



Application for joining the “Red Analítica de Latino America y el Caribe (RALACA)

AREA OF INTEREST	Agrochemical analysis
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Part 1: Nomination

1.1.Country	Peru
1.2.Name of the Institution	SERVICIO NACIONAL DE SANIDAD AGRARIA
1.3.Address of the Institution	AV. LA MOLINA 1915. LA MOLINA. LIMA 12. PERU
1.4.Name of the laboratory	CENTRO DE CONTROL DE INSUMOS Y RESIDUOS TOXICOS
1.5.Name of contact person in the laboratory	ORLANDO LUCAS AGUIRRE
1.6. Email of contact person:	olucas@senasa.gob.pe
1.7. In case of Universities, Research Institutions, others, with more than one laboratory/ or institution please indicate the laboratory/institution that participates in RALACA and the name of the contact person that supports this laboratory participation:	

1.8. Can information in part 1 be shared on the web? (indicate yes or no)

Yes

1.9. Can name and email of the contact person be shared on the web? (indicate yes or no)

Yes

Part 2: More information about the Institution

2.1. Mandate of the Laboratory/Institution	National Official control of food safety
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2.2.Role of the Laboratory/Institution in the farm-to-fork chain	Analysis of contaminants and residues in support to official control of food safety for agro exportation and internal consumption
2.3. Is your laboratory a National Reference Laboratory ? can you specify area and give extra details	Yes, for Analysis of contaminants and residues in support to official control of food safety
2.4.Type of contaminants analysed	Pesticide residues, veterinary drugs, mycotoxins, heavy metals and microbiological contaminants.
2.5. Matrices analysed	Primary production foods of plant and animal origin (Fruits, vegetables, meat, milk, eggs, honey, etc)
2.6.Combination matrices and contaminants analysed: provide list	See Attached list
2.7.For each contaminant list the analytes (compounds) analysed	See Attached list
2.8.Combination of matrices and analytes: provide list	See Attached list
2.9.Which are the validated methods used?	See Attached list
2.10. Is the laboratory accredited according to ISO17025?	Yes
2.11. By which accreditation body?	ANAB ANSI-ASQ National Accreditation Board
2.12. Which are the accredited methods ?	See the Attached certificate and scope of ISO/IEC 17025.
2.13. Does your laboratory provide interpretation of residue data to customers?	No
2.14. Is the laboratory certified according to GLP?	No

2.15. By which certification body?	
2.16. Is the laboratory available for research and development (R@D) within RALACA when funding becomes available?	Yes
2.17. Is the laboratory available for quality auditing services within RALACA when funding becomes available?	Yes
2.18. Is the laboratory available for expert missions within RALACA when funding becomes available?	Yes
2.19. Is the laboratory available for ad hoc on-site training when funding becomes available?	Yes
2.20. Is the laboratory available for ad hoc remote/distance learning training when technology and funding becomes available?	Yes
2.21. Is the laboratory available for preparation of ad hoc reference materials when projects/funding becomes available?	Yes
2.22. Is the laboratory available for organization and distribution of ad hoc proficiency testing/collaborative trials when projects/funding becomes available?	Yes

2.23. Please indicate which information can be shared on the web? (use numbering provided)

Please email this form to ralacaboard@gmail.com



List Combination matrices and contaminants analysed

SENASA – Perú:

Determinación de multiresiduos de plaguicidas en frutos y vegetales por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS) y cromatografía de gas acoplada a espectrometría de masa (GC/MS)

AOAC Official Method 2007.01.

