

CONTENTS



Fapas®

Fera Science Ltd. (Fera)
National Agri-Food Innovation Campus
Sand Hutton
York
YO41 1LZ
UK

Tel: +44 (0)1904 462100 E-mail: info@fapas.com

www.fapas.com www.fera.co.uk

© Copyright Fera Science Ltd. (Fera) 05 2019. All rights reserved.



For the accreditation status of Fapas® proficiency testing programmes, please see our schedule of accreditation at www.fapas.com

0009

4 Who We Are

9 Fapas® Reports

6 Why Choose Fapas®?

7 Benefits of Proficiency Testing

8 Our Simple Web-Based Approach

10 Proficiency Testing Programmes

16 Food and Beverage Microbiology

20 Water and Environmental Chemistry

24 Water and Environmental Microbiology

12 Food and Beverage Chemistry

28 Genetically Modified Foods

32 Fapas® Consultancy Service

34 Agent Information

42 New Features in 2019

33 Fapas® In Action - Case Studies

36 Fapas® Product Codes Explained

40 Quality Control and Reference Materials

38 The Fapas® Customer Journey

Established in 1990, Fapas® is a leading accredited provider of proficiency testing schemes, quality control samples, and reference materials in the food and water, environmental chemistry, and microbiology sectors.

Fapas® proficiency testing schemes cover food and beverage chemistry, food and beverage microbiology, GM Foods, water and environmental chemistry, and water and environmental microbiology. Our quality control samples and reference materials can be purchased easily through our website throughout the year.

Proficiency testing is an independent check of your laboratory procedures that provides you with a completely confidential assessment of your capability. Participation in proficiency testing schemes not only allows you to demonstrate the validity of your systems and the technical ability of your staff, it also helps you gain and maintain ISO/17025 accreditation. Confidence in your laboratory equipment, methods, and staff provides your customers with the assurance that you are delivering the quality results they require.

We provide a confidential, flexible service allowing participation at a level that suits you; there is no minimum number of proficiency tests that you must take part in each year. We provide you with comprehensive reports of your data, which receive rigorous statistical analysis and contain method comparisons to provide further insight into your performance - all of which are accessible via an easy reporting facility on our website.

What makes us different? We only use Real World Samples

In order to obtain life-like results and eliminate as much of the unexpected as possible, we use real food samples and a protocol that has been refined over nearly 30 years. We use incurred materials in combination with established fortification techniques, and extensive stability and homogeneity testing to ensure optimum material production.



4 Proficiency Testing Programme 2019 - 2020 Visit: www.fapas.com Get in touch: info@fapas.com Call us on: +44 (0)1904 462100 5



High Quality Samples

By using real food samples, Fapas[®] test materials provide a representative challenge that simulates routine laboratory scenarios. Our chemistry reference and quality control materials are stable and fully characterised for long term availability in method validation and verification. We also have a limited range of microbiology quality control materials available.



Accredited Programmes

Fera Science Ltd. is a UKAS accredited proficiency testing provider (No.0009), in compliance with ISO/ IEC 17043:2010. Fera Science Limited also holds accreditation and certification to other internationally recognised standards including ISO/IEC 17025 and ISO 9001. The Fapas® participant certificates provide evidence you are enrolled in a reputable proficiency testing, or external quality assessment (EQA), scheme.



Online Data and Reports

The Fapas® online submission and reporting system is simple to use and our reports are comprehensive, but also easy to understand.

There is also the facility to prepare user defined trending charts to compare historical performance over a number of previous tests.

Reports include data on all methods, allowing comparative performance assessment of different laboratory protocols. We can also provide interlaboratory reports for multiple connected laboratories, that provide an overview of global performance.



Flexible and Cost Effective

Our extensive range of multi-analyte programmes and analyte/matrix combinations allow you to reduce the number of individual programmes required to cover your testing schedule, saving both time and money. You can participate at a level that suits you; there is no minimum number of proficiency tests that you must undertake each year. This provides flexibility and ensures suitability for laboratories of all sizes and budgets.



Timely and Effective Reporting

Short timescale reporting provides early identification of potential issues and allows implementation of any corrective or preventative actions with minimum disruption to your laboratory. With a turnaround of less than fifteen days for most reports, you can investigate root causes efficiently, and minimise the risk of future issues. Your results receive rigorous statistical analysis by our experts in that time.



-₩- Strength in Numbers

Fapas® testing regimes are used by thousands of participants every year. This high level of participation means peer group numbers are maximised and provides data across a wide range of instruments and methods.

BENEFITS OF PROFICIENCY TESTING

We understand the challenges you face, which is why we can provide tailored proficiency testing solutions that deliver real value; we can also help with the interpretation of your proficiency test results.



We have been a global leader in proficiency testing for the food and beverage sector for nearly 30 years with thousands of customers in more than 130 countries. As part of Fera Science Ltd. we have access to a wealth of expertise, underpinned by conducting over 600 proficiency tests every year with high levels of participation. This gives you the confidence in our robust analytical data to allow you to make evidence-based business decisions.

The rapid development of new technologies and methodologies can allow you to work smarter but can also pose a challenge for laboratories to maintain quality standards that can be trusted. Proficiency tests help you to achieve EN ISO/ IEC 17025 accreditation, the international standard for analytical laboratories.

Proficiency testing is also a vital tool that can help to mitigate business risks such as product failure and non-compliance. Avoiding these risks can enhance your brand reputation, and help you meet legal requirements. Fapas® deliver a comprehensive yet cost-effective solution to demonstrate the quality of your testing regime. We help you meet your regulatory requirements, work smarter, and increase confidence in the accuracy of your test systems.

With over 600 matrix and analyte combinations currently available, you can be sure that we have the right test for you. We are constantly adding to our range, informed by customer feedback, market analysis, and changes in regulation. A recent example of this is our development and introduction of the new Fipronil proficiency test, which we developed as a result of the recent food scare in eggs and egg products.

Fapas® provides certificates as proof of EQA participation for laboratory accreditation purposes.

