EU PROFICIENCY TEST
EUPT-SRM12, 2017

Residues of Pesticides Requiring Single Residue Methods

Test Item: Strawberry Purée

Survey on EUPT-SRM12

(11 – 22 May, 2017)

July 2017

Q1: HOW SATISFIED ARE YOU WITH THE EUPT-SRM12?

Q1-1: PT Organisation (PT annoucement and assistance before, during and after PT)

		Answer	Ratio
5		65	51 %
4		46	36 %
4 + 5		111	87 %
3		12	9 %
2		4	3 %
1		0	0 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.4	

Positive comments:

- I was very satisfied with all aspects of the EUPT, especially with the amount of information provided at every stage.
- The overall organisation was good.
- Method information on captan/folpet was great.

Negative comments and suggestions for improvement:

- Method information for Captan/Folpet provided too late (3×)
- Too many emails (2×)
- Too much information and not clearly organised (1×)
- Confusing the postponements of the deadline (1×)
- Too many email addresses (1×)
- Send z-scores in a shorter time (1×)

Reply by organisers:

- For the future the intention is not to distribute method information on EUPT-SRM relevant compounds during the PT period.
- It will be checked whether the preliminary report can be released in a shorter time after the PT-deadline. Please consider that in the present PT certain information that was important for the evaluation (e.g. second significant figure for carbofuran) had to be requested from some labs before proceeding with evaluation for the preliminary report.
- It will be considered reducing the number of emails prior to, during and after the PT and to improve the flow of information in general. Where indicated and possible, the intention is to address only affected participants rather than all. Please consider that the malfunction of the PT data submission software has increased the number of emails and that several emails concerned reminders to fill-in data correctly in order to reduce communication afterwards.
- Where possible, we will strive to use the main email address (eurl-srm@cvuas.bwl.de), but please note that in the following two cases emails have to be sent from an individual address for technical

or IT-security reasons: 1) Registration confirmation (sent from noreply@eurl-pesticides-datapool.eu); 2) Your login confidentials (sent from noreply@food.dtu.dk). Individualized circular emails so far sent from pat.schreiter@cvuas.bw.de will be sent from the main email address (eurl-srm@cvuas.bwl.de).

- On the day of the original deadline an unexpected technical problem in the surver room happened, so that the submission was not possible for a while. In addition, some laboratories reported some problems with enterred data not being tracked. To minimize the risk of missing information and laborious data collection afterwards, it was decided to shift the data submission deadline. As in many countries the staff of laboratories is on vacation within the two weeks surrounding Eastern it was decided to shift the deadline by 10 days.

Comment on the survey:

- I do not like surveys, because they take much more time than indicated if filled in contentiously (otherwise kind of useless)

Reply by Organizers:

- Receiving feedback from participants is very important to us as it helps us improve procedures and quality. In any case, participation in surveys remains optional and if the timing of the survey is unsuitable for a laboratory, there is always the possibility to submit comments, suggestions and critisizm at any time via email or personal contact.

Q1-2: Registration Page (new version connected to EURL-DataPool)

		Answer	Ratio
5		62	50 %
4		51	41 %
4 + 5		113	90 %
3		11	9 %
2		1	1 %
1		0	0 %
Not Applicable		2	–
No Answer		0	–
Average Rating		4.4	

Positive comments:

- Registration was easy.

Negative comments and suggestions for improvement:

- We encountered some problems at the registration, but they were solved very quickly by the EURL team. (1×)

Reply by organisers:

- The registration via a website connected to the EURL-DataPool was a pilot project. It is intended to apply this concept to all EUPTs organized by the 4 EURLs dealing with pesticides in order to reduce the burden of labs participating in more than one EUPT in a year and to avoid the administrative effort of crosschecking and updating data between different databases.

Q1-3: Information and instructions provided by the organisers

		Answer	Ratio
5		69	54 %
4		44	35 %
4 + 5		113	89 %
3		14	11 %
2		0	0 %
1		0	0 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.4	

Positive comments:

- Very good
- The updated information on captan and folpet is particularly useful.

