# NEWSLETTER N°117 - SEPTEMBER 2015





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# **New Programs for 2015-2016**

We are pleased to announce the launch of several new programs for 2015-2016 annual series.

# **New PT in WATERS:**

- 78 Tasting analyses on drinking water ODOUR and FLAVOUR: this program is composed of one round, scheduled in November, 2015. Participating laboratories will receive two samples of 1 liter each with different flavours and odours. The requested parameters are the determination of the threshold odour number (TON) and threshold flavour number (TFN).
- Options of PT 37/53 Micropollutants: in order to meet laboratories needs, we decided to reorganize our current options 37/53 Micropollutants:

# **OPTIONS 37 Fresh Waters** 37B - PBDE 37C - Alkylphenols and Bisphenol A 37D - Organotins 53D - Organotins 37E - Chloroanilines 37F - Chloroacetic acid 37G - Epichlorhydrin 37H - Polychlorinated alkanes 371 - Acrylamide 37J - Nitroaromatics 37K - Chlorophenols 37L - Perfluorinated compounds

# **OPTIONS 53 Waste Waters**

53B - PBDE

53C - Alkylphenols and Bisphenol A

53E - Chloroanilines

53F - Chloroacetic acid

53G - Epichlorhydrin

53H - Polychlorinated alkanes

53J - Nitroaromatics

53K - Chlorophenols

53L - Perfluorinated compounds

# **New PT in DAIRY FOOD:**

- 76 Contaminants: this new program is composed of five rounds and is dedicated to the analyses of contaminants in dairy food (pesticides, PCB, PAH, trace elements, M1 aflatoxin, Melamine, Cyanuric acid).
- 75 Physico-chemical analyses: participating laboratories will receive two samples in order to analyze caloric value, minerals, vitamins and fatty acids parameters. This program is composed of one round scheduled in January 2016 and it will evoluate during the year, once the Technical group will be set up.
- 74 Melamine and cyanuric acid: one round is planed in November 2015 and laboratories will perform analyses on milk.
- 31d Mycotoxins: this PT is scheduled in May 2016 and participating laboratories will analyse M1 aflatoxin in milk.

If you are interested in joining those programs, please contact us: shellali@bipea.org

# **NEW ANNUAL SERIES**

We wish you a good 2015 - 2016 Annual Series

# 2015-2016 EDITION CODE

Your new Edition Code is now available. You can obtain it directly from BIPEA website.

This code changes each year, at the begining of our annual series (September) and enables you to identify your results in the Interlaboratory Comparisons reports.

To obtain it, please log into your member area (www.bipea.org).

You can also contact our sales department: sales@bipea.org

# SAVE THE DATE!

The 2015 General Assembly of BIPEA will held on December 10. 2015 in Paris.

Further information will be sent in the upcoming days.

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# MASTER ALL THE FEATURES OF YOUR MEMBER AREA

Your new member area is available and gives you access to several features.

# Access to your online results

This new platform has been adapted to meet your requirements for the receipt of your results. In addition to receiving the interlaboratory comparisons reports by email, you have access to your personalized results. You can thus export your results into Excel format, from your member area according to the available selections (by program, by round, by criterion), and so facilitate your in-house treatment.

# Schedules of the programs and stocks of ERM samples

With this platform you can:

- Access to the schedules of your PT programs in order to organize your work in your laboratory,
- Access to the schedules of all PT programs offered by BIPEA. This information is useful if you want to participate in other PT programs.
- Consult ERM's stock in real-time. So you will be able to send us your order and it will be treated the following day.

Log into the member area with your usual passwords. You will see at the top left side, two links:

- Export your results
- Planning trials

A leaflet is also available. Please contact our sales department: sales@bipea.org

# **EXHIBITIONS AND WORKSHOPS**

As part of our international development, we regularly participate in exhibitions / workshop in analytical fields. In 2015, we participated in the following events:

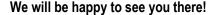
- Pittcon New Orleans (USA) March 8-12, 2015
- Americana Montreal (Canada) March 17-19, 2015
- Arablab Dubaï (UAE) March 23-26, 2015
- Forum Labo Paris (France) March 31 April 2, 2015
- Korea Lab Seoul (South Korea) April 21-24, 2015
- Asia LabEx Delhi (India) August 25-27, 2015.

We thank all people that we have met during those events.

# We will be present in the following exhibitions / workshops:

- September 21-25, 2015 => ICCE Leipzig (Germany)
- October 7-8, 2015 => **Lab Technology Utrech** (The Netherlands)
- October 6-8, 2015 => **AsiaLab Kuala Lumpur** (Malaysia)
- October 21-24, 2015 => Pollutec Casablanca (Morocco)

Our presence at those events is the opportunity to present our new programs and to strengthen our representation abroad.







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# IMPORTANT INFORMATION ABOUT THE 2014 NEW VERSION OF THE T90-431 FRENCH STANDARD (PT 50 - WATERS MICROBIOLOGICAL ANALYSES LEGIONELLA)

French standard T90-431 (Water quality - Detection and enumeration of *Legionella spp* and *Legionella pneumophila* - Method by direct seeding and after concentration by membrane filtration or centrifugation) was recently amended; a new version was in fact published in November 2014. The current assessment is that the implementation of the protocol is tedious for the majority of laboratories using this method, with low recovery rates of microorganisms.

