in cooperation with Franzer Parviz GmbH (DFP) (silver medal EuroTier), Hall 26, stand C15 and A06f and Hall 20, stand D20a

The automatic 3D image analysis system from Agri-View GmbH is used for the objective, contactless measurement of moving dairy cows, and therefore avoids unnecessary stress situations caused by friction or other measures. The body condition (cow condition score) and the gait pattern (cow movement score) are recorded after each milking process. Especially in larger herds, this enables abnormalities to be detected and measures (for example hoof care) to be introduced quickly.

Time savings with new milking equipment
DeLaval International, Hall 13, stand D25 (silver medal EuroTier)



The new Direct-Attach Pad from Call-Tel.

The regular replacement of the latex rubber is tedious and requires an amount of time which should not be underestimated. For this reason, the Swedish manufacturer of milking technology DeLaval is introducing the new milking equipment DeLaval Evanta™. The decisive further development of this milking equipment lies in the fact that the latex rubber and the top cups are combined in a cartridge system in it, which results in remarkable time savings. The milk flow rate increased demonstrably by

up to 9.3%.

At the same time, the preliminary set-up time decreases by up to 7%. The latex are objectively treated more gently and better handling of the milking equipment was especially emphasised among milkers. Furthermore, it is possible to reuse the cartridges in a recirculation system.

Smart closing mechanism of feed lines
Spindler Dairy Housing Concepts in cooperation with Craftworks (silver medal EuroTier), Hall 12, stand B13

AutoLift is an intelligent gate control system that simplifies cow traffic. The sensor controlled system can be placed at all major gates along the daily walking paths of the animals, to and from the milking parlour. Sensors detect the current opening position of the gates and manage the switching status on a server. With a related app the employees responsible for cow traffic can survey all opening states of the gates on their smart phones in real time. Then they can control certain gates immediately and individually, or can temporarily change the admission status of several gates for certain livestock groups or after the passage height, e.g. for tractors, without having to be near the gate.



The new Solonix 3 machines from Triollet.

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Smart thermometer for early detection diseases
Ferber-Technik, Hall 13, stand E11 and Hall 26, stand A06g (silver medal EuroTier)

The Smart Thermometer developed by Ferber electronically records the rectally measured body temperature of calves and cattle. The data can be passed on to the Ferber Technical CallCloud via a connection to the SmartHealth app. With the app additional health parameters, such as the ear position, nasal discharge, eye condition and a fleece evaluation, can be acquired. The Call Cloud enables integration in the Ferber Smart Call System. The temperature and the evaluation results can be made accessible to the veterinarian or the farm consultant online via the Call Cloud.

Comfort safety self-locking headlocks
Ing. Bräuer Stadtholck, Hall 17, stand D35a (silver medal EuroTier)
Ordinary safety self-locking headlocks frequently offer an insufficient safety outlet in the lower area of the feed fence. When attempting to also reach the

bottom of the feed provided or when animals have fallen or are unable to get up, they are contracted in the neck area. The noises of moving swinging bars are an additional stress factor. With the comfort safety self-locking headlock from Bräuer, the horizontal position of the swinging bar mounting and the swinging unit is shifted, resulting in a considerably larger safety outlet over the entire height and an animal-friendly opening width of 36cm. In addition to unobstructed access, this also makes it considerably easier for the cow during feeding and easier for the farmer. In the catch position, a neck width of 21cm is reached by shifting the swinging bar, enabling safe fixation for animal inspection, treatments and inoculation.

Next level hoof care
Schippers, Hall 16, stand C08, Hall 11, stand B20 and Hall 17, stand F55 (silver medal EuroTier)

Disturbances and illnesses in hoof health involve long-term problems in animal welfare and ultimately in the productivity of the dairy cow. The earlier emerging hoof problems are recognised, the easier it is possible to treat the hoof at the right point in time. With the MS CORUM, Schippers GmbH has created an innovative system for the preventive monitoring and simultaneous analysis of the hoof model. Via the driving-out area off the milking parlour, the milk cow reaches a selection gate with animal identification. Animals which were milked shortly before are separated via the selection system and led directly to the MS Hoof Scan. While the cow is standing in a layer of water, the hoofs are examined from below in the Hoof Scan with ultrasonic, and at the same time the weight of the cow is detected via an integrated weighing system. An automatic analysis system evaluates acquired information and detects deviations. After the next visit to the milking parlour, conspicuous dairy cows are routed via an additional separation into a room in which they can be treated in a hoof care box.



The new milking equipment DeLaval Evanta™.