The vast majority of our PT tests comply with ISO/IEC 17043:2010; 'Conformity assessment - General requirements for proficiency testing, and we are a UKAS accredited proficiency testing provider, No. 0009

Accreditation to ISO/IEC 17043:2010 establishes the quality and excellence of Fapas®.

OUR SIMPLE WEB-BASED APPROACH

Fapas® SecureWeb provides a portal for easy, direct submission of results, and for the retrieval of reports directly from our secure Fapas® server.

- Confidentiality and security are maintained via password protected access.
- Enter results directly into the Fapas® database. $\boxed{ }$ Receipt of results is confirmed by e-mail.
- Additions and changes to assay details can be made quickly and easily online.



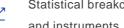


- Requests for new methods, instruments, and reagent codes can be made online.
- Participants receive an email as soon as the report is ready to download
- Digitally signed, secure reports for all historic results can be downloaded from the website.
- View, print, or store reports as you wish.
- Update your laboratory's certificate ြု of participation details.
- All you need is web access, Adobe Reader and a valid login to access the system.



FAPAS® REPORTS

Fapas® reports are presented in a comprehensive, user-friendly format that allows easy interpretation of your analytical performance.



Statistical breakdown by all methods and instruments, where applicable.



Use the histogram to compare your instrument group, method group, and all methods.



Identify trends, biases, and precision problems using the visual charts.





- At-a-glance summary page for all parameters in the programme.
- Compare your result with statistically robust consensus means.
- Identify acceptable and poor performance.

Expert data assessment and application of appropriate statistical treatments ensure fit-for-purpose performance indicators.

Laboratory Group Reports

This service enables large groups to monitor the performance of all the member laboratories. It is particularly powerful when the laboratories coordinate their participation in specific tests at the same time. Each affiliated laboratory will receive an individual report, and the group supervisor also receives a summary report comparing each laboratory in the network.



The confidence in analytical data provided to producers can be enhanced through using proficiency testing. Proficiency testing (PT) provides evidence, from an independent source, regarding the competency of the laboratory supplying the analytical service.

Proficiency testing is also a necessary component for laboratories that wish to become accredited to ISO/17025 laboratory management standards. This provides the basis of laboratory accreditation in more than 40 countries, and other recognised laboratory quality assurance standards may also require that a proficiency testing programme is in place to check the actual performance of a laboratory process.

PT is a key part of food testing services, which helps to ensure the safety and quality of the food chain. The global market for food testing services is projected to grow from \$13Bn in 2017 to \$19Bn in five years. The growth is driven by increasing focus on food quality, stringent food safety regulations, advances in food testing technologies and commercial availability of rapid screening tests. Europe represents the largest food testing market worldwide prompted by increasing consumer awareness over healthy food options, improvements in industrial hygiene standards in food processing, and the efforts of regulatory bodies to ensure safety and authenticity of food products.

Asia-Pacific ranks as the fastest growing market, with the compound annual growth rate of 8.5% in the next five years, led by growing population, escalating demands for food, and strong emphasis on food security and safety in emerging markets such as China and India. Rapid growth in food trade in developing nations and the need to comply with the quality standards are also driving demands for food testing services.

Our Food Chemistry programme covers chemical analysis of real food samples for a wide range of target analytes including: nutritional components, additives, allergens, natural contaminants, pesticide and veterinary medicine residues, and packaging chemical migrants.



FOOD AND BEVERAGE CHEMISTRY



Food and Beverage Chemistry Proficiency Testing Schedule

Materials / Products

Type of Test / Properties Measured

Animal feed, pet food

Alcoholic drinks (beer, brandy, whisky, wine)

Biscuits, cake mix

Cereals and cereal products

Crisps (chips) snack food

Fish and shellfish (prawns, crab, squid)

Fruit and fruit juice Halal compliance

Honey, jam

Herbs, spices

Infant formula, infant food

Meat and meat products (including offal)

Meal (soybean, canned meat, canned cheese

& pasta)

Milk & milk powder

Nuts

Oils and fats

Packaging material solutions Ready meals and snack foods

Rice, rice cakes

Sauce

Soft drinks

Sugar confectionery

Tea, coffee

Vegetables and vegetable juice

Vitamin supplement

3-MCPD, 1,3-DCP

Acidity

Acrylamide

Aflatoxins Alcohol, congeners

Allergens

Antioxidants

Authenticity

Benzoic acid

Biocides Brix

Caffeine, theobromine

Citric acid Colours, dyes Contaminants Cyanuric acid

Fatty acids

Metals Melamine

Mycotoxins Nitrate and nitrite

Nutritional elements PAHs, PBDEs, PCBs, & PFASs

Pesticide residues

Proximates (nutritional components)

Quality indicators Sorbic acid

SO₂

Sugars and sweeteners Veterinary drug residues

Vitamins Water activity

Note: This list is shortened, with many tests and properties grouped together. Please visit www.fapas.com and search the database if your required matrix and/or analyte is not shown here.

For the accreditation status of Fapas® proficiency testing programmes, please see our schedule of accreditation at www.fapas.com

14 Proficiency Testing Programme 2019 - 2020 Visit: www.fapas.com Get in touch: info@fapas.com Call us on: +44 (0)1904 462100 15 Foods which exceed specifications for total bacterial and fungal load, or which are contaminated with a pathogen, pose a risk to both public health and brand reputation.

Modern food processing often involves complicated global supply chains and ample opportunity for foods to be contaminated in their journey to our tables. Even in a carefully controlled environment contamination can occur, and laboratory analysis is a key safety measure to ensure the process and controls are working as they should. Our microbiology proficiency tests are here to ensure that the laboratory itself is working as it should and is capable of detecting non-conforming product should the biosafety chain be compromised.

Our test materials are designed to simulate real laboratory samples with varying levels of target organisms and background flora, providing a more realistic challenge than some proficiency programmes. In the case of Listeria analysis we even make the cheese ourselves, to ensure the contamination is the same as a real sample. Other matrices include beef, chicken, fish, milk powder, salad, rice and others.

We also have environmental swabs for organism identification and enumeration. The processing environment is a common source of food contamination, so ensuring it is hygienic, free from pathogens, and key spoilage organisms, is an important control point.