However, this new version is transient since the ISO 11731 standard shall apply in 2017.

# Adaptation of the PT 50's samples according to the requirements of the new protocol

BIPEA adapted the samples of its PT 50 [Waters: microbiological analyses *Legionella*] to take into account the technical difficulties caused by this new analytical protocol.

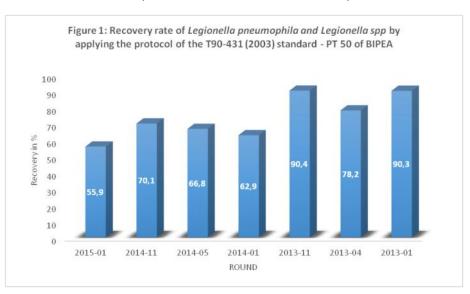
An experimental design was developed with 3 variables: i) microbial strain, ii) microbial concentration and iii) type of membrane. This study allowed to select *Legionella* strains that meet the requirements of the new protocol T90-431 standard in terms of acid treatment resistance.

# Comparisons of T90-431 standard analytical protocols

The round of May 2015 from the PT 50 implemented samples which can be analyzed according to the protocol of the standard T90-431 (2014). The results are consistent with those expected with yields of around 26% on average for all participants, confirming the observations of BIPEA during its preliminary study of strain selection. This low yield is due to the chemical stress on the microbial cells during the acid treatment. This stress was accentuated by the selective agents present in the GVPC media, which have a negative effect on the microbial cells of *Legionella* resulting in viable but non-culturable cells with a risk of false negative results

We proceeded to the establishment of a balance sheet, on previous testing, to assess the performance levels according to the protocol of the T90-431 standard (2003) and its amendment (2006). The calculations were made from homogeneity controls with 20 determinations per test.

The results show that the yield rates under the old protocol varies between 56% and 90% (see Figure 1). The observed yields with the 2003 protocol T90-431 standard are superior to those obtained with the 2014 protocol to the same standard



# Conclusion

If we do not have enough hindsight from the tests with the 2014 protocol of the T90-431 standard, it is undeniable that the microbial cell recovery rate is low compared to the old protocol.

The results used were obtained from the analyzed samples within the framework of proficency testing, which means using artificially spiked samples containing cells of *Legionella* in optimal physiological condition.

However, naturally contaminated samples analyzed routinely by laboratories and containing microbial cells that have undergone one or more stress would highlight a major problem for the recovery of these cells by applying the new protocol. Underestimation of the microbial population in contaminated samples is very likely.

For any further information please contact our Scientific and Technical Manager: M. BOUBETRA aboubetra@bipea.org

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# **QUALITY NEWS**

Quality is an ever-evolving matter. Please find below a summary of progress in standardization over recent months, based on publication in the official standards update of the AFNOR magazine Enjeux N°355, 356, 357. The different standards are classified according to the concerned PTS, but should not be considered as exhaustive.

#### **WATERS**

#### ISO 17690:2015 IS March 2015

Water quality -- Determination of available free cyanide (pH 6) using flow injection analysis (FIA), gas-diffusion and amperometric detection.

### NF ISO 9697 HOM June 2015

Water quality -- Gross beta activity in non-saline water -- Test method using thick source.

# NF EN 15768 HOM May 2015

Influence of materials on water intended for human consumption. GC-MS identification of water leachable organic substances.

#### **SOILS**

#### ISO 17318:2015 IS June 2015

Fertilizers and soil conditioners -- Determination of arsenic, cadmium, chromium, lead and mercury contents.

# ISO 17319:2015 IS May 2015

Fertilizers and soil conditioners. Determination of water-soluble potassium content. Potassium tetraphenylborate gravimetric method.

### ISO 17322:2015 IS June 2015

Fertilizers and soil conditioners. Analytical methods for Sulfur Coated Urea (SCU).

# **FOOD**

### NF EN ISO 5530-1 March 2015

Wheat flour - Physical characteristics of doughs - Part 1: determination of water absorption and rheological properties using a farinograph.

# NF EN ISO 5530-2 March 2015

Wheat flour - Physical characteristics of doughs - Part 2: determination of rheological properties using a extensograph.

#### NF EN ISO 17715 February 2015

Flour from wheat (Triticum aestivum L.) - Amperometric method for starch damage measurement.

# NF EN ISO 17718 February 2015

Wholemeal and flour from wheat (Triticum aestivum L.) - Determination of rheological behaviour as a function of mixing and temperature increase.

# NF EN 15948 May 2015

Cereals - Determination of moisture and protein - Method using Near-Infrared-Spectroscopy in whole kernels.

# NF EN ISO 12966-1 April 2015

Animal and vegetable fats and oils - Gas chromatography of fatty acid methyl esters - Part 1 : guidelines on modern gas chromatography of fatty acid methy esters.

# **BIPEA**

Provider of Proficiency testing programs in physical, chemical and microbiological domain since 1970 (grains, milling, feed, waters, soils, beverages, food, sunscreen)

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