Cromatografía Líquida acoplada a Espectrometría de masa en Tandem Cuadrupolar - LC-MSMS

	DESCRIPCION_ANALITO	LIMITE_DETECCION_LOD	LIMITE_CUANTIFICACION
1	Acetamiprid	0.003	0.010
2	Aldicarb	0.003	0.010
3	Ametoctradin	0.005	0.010
4	Ametryn	0.002	0.005
5	Atrazine	0.003	0.010
6	Azinphos methyl	0.010	0.020
7	Azoxystrobin	0.003	0.005
8	Benalaxyl	0.003	0.005
9	Bensulfuron methyl	0.005	0.010
10	Benthiocarb	0.003	0.010
11	Bifenazate	0.005	0.010
12	Bispyribac	0.010	0.020
13	Bupirimate	0.002	0.005
14	Buprofezin	0.003	0.010
15	Cadusafos	0.003	0.005
16	Carbaryl	0.002	0.005
17	Carbendazim	0.003	0.010
18	Carboxin	0.005	0.010
19	Clofentezine	0.003	0.005
20	Clothianidin	0.005	0.010
21	Cycloxydim	0.005	0.010
22	Cymoxanil	0.005	0.010
23	Cyproconazole	0.002	0.010
24	Cyprodinil	0.003	0.005
25	Desmedifam	0.005	0.010
26	Dichlofuanid	0.005	0.010
27	Dichlorvos	0.003	0.010
28	Dicrotophos	0.003	0.005
29	Diethofencarb	0.003	0.005
30	Difenoconazole	0.002	0.005
31	Diflubenzuron	0.005	0.010
32	Dimethoate	0.003	0.010
33	Dimethomorph	0.003	0.010
34	Diniconazol	0.003	0.005
35	Dinotefuran	0.005	0.010
36	Diuron	0.002	0.010

37	Ethephon	0.020	0.050
38	Ethiofencarb	0.003	0.010
39	Fenamiphos	0.002	0.005
40	Fenamiphos Sulphone	0.003	0.010
41	Fenarimol	0.002	0.005
42	Fenzaquina	0.002	0.005
43	Fenbuconazol	0.005	0.010
44	Fenhexamid	0.003	0.010
45	Fenoxicarb	0.003	0.005
46	Fenpyroximate	0.002	0.005
47	Flufenoxuron	0.005	0.010
48	Fluopyram	0.005	0.010
49	Flusilazole	0.002	0.005
50	Flutriafol	0.005	0.010
51	Forchlorfenuron	0.010	0.020
52	Glufosinate-Ammonium	0.010	0.020
53	Hexythiazox	0.005	0.010
54	Imazalil	0.005	0.010
55	Imidacloprid	0.003	0.005
56	Indoxacarb	0.003	0.005
57	Isoprothiolano	0.003	0.005
58	Isoxaflutole	0.005	0.010
59	Kresoxim-Methyl	0.005	0.010
60	Linuron	0.002	0.010
61	Lufenuron	0.003	0.010
62	Mandipropamid	0.005	0.010
63	Meptyldinocap	0.005	0.020
64	Metalaxyl	0.002	0.005
65	Methamidophos	0.003	0.005
66	Methiocarb	0.003	0.005
67	Methomyl	0.005	0.010
68	Methoxyfenozide	0.003	0.010
69	Myclobutanil	0.003	0.005
70	Novaluron	0.005	0.010
71	Omethoate	0.003	0.005
72	Oxadixyl	0.005	0.010
73	Oxamyl	0.003	0.010
74	Oxycarboxin	0.003	0.005
75	Oxydemeton methyl	0.002	0.005
76	Penconazole	0.003	0.010
77	Phenthoate	0.003	0.005
78	Phosmet	0.005	0.010
79	Phosphamidon	0.003	0.005
80	Pimetrozina	0.003	0.010
81	Pirimicarb	0.002	0.005