Our Food Microbiology has a flexible programme of 10 distributions a year, where samples are sent by courier worldwide in a controlled environment with detailed instructions. Results from each proficiency test receive rigorous statistical analysis, ensuring you have clear feedback on your performance. Comprehensive reports give information on microbiological methods used by other participants.



FOOD AND BEVERAGE MICROBIOLOGY



Food and Beverage Microbiology Proficiency Testing Schedule

Materials / Products	Type of Test / Properties Measured
Animal feed	Enumeration
Cheese	Aerobic Plate Count (APC)
Chocolate	Alicyclobacillus spp.
Chocolate powder	Bacillus cereus
Egg (dried)	Campylobacter spp.
Fish	Clostridium perfringens
Flour	Clostridium spp.
Fruit juice	Coagulase positive staphylococci
Herbs	Coliforms
Infant formula	E. coli
Meat (beef, chicken, pork, dry cured meat)	Enterobacteriaceae
Milk powder	Enterococci
Mixed vegetables	Lactic Acid bacteria
Pepper (ground)	Listeria monocytogenes
Rice (cooked)	Yeasts & moulds
Salad	
Spice (ground pepper)	Detection
Swab	Campylobacter spp.
	Cronobacter sakazakii
	E. coli O157
	Listeria monocytogenes
	Listeria spp.
	Salmonella spp.
	Vibrio parahaemolyticus

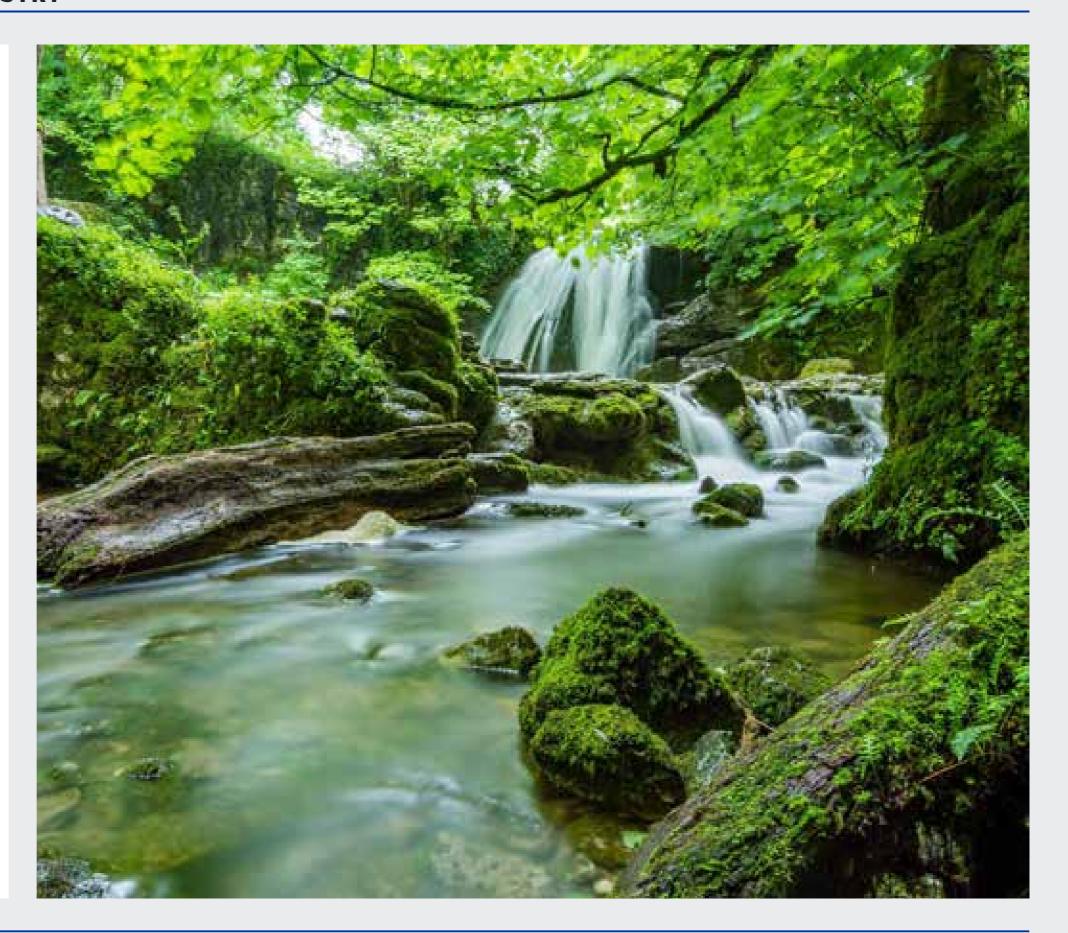
For the accreditation status of Fapas[®] proficiency testing programmes, please see our schedule of accreditation at www.fapas.com

Modern analytical techniques are allowing us to detect chemicals in water at ever decreasing concentrations, and this is changing our understanding of the pollutants that may be present in the environment, which can consequently be an issue for our drinking water.