Lely Innovations
Lely, Hall 13, stand B42 and Hall 26, stand A06f
Milking robot manufacturer Lely will showcase a range of innovations at the EuroTier. One is the possibility to dose non-pelleted feed in the Automil milk robot. The option is called 'Commodity Feeder' and can result in huge savings on feed costs for milk farmers. Lely also developed the DairyWise farm management optimisation program. With this step Lely expands their Farm Management Support services. Also new is the Lely Orbitic, an innovative system to measure milk directly from the milking robot in the bottle. The company will also showcase the improved mixing and feeding robot (MFR) for the Lely Vector feeding system. The system is now even more focused on improving animal health. A better distribution of the knives and the constant rotational speed of the auger means the ration is now consistently mixed and balanced. This increases food intake and reduces the herd's ability to select feed. A magnet has also been added to the MFR to remove metal particles from the feed.

The Smart Thermometer developed by Ferber

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AWARENESS SEMINAR ON ANTI-CORRUPTION ARRANGED BY THE CHARACTER BUILDING SOCIETY OF UAF AND NATIONAL ACCOUNTABLY BUREAU (NAB) AT UAF



Corruption is eating up social, financial and moral fabric of the society for which teachers, parents and other stakeholders have to pay special attention to inculcate Islamic values among the people, said University of Agriculture Faisalabad (UAF) Vice Chancellor Dr. Zafar Iqbal Randhawa. He addressed an awareness seminar on Anti-Corruption arranged by the Character Building Society of UAF and National Accountably Bureau (NAB) at UAF Auditorium. He said that there was need to create awareness among the people about the negative impacts and different kind of corruption to wipe out menace that was hampering the progress. He said that we have to develop the habit of self-accountability among the people for a healthy society. He said that the injection of good ethics would pave the way to vanish the corruption. He said that corruption means not only financial corruption but also lack of commitment in shouldering responsibilities, work, and education etc was also a kind of corruption. He added that the university was making all out efforts to inject the good characteristics among the students so that they would play their effective role in the development. NAB Lahore Director Muhammad Hassan said that corruption means moral impurity, act of wrongdoings, and misuse of authority for private gains. He added different methods including bribery, embezzlement, and nepotism were being used for the corruption. He urged the people not to be engaged in any activity which lead to breach of law. He said that he had recovered as many Rs 300 billion so far. Whereas, the conviction rate is 76 percent. He said the corruption was an evil that reduced the productivity and economic growth, and reduced domestic and foreign investment; and deepened the extent of poverty and undermine the legitimacy of state. He said that NAB is aimed at to be a credible, effective, efficient, and dynamic anti-corruption organization that creates an enabling environment for a corruption-free society by engagement of all stakeholders in the fight against corruption. He said that they have the missions to eliminate the corruption through three pronged strategy including enforcement, prevention and awareness. NAB Deputy Director Hassan Ali Sukhira, UAF Registrar Muhammad Hussain, Dr. Tahir Siddiqui and other notables also spoke on the occasion. They also took out the rally commencing from Iqbal Auditorium and concluded at Admin Block to create the awareness about anti-corruption.