Negative comments and suggestions for improvement:

- Special sample handling advices help get lower coefficient of variation, however this doesn´t reflect routine situation. (1×)
- New proceedures from EURL, e.g. captan, are not very helpfull while a PT is going on, either (at least 2 months) before or after PT. (2×)
- Too many emails / too much information that was difficult to keep track of (4×)
- Too many email addresses used

Reply by organisers:

- When dealing with fruits and vegetables, it is virtually impossible for a PT to reflect the real situation in all laboratories. This already starts from the fact that a homogenate is sent rather than the fresh product. It is well known that handling of homogenates can have a strong influence on the results of certain analytes. To minimize this influence, some advice is given to the participants. In addition, laboratories are requested to provide information on specific sample handling steps such as defrosting procedure, initial sample temperature and extraction time, which can help localize the source of errors.
- Too many emails, too many email addresses and information released during the PT or just before the deadline: Please refer Q1-1: PT-Organisation

Q1-4: Shipment/Delivery

		Answer	Ratio
5		95	75 %
4		21	17 %
4 + 5		116	91 %
3		8	6 %
2		2	2 %
1		1	1 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.6	

Positive comments:

- Good!
- We have received test item and blank material within less than 24 hours from shipment in remarkable condition.
- The follow up after the incident (= Labels had come off the sample pots) in order to tell apart the containers was good.

Negative comments and suggestions for improvement:

- Label was detached from the bottle (4×)
- I would like to see the name of the responsible person to be clearly stated on the parcel, because our parcel was lost in the building because one of the label didn't have the name and on the other label the name was written but in very small letter. So the parcel was open by unathorized person. (1×)

Reply by organisers:

- Several participants reported that one or both labels had come off the plastic bottles. The suitability of the lables will be re-tested and, if necessary, alternative solutions will be sought, (e.g. alterantive lables, special identification marks on bottles).
- The design of waybills is made by DHL. We had already given DHL our suggestion for a clear and larger display of recipeint.
  Once your package was picked by DHL and registered in the system, you will receive an information mail with tracking number of your package. From this point you can follow your package online and can inform your reception about this DHL-package and its tracking number.
  The recipient is normally stated on each of the waybills, even if the shipment consists of more than one packages. Please contact us or send us photos of your waybills so that we can try to find out where the error was.

Q1-5: Test Item

		Answer	Ratio
5		98	77 %
4		19	15 %
4 + 5		117	92 %
3		10	8 %
2		0	0 %
1		0	0 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.7	

Positive comments:

- The amount of test item is adquate for analysis.
- Good
- Very good, that we got 2 portions.
- Very high quality (temperature, homogen)

Negative comments and suggestions for improvement:

- Label had come off both of the bottles (3×). Preliminary screening was necessary in order to know which bottle contained blank and which bottle contained sample (2×)
- Test item arrived partially melted. (1×)
- The opening mechanism on the plastic container was horrible. We required a pair of tongs and a good amount of strength to open it. (1×)
- Sometimes the amount of test sample is not enough to screen all methods and perform confirmatory methods. (1×)

Reply by organisers:

- Problem with labels: Please refer Q1-4: Shipment/Delivery
- Within the current PT, the sample was partly melt at arrival only if it has been on the way more than two days. Mostly it was due to delay at customs, and neither we as organiser nor DHL as curier can hurry up this procedure. Participants should consider contacting the customs and ask either for cooling the package during the time required for clearance or accelaration of the procedure. In this point we would like appeal to participants from countries and location, where shipment with dry ice is not allowed or where delays at the customs are expected, to pay speciall attention to their package delivery via the online tracking tool. In case of delays, DHL or the customs should be contacted.
- Another container will be tested in order to see, if it would be better and easier to open at very low temperatures.
- The amount was calculated to be sufficient for the majority of laboratories (based on sample portion data we have collected in the past). The main limitation are methods for dithiocarbamates where some labs use very large amounts, e.g. 100 or 200 g.