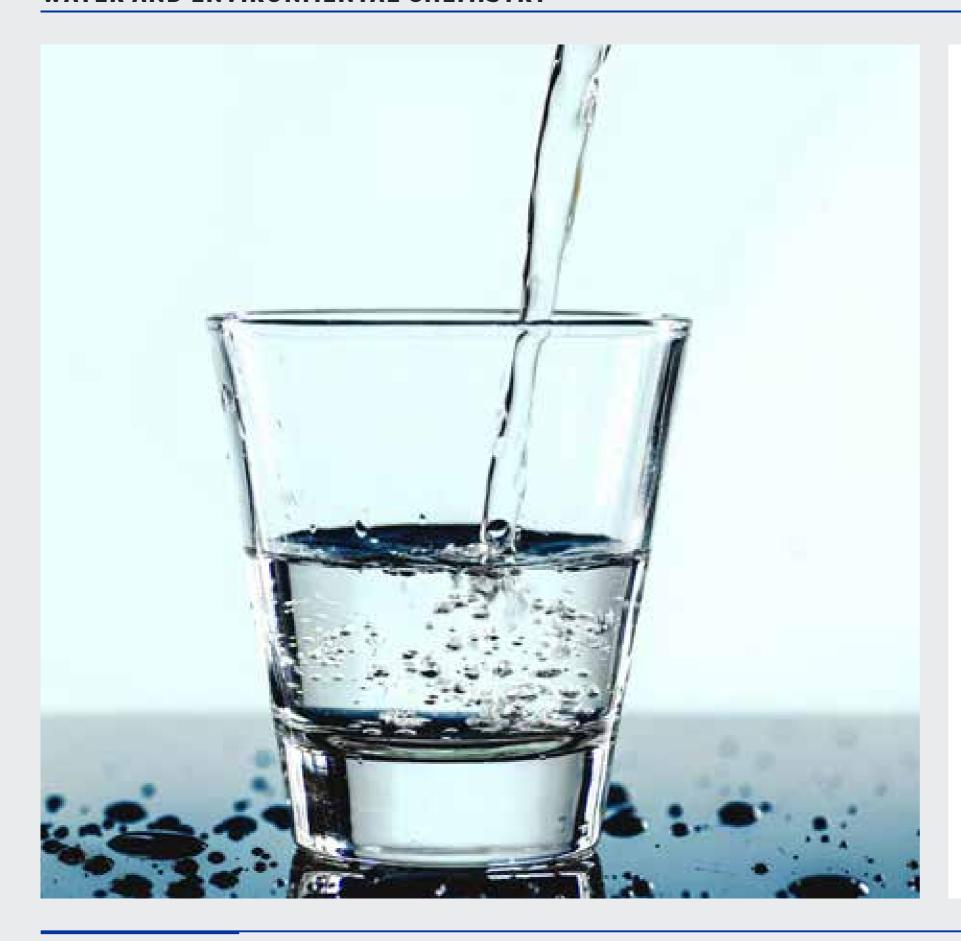
Increasing legislation controlling permitted levels of agricultural contaminants such as fertiliser run-off and over-sprayed herbicides and pesticides means it has never been so important to ensure laboratory analysis of these potentially harmful substances is as accurate as possible. Typically present at low concentrations, they can still impact on the ecosystem and cause damage.

In many regions the majority of drinking water is sourced from rivers and reservoirs, which collect water from a range of environments, including agricultural, urban and potentially industrial areas. Regular monitoring of these diverse water types is required by governmental regulation to ensure the safety of the water we drink and the environment we live in.

The Fapas® Water and Environmental Chemistry Scheme assesses the performance of laboratories in the water and environmental testing sectors, and our range of proficiency testing schemes provide the opportunity to monitor laboratory quality on a global scale. Our extensive programme covers a wide range of water types including, drinking, waste, high salinity, and surface waters, and is complemented by schemes for emergency chemical contamination, taste and odour chemical identification, and soil chemistry.



WATER AND ENVIRONMENTAL CHEMISTRY



Water and Environmental Chemistry Proficiency Testing Schedule

Materials / Products	Type of Test / Properties Measured
Drinking water (potable water) High salinity water Soil (contaminated) Surface water Waste water (effluent)	Acid herbicides Anions Alkalinity BTEX (benzene, toluene, ethylbenzene, styrene, xylene) Cations Chlorine (total + free) Cr (VI) Cyanide (total) Flurosurfactants (PFOS, PFOA) Haloacetic acids Inorganic disinfection by-products Major inorganic components Metals (routine, toxic, trace) Minerals Nitrogen (total + Kjeldahl) Nutrients (complex + simple) Organochlorine (OC) pesticides Organophosphate (OP) pesticides Oil and grease Oxygen demand (BOD, COD, TOC) Oxygen (dissolved) Perchlorate pH + conductivity Phosphorus (total + orthophosphate) Phthalates Polycyclic aromatic hydrocarbons (PAHs) Routine components Solids (dissolved, suspended, total) Sulphide (total) Triazine + urea (uron) pesticides Trihalomethanes / chlorinated solvents Uranium VOC

For the accreditation status of Fapas[®] proficiency testing programmes, please see our schedule of accreditation at www.fapas.com

Modern water distribution systems in developed countries provide clean water to vast populations, so regular monitoring of water quality in terms of microbiological safety is highly regulated.

A failure in the system could lead to a significant public health risk, if contamination with a pathogenic organism were to enter such a widespread and essential commodity. Rather than looking for pathogens themselves, which should never be present at detectable levels in a well-controlled system, laboratories look at the overall hygienic status of the water, and specifically look for organisms which would indicate a failure of the treatment system. Such organisms should be absent or below the set limit for drinking water.

The Fapas® water and environmental microbiology scheme covers all the common indicator organisms for drinking water, as well as Legionella spp. in environmental (cooling) waters and common water parasites associated with water treatment failure (Cryptosporidium).

The programme also covers water quality tests for swimming pool and spa waters and tests for outdoor bathing waters whether they are swimming lakes or beach bathing.



WATER AND ENVIRONMENTAL MICROBIOLOGY



Water and Environmental Microbiology Proficiency Testing Schedule

Materials / Products	Type of Test / Properties Measured
Lyophilised vials	Enumeration
PBS suspensions	Total coliforms
Drinking Water	E. coli
Swimming Pool Water	TVC (37°C/24hours)
Bathing Water	Colony counts (22°C/3 days)
Environmental Water	Colony counts (37°C/2 days)
	Enterococci
	Clostridium perfringens
	Pseudomonas aeruginosa
	Coagulase positive staphylococci
	Total staphylococci
	Legionella spp.
	Parasitology
	Cryptosporidium oocysts
	Giardia cysts
	Detection
	Organism Identification
	E. coli O157
	Campylobacter spp.
	Salmonella spp.
	Legionella spp.

For the accreditation status of Fapas[®] proficiency testing programmes, please see our schedule of accreditation at www.fapas.com

Nearly 35 years after the first product trials, GM foods remain a topic of much discussion. Some territories embrace the technology widely, some restrict the use and cultivation of GM crops and others continue to ban their use in agriculture.