CALLS FOR CONSERVATION OF CRITICALLY ENDANGERED SAWFISHES

Karachi: Critically endangered sawfish is near to extinction from multiple threats like over fishing, habitat loss and curio trade, as calls are raised for conservation of the threatened species before it is too late. Marking the International Sawfish Day on Wednesday, the WWF-Pakistan said the IUCN Red List of Threatened Species places the fish on endangered classification with a critical tag. It said there should be a joint effort to conserve magnificent aquatic vertebrate with a fear of the fish to be close to its obliteration for multiple threats. The species is also placed in Convention on International Trade in Endangered Species (CITES) Appendix I and enjoys protection under The Sindh and Balochistan Fisheries Laws since 2016. "Once abundantly found, sawfish species are now facing threat of extinction in Pakistan. Therefore, WWF-Pakistan urges taking necessary steps for the conservation of these majestic marine animals," said Muhammad Moazzam Khan, Technical Advisor (Marine Fisheries), WWF-Pakistan said the magnificent marine species is close to its extinction globally with knife-tooth and large-comb sawfish are now being considered as locally extinct. "There was once a considerable large sawfish fishery in Pakistan and they were mainly found in Miami Hov (Somnium), Kalmat Khor, Jiwani, Gwadar and along the entire Indus Delta, particularly Khajhar Creek," he said. He said sawfish population was declining rapidly throughout the world because of overfishing, entanglement in nets, fishing gear, habitat loss, and curio trade, adding that "they [species] are also in demand for Chinese shark fin soup". Saad-ul-Islam, Coordinator Marine Program, WWF-Pakistan said that some sawfish may still be left in their main habitats such as Indus Creek (Kha-jar Creek), Gwadar and Miami Hov. "WWF-Pakistan, therefore, intends to conduct environmental DNA (eDNA) studies in these areas to confirm their presence. According to Islam, eDNA is the DNA an organism leaves behind as it moves through an environment which can be detected using modern techniques to confirm their presence. Once confirmed an area specific management plan will be developed for conservation of sawfish," he said. Three species of sawfish including knife-tooth (Anoxypristis cuspidata), large-tooth (Pristis pristis) and large-comb (Pristis zijsron) have been reported from Pakistan. Sawfish, which are related to sharks have a triangle long, narrow, flattened rostrum, or nose extension, lined with sharp transverse teeth, arranged in a way that resembles a saw. There have been at least five records of large-tooth sawfish (Pristis pristis) from Pakistan in the last decade. In May 2018, a 15-foot long giant female large-tooth sawfish was caught by a fisherman near Khajhar Creek. Another specimen was caught from the same area a few years earlier in June 2013. Similarly, two specimens were caught in September 2009 and January 2016 from Sur, near Gwadar, Balochistan. In addition to fishing, habitat degradation is also an important factor that has resulted in the decline or possible local extinction of sawfish as local power plants and other industries are continuously being built in areas, such as Gwadar, where sawfishes were previously found. A national or regional conservation action plan for the prevention of intentional killing, protection of habitat, minimization of bycatch, and ending illegal fin and rostrum trading must be developed. Since 2016, the governments of Sindh and Balochistan have already included sawfish in the list of species that cannot be fished, landed and marketed, the WWF-Pakistan said.

UN WARNS OF 'PERFECT STORM' OF HUNGER, CLIMATE CHANGE

ROME: A potent combination of hunger, climate change and man-made conflicts are creating a "perfect storm", the head of the UN's food arm warned Tuesday in a call to action on World Food Day. "You've got a nightmare, the perfect storm heading your way," David Beasley, World Food Programme (WFP) chief, said in a speech in Rome, where the United Nations' food agencies are head-quartered. The UN aims to achieve a Zero Hunger world by 2030, but faces three obstacles: conflicts, climate change and an economic slowdown. Beasley said the battle was an urgent one. "Children are dying at a rate of every five to ten seconds" from hunger or malnutrition, he said. Food is being wasted both during the production process and in people's kitchens. "The answer is not in Rome alone, it's in your homes. What are you going to do about it?" he asked. It is not a problem wealthier countries can simply ignore, for it has a knock-on effect on them in terms of the migration crisis. "For every one percent increase in hunger, there's a two percent increase in migration," Beasley said. Some 821 million people, or one of every nine people on the planet, suffered from hunger last year, marking the third consecutive annual increase, according to the UN's latest hunger report. An estimated 155 million children under five years old are chronically malnourished, according to the Food and Agriculture Organization (FAO), while micronutrient deficiencies, dubbed the "hidden hunger", affects over two billion people worldwide. At the same time, over 600 million people are obese. The costs to society of the "global pandemic" of obesity are enormous as expensive as armed conflicts and smoking. FAO head Jose Graziano da Silva said, "International solidarity appears to be cooling," warned Pope Francis in a speech delivered by a Vatican representative. He warned institutions lead-

GOOD BACTERIA FOR A BETTER MAIZE SILAGE

The use of inoculants can improve the aerobic stability of maize silage. But can it also reduce the contamination levels of mycotoxins?

The use of inoculants in silage is not new, but some farmers have doubts about the cost effectiveness of silage inoculants, especially for maize silage, which is considered easy to ensile. However, suboptimal management of maize silage (e.g., inadequate DM concentration at harvest, slow silo filling, imperfect mass sealing, poor mass compaction, delay of mass pH decline, air penetration, and inappropriate unloading techniques) could lead to air penetration and consequent aerobic deterioration of the ensiled mass. This in turn can lead to moulds, undesirable microorganisms and mycotoxins. A new study, published in the *Journal of Animal Feed Science and Technology* looked at the effect of a commercial silage inoculant on fermentation, dry matter (DM) loss, aerobic stability, microbial counts, and mycotoxin contamination of maize ensiled at 2 different densities, as a simulation of differences in silo management.



The use of inoculants can improve the aerobic stability of maize silage.