82	Pirimiphos methyl	0.002	0.005
83	Prochloraz	0.003	0.005
84	Propetamphos	0.005	0.010
85	Prophenofos	0.003	0.005
86	Propiconazole	0.002	0.005
87	Pyraclostrobin	0.005	0.010
88	Pyridaben	0.002	0.005
89	Pyrimethanil	0.003	0.005
90	Rotenone	0.002	0.005
91	Saflufenacil	0.005	0.010
92	Spinetoram	0.005	0.010
93	Spinosad	0.005	0.010
94	Spirotetramate	0.005	0.010
95	Sulfoxaflor	0.020	0.040
96	Tebuconazole	0.003	0.005
97	Teflubenzuron	0.005	0.010
98	Temephos	0.005	0.010
99	Tetraconazole	0.003	0.005
100	Thiacloprid	0.002	0.005
101	Thidiazuron	0.010	0.020
102	Thiodicarb	0.003	0.005
103	Thiophanato methyl	0.005	0.010
104	Tiabendazol	0.003	0.005
105	Tolclofos methyl	0.003	0.010
106	Triadimefon	0.003	0.005
107	Triadimenol	0.002	0.005
108	Trifloxystrobin	0.002	0.010
109	Triflumizole	0.003	0.010
110	Triflumuron	0.005	0.010
111	Zoxamida	0.005	0.010
Cromatografía de Gas acoplado a Espectrometría de Masa GC-MS			
	DESCRIPCION_ANALITO	LIMITE_DETECCION_LOD	LIMITE_CUANTIFICACION
112	Alachloro	0.005	0.010
113	Aldrin	0.003	0.010
114	Amitraz	0.007	0.020
115	Azinphos Ethyl	0.004	0.010
116	Benfuracarb	0.003	0.010
117	Bifenthrin	0.003	0.010
118	Boscalid	0.003	0.010
119	Bromopropylate	0.002	0.010
120	Captan (as Tetrahydrophthalimide)	0.010	0.040
121	Carbofuran	0.004	0.010
122	Carbosulfan	0.006	0.020

123	Chlordane, cis	0.004	0.010
124	Chlordane, cis	0.004	0.010
125	Chlorfenapyr	0.008	0.020
126	Chlorobenzilate	0.004	0.010
127	Chloroneb	0.005	0.010
128	Chlorothalonil	0.008	0.020
129	Chlorpyrifos	0.003	0.010
130	Chlorpyrifos Methyl	0.003	0.010
131	Chlortal Dimethy	0.003	0.010
132	Clomazone	0.005	0.005
133	Cyanazine	0.007	0.020
134	Cyfluthrin (Sum)	0.005	0.010
135	Cyhalotrin, Lambda	0.003	0.010
136	Cypermethrin (Sum)	0.007	0.020
137	Deltametrin	0.006	0.020
138	Diazinon	0.003	0.010
139	Dichlofenthion	0.003	0.010
140	Dichloran	0.003	0.010
141	Dieldrin	0.002	0.010
142	Disulfoton	0.003	0.010
143	Endosulfan alpha	0.003	0.010
144	Endosulfan beta	0.005	0.010
145	Endosulfansulfate	0.004	0.010
146	Endrin	0.002	0.010
147	Endrin aldehyde	0.003	0.010
148	Endrin keto	0.003	0.010
149	Ethoprophos	0.004	0.010
150	Etoxazole	0.004	0.010
151	Etridiazole	0.006	0.020
152	Famphur	0.004	0.010
153	Fempropathrin	0.002	0.010
154	Fenitrothion	0.004	0.010
155	Fenoxaprop-P-ethyl	0.004	0.010
156	Fenthion	0.003	0.010
157	Fenvalerate y Esfenvalerate	0.004	0.010
158	Fipronil	0.001	0.005
159	Flubendiamide	0.006	0.020
160	Fludioxonil	0.004	0.010
161	Fluopicolide	0.004	0.010
162	Fluvalinate, tau-	0.004	0.010
163	Folpet	0.006	0.020
164	HCH, alpha-	0.003	0.010
165	HCH, beta-	0.002	0.010
166	HCH, delta-	0.002	0.010
167	HCH, gamma- (lindane)	0.003	0.005