Q1-6: Blank Material

		Answer	Ratio
5		99	78 %
4		20	16 %
4 + 5		119	94 %
3		8	6 %
2		0	0 %
1		0	0 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.7	

Positive comments:

- Good
- Good, that we got 2 portions.

Negative comments and suggestions for improvement:

- Labels had come off both of the bottles. Preliminary screening was necessary in order to know which bottle contained blank and which bottle contained sample (2×)
- Blank material arrived partially melted. (1×)
- The opening mechanism on the plastic container was horrible. We required a pair of tongs and a good amount of strength to open it. (1×)
- Sometimes the amount of blank material is not enough to screen all methods and perform confirmatory methods. (1×)

Reply by organisers:

- Problem with labels: Please refer Q1-4: Shipment/Delivery
- Problem with the condition of blank material at arrival, opening the plastic pots, amount of blank material: Please refer Q1-5

Q1-7: ILISs provided

		Answer	Ratio
5		54	65 %
4		22	27 %
4 + 5		76	92 %
3		6	7 %
2		1	1 %
1		0	0 %
Not Applicable		44	–
No Answer		0	–
Average Rating		4.6	

Positive comments:

- nice, very helpful service which we really appeciate and encourage to increase. (2×)
- very good, because not everybody has ILIS, maybe there will be a better comparison of the results
- That's a very good point that the EURL provides specific ILIS. It would be even better if the EURL could inform the participants about that at the same time as the Target List is released.
- We used our own ILIS purchased by CVUA Stuttgart to follow our standard procedure. (2×)

Negative comments and suggestions for improvement:

- –

Reply by organisers:

- As demostrated in the past EUPT-SRMs the use of ILIS considerably imporves the analytical proficiency of laboratories and it is the easiest way to compensate matrix effects and possible losses during sample preparation. For the future it will be considered informing the participants well in advance to the start of EUPTs about the delivery of the ILISs.

Q1-8: Results Submission Page

		Answer	Ratio
5		40	31 %
4		39	31 %
4 + 5		79	62 %
3		31	24 %
2		11	9 %
1		6	5 %
Not Applicable		0	–
No Answer		0	–
Average Rating		3.8	

Positive comments:

- Very good (1×)
- For standard or official methods is o.k. (1×)
- a lot of questions but still o.k. (1×)

Negative comments and suggestions for improvement:

- method information subpage: not easy to handle special methods or methods differing from the standard ones (1×)
- method information subpage: a bit problematic and didn't work correctly, e.g. getting disconnected and the system lost the data entered and even saved before; data input and save using form-view (edit) didn't work. (9×)
- too much information, too many horizontal and very wild columns on one page, so that one have to score the page to fill in. But the header and the first column were not fixed, so that one lost the orientation while scolling. It was difficult to work with. (8×)
- It would be good to fix the header and the first column (3×)
- Inconsistencies in form-view (edit) and line view, e.g. certain dropdown options existed only in the line view. (2×)
- Too many information and data have to be entered, esp. methodological information, very time consuming (6×)
- One cannot see all information or parameters requested on one page. (2×)
- Using form-view (edit) it was not possible to go to the next or previouse analytes directly. (1×)
- Very slow and very long time needed to update or save a page. (1×)
- Fields should not be mandaroty or can be automatically filled if a standard method without modification was used. (1×)
- Subpage 3 "Method" was very confused, too complex, too many steps. (3×)
- It will be great if result submission page can be simplified. (1×)
- "Fill down" fuction should expanded for all columns. (1×)
- Option to copy parameters in single columns would be appreciated (e.g. Excel). (1×)
- Check Report data via .csv was not helpful/available, results not given (1×)
- Result submission page was not properly accessible. (1×)
- It was very difficult for us to find a proper way to register a non accredited analyte, and even more

difficult if that was a part of a sum where you had to write an LOQ/reporting limit. That resulted in a lot of email correspondence with the organisers. (1×)

- Obviously the EUPT is not only used to check the labs' analytical proficiency but also to collect and achieve data (validation/Datapool). That is very helpful, but if there are analytes not yet within the labs routine scopes, the time for result submission should be a week longer. (1×)

Reply by organisers:

- Based on the comments and suggestions there is a big potentail to improve the submission tool, in particular to simplify structure and the way to enter the data.
- Allthough the pages and functions were checked carefully before opening the data submission website, errors cannot be totally excluded. In case of detected errors, e.g. problems with logging in to the website or with the accessibility of a certain subpage, inconsistencies between the form and line view, inability to export data in the CSV format or errors in the data allocation within the CSV export file, please contact us in order to promptly solve the problem or to assist you.
- Some emails exchanged with participants concerned the collection of missing data in subpages 1 and 2, that remain inaccessible after the deadline. The request to submit LOQ values for summed parameters was done by mistake and affected a few laboratories.
- Please note that the data of the EUPT are not used in the valiadtion database. Currently only the results of the EUPT (not the methodology data) are introduced.
- The restrictions concerning non-accredited / non-targeted analytes concerned other PTs and not the EUPT-SRM.

Q2: Was the matrix used in EUPT-SRM12 (strawberry) relevant for your routine work?

		Answer	Ratio
Yes		**114**	**90 %**
No		**9**	**7 %**
No Opinion		**4**	**3 %**
No Answer		**0**	–

Q3: According to your opinion, were the compound concentrations in the test item adequate for accessing the analytical proficiency of your laboratory?

Q3-1: 2,4-D (AV = 0.079 mg/kg)

		Answer	Ratio
Appropiate		95	98 %
Too High		2	2 %
Too Low		0	0 %
No Answer		30	–

Comments on AV of 2,4-D:

- (too high) Findings of 2,4-D in routine samples are often in the range of 0.01 – 0.1 mg/kg

Q3-2: Captan (parent) (AV = 0.085 mg/kg)

		Answer	Ratio
Appropiate		93	99 %
Too High		0	0 %
Too Low		1	1 %
No Answer		33	–

Comments on AV of captan (parent):

- (too low) captan (parent): 0.50 mg/kg

Q3-3: Chlorothalonil (AV = 0.125 mg/kg)

		Answer	Ratio
Appropiate		108	100 %
Too High		0	0 %
Too Low		0	0 %
No Answer		19	–

Q3-4: Dithiocarbamates (AV = 0.267 mg/kg)

		Answer	Ratio
Appropiate		99	96 %
Too High		1	1 %
Too Low		3	3 %
No Answer		24	–

Comments on Dithiocarbamates:

- (too low) since the USP limit is 2 mg/kg, it will be better the assigned value.
- (too low) MRL for dithiocarbamates are 10 mg/kg
- (too low) about 1 mg/kg
- (too high) Dithiocarbamates in strawberry between 0.05 and 0.15 mg/kg. Routinely we are monitoring dithiocarbamates residues in about 50 strawberry samples/year and we have never found concentrations higher than 0.15 mg/kg.

Q3-5: Fenbutatin oxide (AV = 0.086 mg/kg)

		Answer	Ratio
Appropiate		81	99 %
Too High		0	0 %
Too Low		1	1 %
No Answer		45	–

Comments on Dithiocarbamates:

- (too low) We have no experience with fenbutatin oxide and N-acetyl-glyphosate, and we have big sensibility problems for these compound.

Q3-6: Folpet (parent) (AV = 0.334 mg/kg)

		Answer	Ratio
Appropiate		95	98 %
Too High		2	2 %
Too Low		0	0 %
No Answer		30	–

Comments on AV of Folpet (sum):

- (too high) Folpet: normally seldom found, only phthalimid is detected
- (too high) about 0.1 mg/kg

Q3-7: Glyphosate (AV = 0.306 mg/kg)

		Answer	Ratio
Appropiate		78	89 %
Too High		8	9 %
Too Low		2	2 %
No Answer		39	–

Comments on AV of glyphosate:

- (too low) preferred range (> 0.5 mg/kg) – due to poor sensitivity of Waters Micromass for this compound
- (too low) above 1 mg/kg
- (too high) 0.10 mg/kg
- (too high) Findings of glyphosate in routine samples are often in the range of 0.01 – 0.1 mg/kg
- (too high) 0.050 – 0.010 mg/kg
- (too high) Range between 0.010 mg/kg und 0.050 mg/kg, because we have a lot of organic samples and glyphosate is a big topic for this customers
- (too high) 0.05 – 0.2 mg/kg
- I don´t really see how glyphosate is relevant to strawberrys. Wouldn´t the plant die?