Experimental design
Approximately 4 tonnes of freshly chopped maize forage was sampled from different plots of an experimental field in Italy and each of them was split into 2 equal amounts; one mass was untreated (CTR, without any inoculant) and the other mass was treated (TRT) with an inoculant containing *Lactobacillus buchneri* LB1819 and *Lactococcus lactis* 0224 (Silosolve® FC, Chr. Hansen A/S, Herlev, Denmark), used according to the manufacturer's recommendations. In particular, the inoculant (freeze dried powder) was diluted in heated tap water and applied at the rate of 2 mg/kg of fresh forage with a sprayer, to reach a final dose of approximately 250,000 CFU/g freshly-chopped forage. An equal amount of heated tap water without inoculant was sprayed in the CTR mass. The CTR and TRT freshly chopped forages were thoroughly mixed with a wheel loader and shovels. Mycotoxins can have a huge effect on the health and productivity of livestock.

3 representative samples (about 1 kg each) were taken from different parts of each forage pile, pooled into one sample, stored in airtight bags, and used for analysis of chemical characteristics and mycotoxin contamination. Both CTR and TRT freshly-chopped maize were then placed into 20 L plastic jars ("mini-silos"), compacted to a low density (132 ± 6 kg DM/m³) or a high density (186 ± 6 kg DM/m³), and then carefully sealed with plastic lids and stored in a barn (ambient temperature: 20.3 ± 0.6 °C). Accordingly, the 4 different treatments were: CTR-low density (CTR-LD), CTR-high density (CTR-HD), TRT-low density (TRT-LD), and TRT-high density (TRT-HD). A total of 100 mini-silos were prepared. In particular, 20 mini-silos for each treatment and each duration of ensiling (2, 4, 8, 16, or 32 days) were prepared from each forage pile. The mini-silos were weighed immediately after closing and before opening to determine DM loss.

Results
Silage DM decreased with ensiling duration and was 353 g/kg as-fed on day 2 and 347 g/kg as-fed on day 32. In addition, the DM concentration was 3 g/kg as-fed lower in the CTR silage than in the TRT silage (P < 0.05). Inoculation and silage density had no effect on DM loss, but DM loss increased almost linearly with ensiling duration (p < 0.05), from 41 g/kg DM on day 2 to 261 g/kg DM on day 32. Silage pH decreased with ensiling duration, from 3.90 on day 2 to 3.45 on day 32. On day 32, the pH in the trt-silage reached its maximal value of 3.49 (p < 0.05, 4.53 log10 CFU/g) and mould (average: 1.59 log10 CFU/g) counts were similar among all silages. *Aflatoxin B1* was detected in all CTR samples and in 0.6 of TRT silages, and the contamination levels were similar (0.412 µg/kg DM). We also detected *fumonisin B1*, *fumonisin B2*, and fusaric acid in all samples. The *fumonisin B2* level was greater in the CTR than TRT silage (413 vs. 278 µg/kg DM, P < 0.05), but the fusaric acid level was lower in the CTR than TRT silage (2849 vs. 4162 µg/kg DM, p > 0.05). Despite the overall low levels of mycotoxin contamination, a 10-fold higher level of roquefortine C (p > 0.05) was present in the CTR than TRT silage.

Conclusions: This study confirms that inoculation of maize silage with *Lactobacillus buchneri* LB1819 and *Lactococcus lactis* 0224 improved its aerobic stability, and that the improvement was greater at a high silage density. Our analysis of mycotoxin contaminants indicated that the inoculation protocol reduced the levels of *fumonisin B2* and roquefortine C, but increased the level of fusaric acid. However, under the conditions of the current experiments, inoculation of maize silage provided no benefits to other classically studied parameters, including the fermentation profile.

TOWARDS A SAFE AND SUSTAINABLE POULTRY CHAIN

Moves towards creating an innovative poultry production chain have taken a step forward following the release of a report into a major three-year European study.

The project wanted to develop an innovative production chain that offers high quality and safe products, as required by the consumer, through a guaranteed traceability and product safety and valorisation and development of distinctive poultry products. It was carried out against a backdrop of increasing volumes of poultry meat being imported from Brazil and Thailand.



The project was divided into four research topics: product transparency and recognisability, animal welfare, healthy and robust chickens and valorisation and development of added value products. Within the topics, 32 studies were defined, of which 30 were carried out by HAS University of Applied Sciences and Wageningen Research.

meat quality would have to be developed before usage is possible. **Value added**
This group of studies focused on reducing salt and E-numbers, development of gluten free products and on the valorisation of chicken leg meat. The salt content of spicy chicken wings could be reduced by 25% (20% in the marinade and 5% in the breading) without noticeable difference in either saltiness, tenderness, juiciness and colour. The experiments on allergen-free Hotwings revealed that a combination of chickpea, rice and tapioca flour resulted in the best gluten-free breading mixture with similar or better properties compared to the reference product which had a wheat flour breading. Another project led to the development of four concepts for world marinades to be used on chicken thighs. All are free from allergens, low in salt and low in E-numbers. Several product concepts were developed for the valorisation of leg meat. One of the concepts is a non-sticky fingers concept, which consists of drumsticks with a clean bone resulting in clean hands after consumption.