In some quarters, GM foods are seen as the way to feed the everexpanding world population or a means to increase the efficiency (and reduce the environmental impact) of farming. In others cultivation of GM crops is strictly controlled, or even completely prohibited.

Where GM foods are controlled or prohibited, it is important that laboratories testing for the presence of GM are able to detect the modified material. The Fapas® GM proficiency testing materials provide laboratories with the means to independently demonstrate their ability to correctly analyse for the most commonly encountered GM crops, such as maize and soya.

Genetically modified crops can reduce the environmental impact of farming and have other environmental benefits such as helping to reduce food waste and improve air quality. Whether it is less time spent on a tractor tilling soil, which helps to reduce carbon emissions, or applying less insecticides, GMOs help farmers to reduce their environmental footprint in many ways. Additionally, genetically modified crops enable farmers to grow more crops using less land while applying fewer chemicals and conserving water and energy.

The recent development of drought tolerant maize, aiming to improve yields for farmers in dry climates, especially Africa where improved food production is needed most, may also prove important elsewhere as global warming continues.



GENETICALLY MODIFIED FOODS



GM Foods Proficiency Testing Schedule

Materials / Products	Type of Test / Properties Measured
Soya flour	Detection & identification / quantification
Maize flour	35S Promoter
Wheat flour	Bt11 maize
Animal feed	Bt176 maize
Mixed flours	GA21 maize
Processed/baked product	Maize (contamination)
Tobacco	MIR604 maize
	MON810 maize
	MON863 maize
	MON8817 maize
	MON89788 soya
	MON89034 maize
	NK603 maize
	NOS Terminator
	Other GM Event
	Rice (contamination)
	Roundup Ready (40-3-2) soya
	Soya (contamination)
	TC1507 maize

For the accreditation status of Fapas[®] proficiency testing programmes, please see our schedule of accreditation at www.fapas.com

FAPAS® CONSULTANCY SERVICE

For when you need that expert on hand to advise on best-practice industry standards to deliver both quality and process improvement across your laboratory systems.

By combining process mapping, functional trending, a variety of analyses, and the use of process metrics and controls, Fapas[®] can provide a highly effective service for improving quality control processes.

Root cause analysis is crucial to increase the speed of resolving complex quality issues or to eliminate intractable problems once and for all. Our remedial services are practical and effective, and can result in tangible benefits including faster production, higher quality output, increased customer satisfaction, lower cost, and better execution. Training is a cornerstone of our consultancy framework and provides the tools to individuals and teams to help eliminate problems once and for all.





Fapas® has authored many peer-reviewed publications and technical papers in this area; our consultants apply their expertise to develop and enhance quality control systems and processes for your testing laboratory. By implementing integrated, efficient, and flexible quality processes our clients are able to adjust to rapidly changing marketplaces, reduce delays, and enhance their customer satisfaction, encourage collaboration with partners and customers, and optimise utilisation of resources.

For nearly 30 years, Fapas® consultants have provided their customers with world-class data-driven process improvements to drive high performance.

FAPAS® IN ACTION - CASE STUDIES

"How can you help me with my analytical problems?"

Fapas[®] collaborated with a national food producer to investigate issues arising with their nutritional data, which was not meeting the necessary requirements. Fapas[®] used problem-solving techniques, expertise, and a thorough understanding of the information to break down the complexities of the issues faced by the business, and get to the root cause of the problem, by focusing on areas of immediate concern.

Fapas® proficiency tests and consultancy services compared the fitness-for-purpose of the customer's existing nutritional testing methods and highlighted areas for improvement. The existing testing methods were found not to meet the strict requirements of nutritional compliance.

To address this issue, Fapas[®] recommended the sustained use of quality control samples to build an ongoing control chart, providing an effective monitoring tool for the customer's analytical methods and processes. The feedback gained from using the QC samples provided by Fapas[®] significantly improved the producer's analysis methods, allowing them to meet compliance criteria to ensure their foodstuffs could stand up to regulatory scrutiny.

"I need to know if my global supplier network is proficient."

Fapas® worked with a global manufacturer to provide a network-wide proficiency testing programme and a dedicated Technical Account Manager to work closely with their team. Together they designed tailor-made schemes specific to the needs of the customer's situation. A fully comprehensive overall report was produced for the responsible Quality Manager detailing the performance of their laboratories and highlighting any trends or issues.

This process enabled the customer to have full oversight of the performance of their laboratory network (both internal and external) allowing them to take correcting action and deploy resources where they were required. Additionally, with consultancy from the Fapas® Technical Manager, the customer was supported in effectively interpreting the results of the proficiency tests, allowing them to gain the maximum possible benefit from their investment.

Fapas[®] also managed the fulfilment of the ordering process, which reduced the time required to register their laboratories and schedule their testing schemes.

Fapas® has a network of Agents to help you locally. Please contact your nearest office:

Argentina Phone: +5411-4701-6262

b.barloqui@r-biopharmlat.com.ar k.irgui@r-biopharm.fr

Phone: +7 495 707 28 68 pt@stylab.ru

Phone: +49 40 49294 2930 fapas@eurofins.de

Australia

Phone: +61 (0)3 9416 0093 info@biosys.com.au

Phone: +7 495 707 28 68

Azerbaijan

pt@stylab.ru

Belgium

Phone: +32 2 736 62 18 carlos.maes@bio-line.eu

Belarus

Phone: +7 495 707 28 68 pt@stylab.ru

China (Shanghai) Phone: + 86 13311603693 jan_shen2001@aliyun.com

China (Beijing) Phone: +86-10-88026887 leifh@clovertek.com

Phone: +202 0114 15 215 26 pts@targetls.net

Estonia

Phone: +7 495 707 28 68 pt@stylab.ru

Phone: +33 478643200

Georgia

Phone: +7 495 707 28 68 pt@stylab.ru

Germany

Phone: +49 40 49294 2930 fapas@eurofins.de

Greece

Phone: +30-210-2934745 info@qacs.gr

Indonesia

Phone: +62 811824811 marketing@rnd.co.id

Israel

Phone: +972572400503 assafy@eldan.biz

Italy Phone: + 39 02 89540225

giovanna.lampis@starecotronics.it badania@nuscana.pl

Phone: +81 3 5627 8150 fapas.info@cscjp.co.jp

Kazakhstan Phone: +7 495 707 28 68

pt@stylab.ru

Phone: +81 2529 2282 kisan@kisanbio.com

Kyrgyzstan

Phone: +7 495 707 28 68 pt@stylab.ru

Phone: +7 495 707 28 68 pt@stylab.ru

Lithuania

Phone: +7 495 707 28 68 pt@stylab.ru

Malaysia

Phone: +603-5122 5108 fapas@tms-lab.com

Moldova

Phone: +7 495 707 28 68 pt@stylab.ru

Pakistan

Phone: +92 42 3733 9116 saq@swissconsulting.co

Philippines Phone: +6324410430

r.alaba@fil-anaserve.com

Poland Phone: +48 61 868 6272

Portugal

Phone: +351 22 996 20 69 artur.melo@ambifood.com

Russia

Phone: +7 495 707 28 68 pt@stylab.ru

South Africa

Phone: +27 11 691 6500 alet@aecam.co.za

Phone: +34 91.504.66.02

info@setelsl.com

Switzerland

Phone: +49 40 49294 2930 fapas@eurofins.de

Taiwan

Phone: +886228484509 biotic@ms64.hinet.net

Tajikistan

Phone: +7 495 707 28 68 pt@stylab.ru

Thailand

Phone: +6628817404 sales@scientificsupply.co.th

Turkey

Phone: + 90 232 464 8006 edip@sincer.com.tr

Turkmenistan

Phone: +7 495 707 28 68 pt@stylab.ru

Ukraine

Phone: +7 495 707 28 68 pt@stylab.ru

United Arab Emirates Phone: +971-4-2852211

salesexecutive@bdhme.com

United States of America Phone: +18507278107

orders@biofronttech.com

Uzbekistan Phone: +7 495 707 28 68

pt@stylab.ru

Vietnam

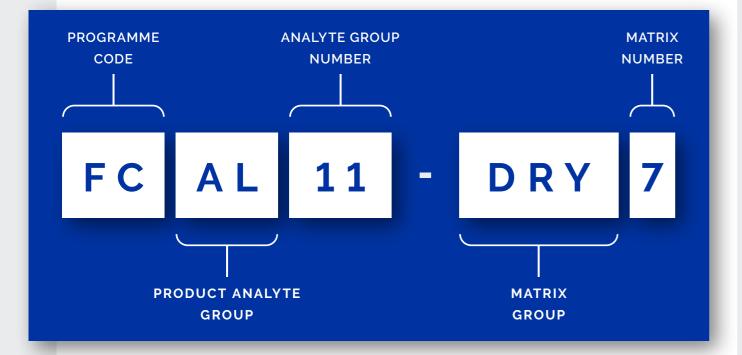
Phone: +84 8 3726 0440 fapas@nghiphu.com



FAPAS® PRODUCT CODES EXPLAINED

We've made our product codes even simpler!

We've organised our codes by programme, analyte group and matrix so you can quickly understand your product exactly. As our product offering is so extensive see the list below of all the programme, analyte and matrix groups we offer.



So for **FCAL11-DRY7** this product is within the food chemistry programme, number 11 within the allergens sub group, and number 7 in the dairy matrix group.

Programme Code

Code	Programme
FC	Food Chemistry
BL	BLANK (Food Chemistry)
FG	Fapas [®] GM
FM	Food Microbiology
FW	Fapas [®] Water