Q3-8: Haloxyfop (AV = 0.070 mg/kg)

		Answer	Ratio
Appropiate		93	99 %
Too High		1	1 %
Too Low		0	0 %
No Answer		33	–

Q3-9: Captan (sum) (AV = 0.302 mg/kg)

		Answer	Ratio
Appropiate		77	99 %
Too High		0	0 %
Too Low		1	1 %
No Answer		49	–

Comments on AV of Folpet (sum):

- (too low) 0.7 mg/kg

Q3-10: Folpet (sum) (AV = 1.195 mg/kg)

		Answer	Ratio
Appropiate		75	94 %
Too High		5	6 %
Too Low		0	0 %
No Answer		47	–

Comments on AV of Folpet (sum):

- (too high) Mean value measured in routine samples: 0.1 – 0.5 mg/kg
- (too high) Folpet: normally seldom found, only phthalimid is detected
- (too high) too high, should be 0.2 – 0.3 mg/kg
- (too high) about 0.1 mg/kg

Q3-11: THPI (AV = 0.110 mg/kg)

		Answer	Ratio
Appropiate		76	100 %
Too High		0	0 %
Too Low		0	0 %
No Answer		51	–

Q3-12: Phtalimide (AV = 0.446 mg/kg)

		Answer	Ratio
Appropiate		76	97 %
Too High		2	3 %
Too Low		0	0 %
No Answer		49	–

Comments on AV of phtalimide (sum):

- (too high) Mean value measured in routine samples: 0.1 – 0.5 mg/kg
- (too high) about 0.1 mg/kg

Q3-13: Bifenazate (sum) (AV = 0.270 mg/kg)

		Answer	Ratio
Appropiate		63	98 %
Too High		1	2 %
Too Low		0	0 %
No Answer		63	–

Q3-14: Bromide ion (AV = 19.1 mg/kg)

		Answer	Ratio
Appropiate		60	97 %
Too High		2	3 %
Too Low		0	0 %
No Answer		65	–

Comments on AV of brommide ion (sum):

- (too high) about 5 mg/kg

Q3-15: Carbofuran (part of sum) (AV = 0.0030 mg/kg, uncertain; Mean of homogeneity test: 0.0043 mg/kg)

		Answer	Ratio
Appropiate		68	84 %
Too High		0	0 %
Too Low		13	16 %
No Answer		46	–

Comments on AV of carbofuran (sum):

- (too low) Carbofuran at least > 0.01 mg/kg, uncertainty is always too high at lower concentrations.
- (too low) ≥ 0.01 mg/kg, it is our LOQ.
- (too low) > 0.01 mg/kg
- (too low) Carbofuran > 0,010 mg/kg because of confidence of measuring.
- (too low) Carbofuran concentration was below our RL
- (too low) For carbofuran LOQ – 0.01 mg/kg with our old LC/MS/MS.
- (too low) > 0.010 mg/kg (lower levels not yet validated in routine commodity groupts)
- (too low) at least 0.05 mg/kg (our RL) and tricky because of different possible origin (which was not relevant for this challenge, however)
- (too low) Considering the high number of false negatives and the high CV % of results, I think that an MRRL of 0.001 mg/kg is not appropriate for EU official labs. As a consequence, in my opinion, an MRL of 0.001* mg/kg, which is stated for some commodities like apples, is not easily achievable. Concentration range 0.005 – 0.05 mg/kg should be more appropriate.
- (too low) 0.05 mg/kg
- (too low) above 1 mg/kg

Q3-16: Chlorate (AV = 0.490 mg/kg)

		Answer	Ratio
Appropiate		63	93 %
Too High		5	7 %
Too Low		0	0 %
No Answer		59	–

Comments on AV of Chlorate:

- (too high) Findings of chlorate in routine samples are often in the range of 0.01 – 0.1 mg/kg
- (too high) 0.050 – 0.100 mg/kg
- (too high) default MRL for chlorate is 0.01 mg/kg
- (too high) about 0.05 mg/kg

Q3-17: Dithianon (AV = 0.294 mg/kg)

		Answer	Ratio
Appropiate		72	97 %
Too High		2	3 %
Too Low		0	0 %
No Answer		53	–

Comments on AV of Chlorate:

- (too high) 0.050 – 0.100 mg/kg
- (too high) 0.05 – 0.2 mg/kg

Q3-18: Phosphonic acid (AV = 19.3 mg/kg)

		Answer	Ratio
Appropiate		57	92 %
Too High		5	8 %
Too Low		0	0 %
No Answer		65	–

Comments on AV of Phosphonic acid:

- (too high) Phosphonic acid especially relevant for organic products – level should be in the range 0.1 – 0.2 mg/kg
- (too high) Mean value measured in routine samples: 1 – 5 mg/kg
- (too high) In the most cases there are not so high values in the routine samples, for example phosphonic acid: high levels are mainly 5 – 10 mg/kg
- (too high) 1 mg/kg
- (too high) 1 – 5 mg/kg – it required a higher dilution than espected
- (too high) In ring tests the concentration of phosphonic acid is always very high, so it would be very interesting to have a ring test with a lower concentration

Reply by organisers:

- Initially the plan was to spike phosphonic acid at a level that would be relevant for organic products. Unfortunately the high level of phosphic acid (0.560 mg/kg) in the blank material made it impossible to spike at a low level as the blank is often used for matrix-matched calibrations.

Q3-19: N-Acetyl-glyphosate (AV = 0.100 mg/kg)

		Answer	Ratio
Appropiate		38	95 %
Too High		0	0 %
Too Low		2	5 %
No Answer		87	–

Comments on AV of N-Acetyl-glyphosate:

- (too low) preferred range (> 0.5 mg/kg) – due to poor sensitivity of Waters Micromass for this compound
- (too low) We have no experience with N-acetyl-glyphosate and had big problem with the sensibility for this compound.

Q4: Are you satisfied with the preliminary report on the EUPT-SRM12?

Q4-1: Publishing date (within 3 weeks following to the submission deadline)

		Answer	Ratio
5		103	81 %
4		19	15 %
4 + 5		122	96 %
3		4	3 %
2		1	1 %
1		0	0 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.8	

Positive comments:

- perfect/excellent/very good (3×)
- Excellent, that we received the preliminary report so fast, because if there are any possible discrepancies, the test can repeated within a appropiate time.
- I was very pleased to receive the preliminary report so quickly.
- very fast after result submission: better possibilties to look for problems with poor performance
- Quick and punctual, thank you!
- Very early, we still can use the rest of the material for some more analyses
- sufficient

Negative comments and suggestions for improvement:

- Three weeks would be fine for final report.

Reply by organisers:

- On the evaluation meeting, which takes place once a year after all EUPTs have been conducted, the PT-organisers meet the EUPT-SC to discuss in detail the EUPT-results and their evaluation. During this meeting several desicions are taken, e.g. if one analyte with high RSD or showing instability should be evaluated for information only or if alternative evaluation based on subpopulations should additionally made. Typically the preliminary evaluation is modified according to the decisions made on this meeting, so that it is not possible to release the final report before the evaluation meeting.
  The main reason for the late release of the final report is, however, the incomplete or inconsistent methodology information submitted by many participants. Without the correct and complete information the conclusion derived from the data set is not correct and useless.
  Each participant can contribute to the accelaration of publication of the final report by submitting the requested information completely and correctly.