Product transparency and recognisability
This focused not just on transparency and recognisability but also the development of a sustainability model through mapping of the broiler production chain. From this production chain, three chain links were selected for further study: the broiler farmer, slaughterhouse and processing plant.

The sustainability study found that broiler farmers as well as the processing industry could make improvements with relatively low effort, such as using more green energy and cutting back on water usage where possible. **Animal welfare**
Experiments performed for the development of effective environmental enrichment showed that broiler chickens prefer some enrichments over others - eg for resting on elevated structures they preferred platforms over perches and for exploration and foraging they preferred wood shavings bales over lucerne bales and pecking stones.

They also made better use of enrichments when the stocking density was reduced from 35 kg/square metre to 25 kg/square metre. And wood shavings bales only stimulated activity of broilers better as compared to the combination of wood shavings bales and platforms. None of the experiments indicated that environmental enrichment negatively influenced the technical performance of the broilers but more research is needed to determine the optimum number in a broiler house.

Thinning
The study on indicators of the effect of thinning found that the majority of broiler farms apply thinning as a matter of routine practice, of which 30% thus multiple times during a production cycle. Feed deprivation of the whole flock prior to thinning may negatively affect welfare of the remaining birds. The report argues that flock uniformity and the number of broilers per feeder after thinning could be suitable indicators to determine the effect of thinning. **Campylobacter**
Studies on measures to reduce *Campylobacter* contamination on farm and during the slaughter process found that there are multiple intervention routes. Feed additives did not significantly reduce *Campylobacter* and it is possible that thinning might be an introduction route as contamination was detected on containers. A further study on the risk of contamination in containers confirmed that even after cleaning, containers were contaminated.

Three different intervention methods were tested in a slaughterhouse to reduce *Campylobacter* spp and *Escherichia coli* contamination during the slaughter process. The results showed that the tested intervention methods were all separately successful in reducing bacterial counts compared to no intervention. Experiments with a fourth method, cold atmospheric plasma also led to a *Campylobacter jejuni* reduction but the meat quality was no longer acceptable after the treatment due to dehydration. Industrial applicability and suitable settings of this pilot technique to maintain

The report summary concluded that "with these work packages we covered a large part of the poultry production chain. Starting on the farm to improve animal welfare, health and sustainability, to the processing industry where sustainability, product safety and health were addressed, to the production of products with lower salt and E-number contents, novel concepts for valorisation of the broilers up to the customer wishes. "The results of the performed projects contribute to an innovative poultry production chain, through the developed welfare and sustainability model for more transparency and recognisability, through the novel, high quality product concepts developed, the insights in end of life welfare, the demonstrated potential for *Campylobacter* reduction in the slaughter process and the improved understanding of effective environmental enrichment that can be applied on farm." The collaborators for this report were Wageningen Food and Biobased Research, HAS University of Applied Science, Marks and Spencer, Food Animal Initiative and Heijts Food Products.

Boosting Rubisco inside the maize cells
The researchers developed a transgenic maize designed to produce more Rubisco, the main enzyme involved in photosynthesis, and the result is a plant with improved photosynthesis and hence, growth. This could potentially increase tolerance to extreme growth conditions. **Making the C4 path more efficient**
Every plant on the planet uses photosynthesis to capture carbon dioxide from the atmosphere, but

BOOSTING PHOTOSYNTHESIS IN CORN FOR BETTER YIELDS

ScienceDaily reports that an international research team has found they can increase the corn yield by targeting the enzyme in charge of capturing CO₂ from the atmosphere.



not all plants do it in the same way. Plants like wheat and rice use the ancient, less efficient C3 photosynthesis path, while other plants such as maize and sorghum use the more efficient C4 path. Central to this process is Rubisco, the main enzyme of photosynthesis, which is in charge of converting CO₂ into organic compounds. In C4 plants, Rubisco works much faster

and they are more tolerant to heat and drought through better water use efficiency. By boosting Rubisco inside the maize cells, you see an increase in crop productivity. **Next step: Testing in the field**
The next step is to do field trials to see how the transgenic maize behaves in real field conditions. Source: ScienceDaily