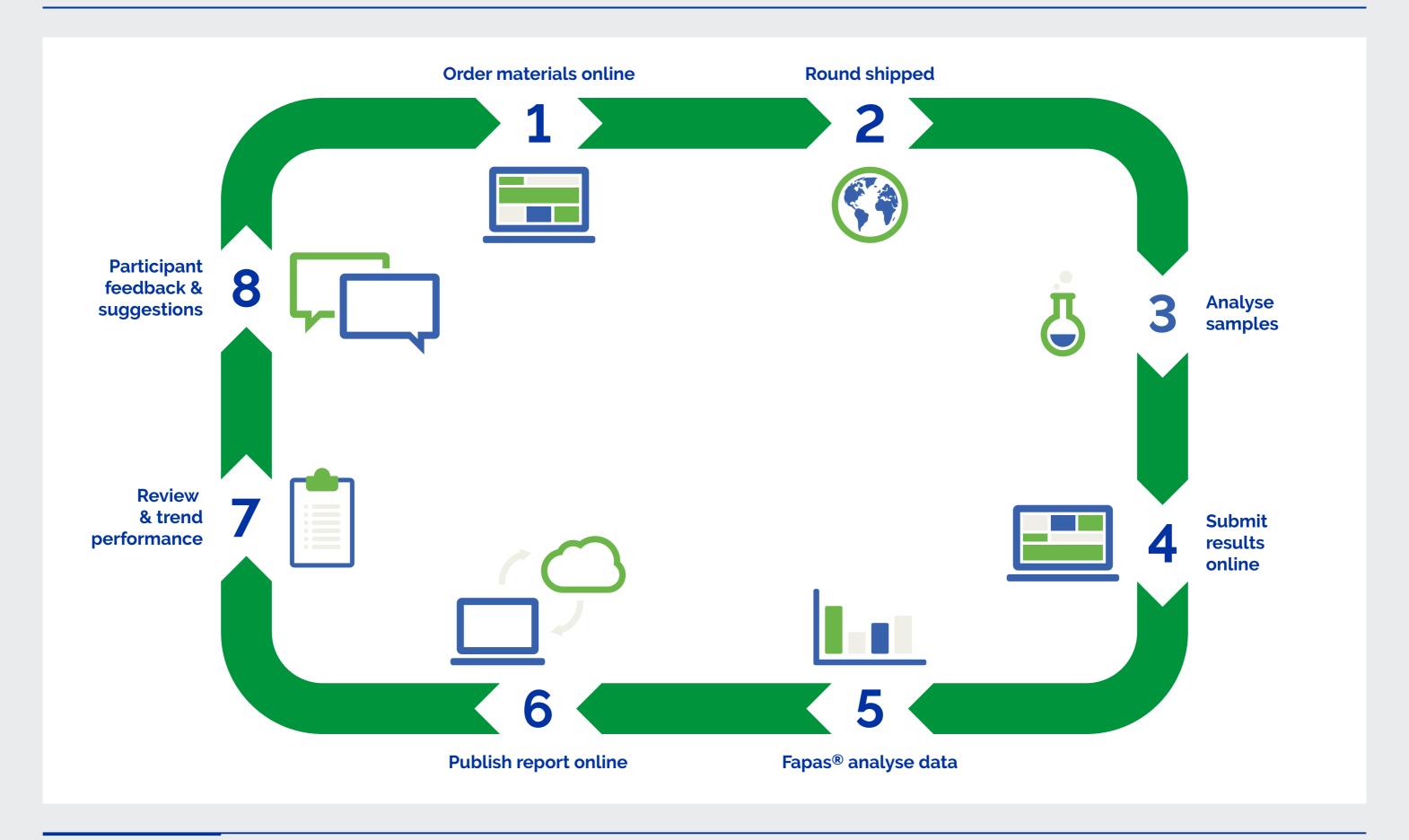
Analyte Group

OH AL AA AC AS CO	Alcohol (OH) Allergens Authenticity: Adulteration Authenticity: Contamination Authenticity: Speciation Contaminants: Overall migration (packaging contaminants)
AA AC AS	Authenticity: Adulteration Authenticity: Contamination Authenticity: Speciation Contaminants: Overall migration (packaging
AC AS	Authenticity: Contamination Authenticity: Speciation Contaminants: Overall migration (packaging
AS	Authenticity: Speciation Contaminants: Overall migration (packaging
	Contaminants: Overall migration (packaging
00	
CO	
CE	Contaminants: Environmental PAH
СР	Contaminants: Processing Contaminants
CS	Contaminants: Specific migration (phthalates, BPA, PAA)
СМ	Contaminants: Metals, Trace elements
FO	Fat, Fatty Acids and Oil
FA	Food Additives and Ingredients
OE	Food Microbiology: Organism Enumeration
OD	Food Microbiology: Organism Detection
GM	GM
MA	Mycotoxins: Aflatoxins
ME	Mycotoxins: Ergot Alkaloids
MF	Mycotoxins: Fusarium toxins
ММ	Mycotoxins: Multi-Mycotoxins
МО	Mycotoxins: OTA
MP	Mycotoxins: Patulin
NC	Nutritional, Proximates: Nutritional Components
NE	Nutritional, Proximates: Nutritional Elements
NV	Nutritional, Proximates: Vitamins
PM	Pesticides: Multi Residue Methods
MS	Pesticides: Single Residue Methods
QH	Quality: Honey
QO	Quality: Olive Oil
QT	Quality: TVB-N
VD	Vet Drugs

Matrix Group

Code	Programme
AFE	Animal Feed
PFO	Pet Food
DRY	Dairy
EGG	Eggs
INF	Infant food
DRA	Alcoholic Drinks
DRN	Soft Drinks
DRH	Tea, Coffee & Hot Drinks
FRU	Fruit & Fruit Purees
VEG	Herbs, Salad & Vegetables
SEA	Fish and Seafood
MRP	Meat (raw and processed)
UNF	Non-Food Media
CCP	Cereals and Cereal Products
FAT	Fat
NUT	Nuts
OIL	Oil (olive and vegetable)
PMM	Packaging materials and migration simulants
CON	Confectionery and Condiments
HON	Honey
SUP	Nutritional Supplements
PRO	Processed products and baked goods
SPI	Spices
ТОВ	Tobacco
DRW	Drinking Water
EWW	Environmental

36 Proficiency Testing Programme 2019 - 2020 Visit: www.fapas.com Get in touch: info@fapas.com Call us on: +44 (0)1904 462100 37



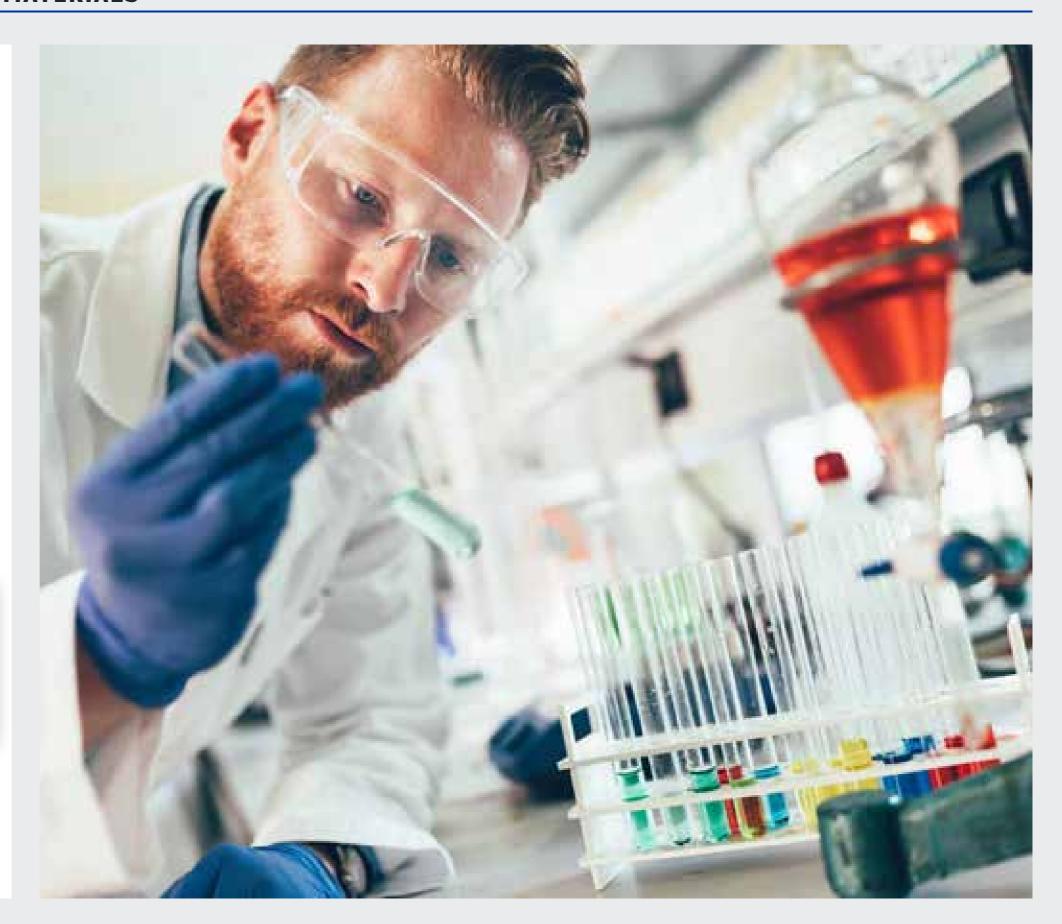
Key to supporting your monitoring of laboratory results, as required in ISO/IEC 17025, is the use of quality control and reference materials alongside your proficiency testing.