Q4-2: Information given in the preliminary report

		Answer	Ratio
5		86	68 %
4		33	26 %
4 + 5		119	94 %
3		7	6 %
2		1	1 %
1		0	0 %
Not Applicable		0	–
No Answer		0	–
Average Rating		4.6	

Positive comments:

- satisfied/sufficient (4×)

Comments and suggestions for improvement:

- It is always helpful and necessary for the internal quality control to get further information on spiking levels (4×), preferably on the day after the submission deadline (1×)
- It could be helpful to have the mean value from the homogeneity test - especially in cases with high CV values (2×)
- Concentrations determinated during stability test could be usefull.
- In some cases we would like to know how was the mean set or whether the method used could not affect the result of the mean.
- Information about the analytical method submitted in general and comparison statstics and figures. This can be included more detailed in the final report
- missing information for some compounds e.g. AMPA (not detectable/questionable results?)

Reply by organisers:

- The organisers have been avoiding reporting the spiking levels for several reasons including the following: a) to avoid that laboratories start calculating alternative z-scores if the spiking level is closer to their result; b) because some analytes get partly lost during the spiking or the homogenisation process with the spiking level not corresponding to the theoretical concentration any more; c) because in many cases the analytes are applied in the field (incurred) with the real concentrations on the final products remaining unknown.
  In any case, if results show that the assigned value is most likely shifted considerably from the true concentration due to the use of biased methodologies by many labs, this is discussed in detail and alternative z-scores based on sub-populations are calculated.
  The display of homogeneity test results in the preliminary report will be considered in the future as it can help identify where assigned values might be biased. Please note, however, that the homoneneity test results are not necessarily accurate and that the results of the stability tests are typically not finished by the time the preliminary report is published. Robust means of sub-populations of participants that use certain procedures deemed to be more accurate would also be helpfull, but this is difficult to realize because at this stage, methodology data of many labs is still missing or con-

traticitive. Methodology based evaluations are thus only shown in the final report.
All these issues will be dicussed in the upcoming meeting of the EUPT-advisory group and a decission will be taken..

- The preliminary report contains only the most important data for the participants: 1) data of compounds present in the test items, either spiked or inccured. For these compounds the numerical results, false negative results and the correpsonding preliminary z-scores are shown, and 2) false positive results for analytes not present in the test items.
- Analytes that were correctly reported as not detected are not shown in the preliminary report.
- The preliminary report also shows a preliminary classification of results into “Acceptable”, “Questionable” or “Unacceptable” according to the rules in the General Protocol. The latter two classifications belong to poor performance, and the participants getting such results should investigate and report the reasons.
- In the current PT AMPA was not contained in the test item, and there was no false positive results for AMPA, therefore, there was not any information on it in the preliminary report.

Q5: Wishes as regards matrices that could be used in the next two or three EUPT-SRMs (focusing on compounds not amenable to multiresidue methods)

Q5-1: High Fat content and dry (e.g. nuts or oily seeds)

		Answer	Ratio
High Interest		21	17 %
Medium Interest		38	30 %
Low Interest		40	31 %
No Interest		28	22 %
No Answer		0	–

Comments and suggestions for improvement:

- **Matrix**
  - nuts (2×), peanut, almonds, walnut
  - oily seeds, soybean, sunflower seeds (2×), rape seeds (2×)
  - fish Oil
  - olive oil

- **Compounds**
  - dithiocarbamates, glyphosate, AMPA, chorate, perchlorate

- **Matrix – Compounds**
  - fennel, linseed, chia seeds – glyphosat, diquat, paraquat
  - nuts (Bromide)
  - olive oil – chlorate

Reply by organisers:

- The suggestions will be taken into account.
- Oils are typically of low relevance for SRM pesticides and metabolites

Q5-2: High Water content (e.g. vegetables)

		Answer	Ratio
High Interest		93	73 %
Medium Interest		26	20 %
Low Interest		7	6 %
No Interest		1	1 %
No Answer		0	–

Comments and suggestions for improvement:

- **Matrix**
  - generally fruits and vegetables (3×)
  - leafy vegetables, salad plants, lettuce (4×), cabbage
  - fruiting vegetables/cucurbits; tomatoes (7×), watermelon (2×), melons, zuchini, cucumber
  - stone fruits: peach, apricot, cherries
  - pome fruit: apples (3×), pears
  - berries (2×), Grapes (2×)
  - kiwi (2×), pineapple (2×)
  - fresh herbs (2×)
  - bananas (2×)
  - citrus fruit
  - potato
  - onions, pepper
  - fruit pomace
  - pomegranate, custard apple, cherimoya, okra, dragon fruit

- **Compounds**
  - pesticides requiring a hydrolysis step e.g. 2,4-D in citrus (full residue definition)
  - dithiocarbamates, glyphosate, AMPA, chorate, perchlorate
  - fosetyl and phosphonate, ethephon, DEET

- **Matrix – Compounds**
  - pears or apples (captan, folpet, sum, TNFA, TNFG)

Reply by organisers:

- The suggestions will be taken into account.
- Many of the commodities suggested actually belong to the “high acid content” commodity group (citrus, grapes, pinepples, kiwi, berries). This group was left out as it was represented in the EUPT-SRM12.

Q5-3: High Fat, intermediate water

		Answer	Ratio
High Interest		**27**	**21 %**
Medium Interest		**34**	**27 %**
Low Interest		**47**	**37 %**
No Interest		**19**	**15 %**
No Answer		**0**	–

Comments and suggestions for improvement:

- **Matrix**
  - olives (7×)
  - avocado (6×)
  - olive oil

- **Matrix – Compounds**
  - Avocado – chlorate, folpet

Reply by organisers:

- The suggestions will be taken into account.

Q5-4: Cereals

		Answer	Ratio
High Interest		**58**	**46 %**
Medium Interest		**43**	**34 %**
Low Interest		**17**	**13 %**
No Interest		**9**	**7 %**
No Answer		**0**	–

Comments and suggestions for improvement:

- **Matrix**
  - homogenized brown rice
  - wheat (2×), wheat flour
  - baby food based on cereals (2×)
  - rice
  - cereal grain and products thereof incl. cereal based composite feed

- **Compounds**
  - dithiocarbamates, glyphosate, AMPA, chorate, perchlorate
  - low concentrations of DTC, phosphane

- **Matrix – Compounds**
  - wheat, rye, oat (glyphosat)
  - wheat or spelt with glyphosate, chlormequat, bromide, phosphine
  - oat – chlorate and phosphonic acid

Reply by organisers:

- The suggestions will be taken into account.
- The fact that several labs focusing on cereals did not participate in the EUPT-SRM12 and the current survey will be considered.

Q5-5: Feed

		Answer	Ratio
High Interest		20	16 %
Medium Interest		19	15 %
Low Interest		30	24 %
No Interest		58	46 %
No Answer		0	–

Comments and suggestions for improvement:

- **Matrix**
  - soy extraction grist/meal (2×)
  - rape, soy

- **Compounds**
  - dithiocarbamates, glyphosate, AMPA, chorate, perchlorate

Reply by organisers:

- The suggestions will be taken into account.
- The fact that several labs focusing on feed did not participate in the EUPT-SRM12 and the current survey will be considered.

Q5-6: Animal origin (e.g. muscle, liver, egg, dried egg, milk, dried milk, honey)

		Answer	Ratio
High Interest		**20**	**16 %**
Medium Interest		**27**	**21 %**
Low Interest		**24**	**19 %**
No Interest		**56**	**44 %**
No Answer		**0**	–

Comments and suggestions for improvement:

- **Matrix**
  - honey (11×)
  - milk (3×), milk (> 2 % of fat), dried milk (infant formulae) (2×)
  - egg (3×)
  - meat (muscle) (3×), liver
  - fish/fish meal/fish products (3×)
  - cheese
  - no muscle or liver!

- **Compounds**
  - organostannic related residues
  - honey (glyphosate)

- **Matrix – Compounds**
  - honey, milk, eggs (glyphosate)
  - BACs and DDAC in meat and fish (EUPT-AO?)
  -

Reply by organisers:

- The suggestions will be taken into account.
- It is furthermore acknowledged that there is labs focusing on food of animal origin that did not participate in the EUPT-SRM12 and the current survey.

Further suggestions:

- **Further suggestions for Matrix**
  - dry herb (1×)
  - tea (1×)