Proficiency testing is the only way of independently validating your laboratory results; but whilst it represents the ultimate test of your laboratory it is generally not practical to use for routine control due to the relative infrequency of available rounds. Between rounds the practical way to monitor laboratory results is by the use of quality control materials (QCs), and for more involved projects such as method validation, reference materials (RMs) .

Fapas[®] provides a wide range of quality controls and reference materials from a large selection of food chemistry and GM foods, so we are likely to be able to meet your needs in this area. QC materials have been used in our proficiency testing rounds and analysed by many laboratories and come with a datasheet detailing the analyte values and performance limits for those values.

Our reference materials are provided with defined traceability to established standards and a data sheet stating the reference values and the expanded uncertainty U for those values. Our materials are generated according to the principles of ISO 17034.

Fapas[®] has a wide range of QCs and RMs available to purchase, covering allergens, authenticity, pesticides, vet drugs, GM foods, mycotoxins and many more. We also provide blank materials, which are an essential tool in method validation, especially where matrixmatched standards are required.



NEW FEATURES

What's New



Multiple Results Submission

You can now submit more than one result in each of our PTs allowing you to:

- Compare different methods
- Compare performance of analysts
- Demonstrate analyst competence
- Your nominated result will appear in the report and your additional results appear on Fapas[®] SecureWeb

Improved Charting

- Online trending is now available for all our programmes
- A new range of filters to display the data you need quickly and clearly
- Export data into Excel format, to produce control charts and feed into your existing quality control procedures

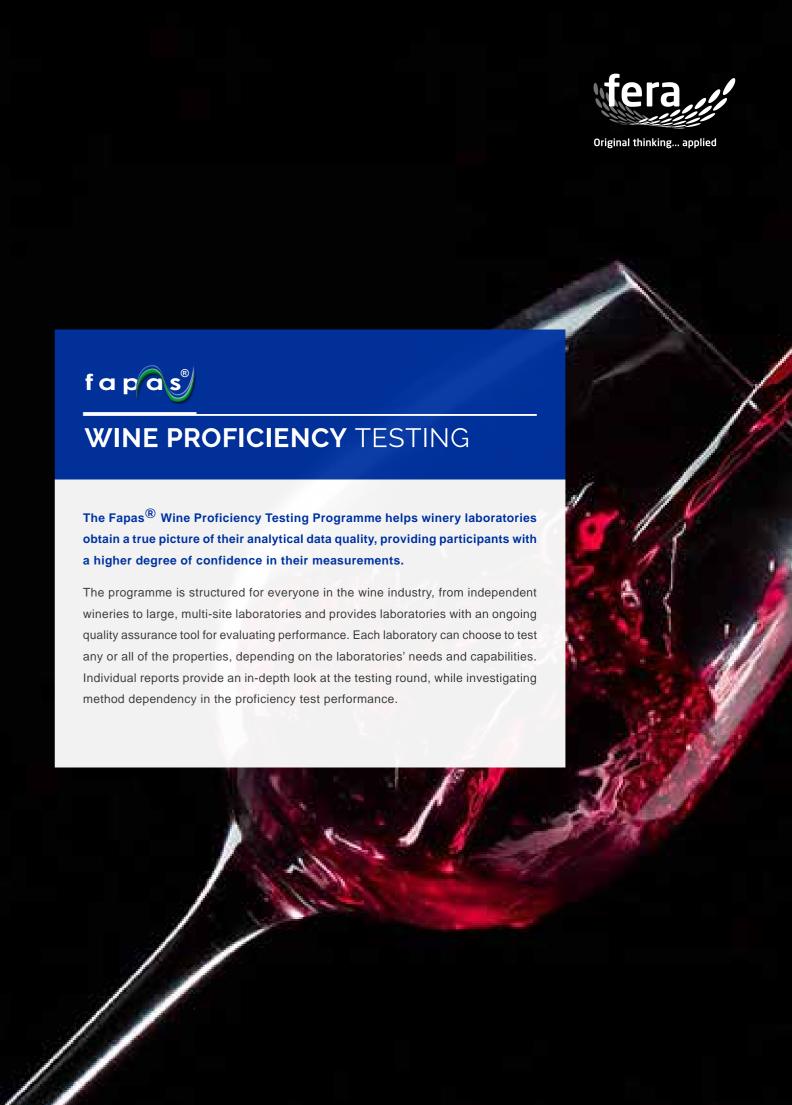




Easy Re-ordering

You can now save time and use our easy re-ordering tool to purchase tests you've ordered in previous years.

- Tests purchased the previous year will automatically be added to your basket
- Shop for additional tests in the Fapas[®] shop
- View your Proficiency Test orders and quotations





PROFICIENCY TESTING

Fera Science Ltd

National Agri-Food Innovation Campus (NAFIC) Sand Hutton, York, YO41 1LZ United Kingdom



www.fapas.com

✓ info@fapas.com

+44 (0)1904 462100



Fera Science Ltd is a company registered in England and Wales with Company Number 9413107. VAT Registered number GB618184140. Products and services availability may change at any time without prior notice given and all content are for illustration purposes only.