168	Heptachloro	0.003	0.010
169	Heptachloroepoxid	0.002	0.005
170	Hexachlorobenzene	0.006	0.020
171	Hexachlorocyclopentadiene	0.008	0.020
172	Iprodione	0.004	0.010
173	Malathion	0.005	0.010
174	Methidathion	0.007	0.020
175	Methoxychlor	0.004	0.010
176	Metolachlor	0.004	0.010
177	Metribuzin	0.004	0.010
178	o,o,o Triethyl thiophosphate	0.003	0.010
179	Orthophenylphenol	0.008	0.020
180	p,p' DDD	0.003	0.010
181	p,p' DDE	0.004	0.010
182	p,p' DDT	0.004	0.010
183	Parathion	0.004	0.010
184	Parathion Methyl	0.003	0.010
185	Permethrin (Sum)	0.004	0.010
186	Phenothrin	0.007	0.020
187	Phorate	0.004	0.010
188	Piperonyl Butoxide	0.004	0.010
189	Prallethrin	0.008	0.020
190	Procymidone	0.002	0.010
191	Propachloro	0.004	0.010
192	Propargite	0.007	0.020
193	Propazine	0.005	0.010
194	Pyriproxyfen	0.003	0.010
195	Quinoxifen	0.002	0.010
196	Quintozene	0.004	0.010
197	Resmethrin (sum)	0.005	0.020
198	Simazine	0.003	0.010
199	Spirodiclofen	0.004	0.010
200	Sulfotep	0.003	0.010
201	Tefluthrin	0.002	0.005
202	Terbutryn	0.003	0.010
203	Thionazin	0.003	0.010
204	Tolyfluanid	0.007	0.020
205	Triazophos	0.004	0.010
206	Trifluralin	0.004	0.010
207	Vinclozolin	0.008	0.020

Denominación del Servicio	Referencia del Método
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Determinación de metales pesados en frutos y vegetales por plasma inductivamente acoplado a espectrometría de masa (ICP-MS)			Norma Oficial Mexicana NOM-117-SSA1-1994
N°	Analito	Límite de Cuantificación LoQ (mg/Kg)	Límite de Cuantificación LoQ (mg/Kg)
1	Plomo	0.022	0.075
2	Cadmio	0.001	0.004
3	Arsenico	0.002	0.008

Alimento de origen animal			
Producto / Matriz	Denominación del Servicio		Analitos
CARNES (excluido los despojos): Ovino, caprino, porcino, vacuno, pollo, cuy, camelido.	Determinación de metales pesados en carne , por Plasma Inductivamente Acoplado a Espectrometría de Masa (ICP-MS)	1	Arsenico
		2	Cadmio
		3	Plomo
	Determinación de residuos de metabolitos de nitrofuranos en carnes por cromatografía líquida acoplada a espectrometría de masa en tandem(LC/MS/MS)	4	AMOZ (5-metil-morfolino-3-amino-2-oxazolidinona)
		5	AOZ (3-amino-2-oxazolidinona)
	Determinación de residuos de cloranfenicol en carnes por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)	6	Cloranfenicol
	Determinación de residuos de antihelmínticos (Benzimidazoles y Avermectinas) en leche y carnes por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)	7	5-hidroxiabendazol
		8	Abamectina
		9	Albendazol
		10	Albendazol 2-amino Sulfona
		11	Albendazol sulfona
		12	Albendazol-sulfoxido
		13	Doramectina
		14	Emamectina
		15	Fenbendazole
		16	Ivermectina
		17	Levamisol
		18	Mebendazol
		19	metronidazol
		20	Praziquantel
		21	Tiabendazol
		22	Triclabendazol
		23	Triclabendazol sulfona
	24	Triclabendazol sulfoxido	
	Determinación de residuos de antibióticos (Sulfonamidas, Penicilinas, Quinolonas, Tetraciclinas y macrolidos) en tejido animal por	25	Amoxicilina
		26	Ampicilina
		27	Bencilpenicilina

	cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)	28	Ciprofloxacina	
		29	Clortetraciclina	
		30	Dicloxacilina	
		31	Doxiciclina	
		32	Enrofloxacina	
		33	Eritromicina	
		34	Norfloxacina	
		35	Ofloxacino	
		36	Oxitetraciclina.	
		37	Sulfaclopiridazina	
		38	Sulfadiazina	
		39	Sulfadimetoxina	
		40	Sulfadoxina	
		41	sulfaguanidina	
		42	Sulfamerazina	
		43	Sulfametazina	
		44	Sulfametizol	
		45	sulfametoxazol	
		46	Sulfametoxipiridazina	
		47	sulfanilamida	
		48	Sulfapiridina	
		49	Sulfaquinoxalina	
		50	Sulfatiazol	
		51	Tetraciclina	
		52	Tilosina	
		53	Trimetoprim	
		Determinación de residuos de Aminoglucósidos en tejido animal por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)	54	Dihidroestreptomicina
			55	Espectinomicina
			56	Estreptomicina
			57	Gentamicina
			58	Kanamicina
		59	Neomicina	
		LECHE	Determinación de metales pesados en Leche y derivados lacteos por Plasma Inductivamente Acoplado a Espectrometría de Masa (ICP-MS)	1
	2			Cadmio
	3			Plomo
	Determinación de residuos de antihelmínticos (Benzimidazoles y Avermectinas) en leche y carnes por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)		4	Abamectina
			5	Albendazol
			6	Albendazol sulfona
			7	Albendazol-sulfoxido
			8	Doramectina
			9	Emamectina
			10	Fenbendazol
			11	Ivermectina
			12	Levamisol clorhidrato
			13	Mebendazol
			14	Metronidazol
			15	Praziquantel
			16	Tiabendazol
			17	Triclabendazol
			18	Triclabendazol sulfona
			19	Triclabendazol sulfoxido
			20	Ampicilina

	<p>Determinación de residuos de antibióticos (Sulfonamidas, Penicilinas, Quinolonas, Tetraciclinas y macrolidos) en tejido animal por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)</p>	21	Bencilpenicilina
		22	Ciprofloxacina
		23	Clortetraciclina
		24	Dicloxacilina
		25	Doxiciclina
		26	Enrofloxacina
		27	Eritromicina
		28	Norfloxacina
		29	Ofloxacino
		30	Oxitetraciclina.
		31	Sulfaclopiridazina
		32	Sulfadiazina
		33	Sulfadimetoxina
		34	Sulfadoxina
		35	Sulfamerazina
		36	Sulfametazina
		37	Sulfametizol
		38	Sulfametoxasol
		39	Sulfametoxipiridazina
		40	sulfanilamida
		41	Sulfapiridina
	42	Sulfaquinoxalina	
	43	Sulfatiazol	
	44	Tetraciclina	
	45	Tilosina	
	46	Trimetoprim	
Leche	DETERMINACIÓN DE AFLATOXINA M1 EN LECHE POR CROMATOGRFÍA LIQUIDA CON DETECTOR DE FLUORESCENCIA	1	Aflatoxina M1
MIEL	<p>Determinación de residuos de metabolitos de nitrofuranos en miel por cromatografía líquida acoplada a espectrometría de masa en tandem(LC/MS/MS)</p>	1	AMOZ (5-metil-morfolino-3-amino-2-oxazolidinona)
		2	AOZ (3-amino-2-oxazolidinona)
	<p>Determinación de residuos de cloranfenicol en miel por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)</p>	3	Cloranfenicol
	<p>Determinación de residuos de antibioticos (Sulfonamidas, Penicilinas, Quinolonas, Tetraciclinas y macrolidos) en tejido animal por cromatografía líquida acoplada a espectrometría de masa en tandem (LC/MS/MS)</p>	4	Ampicilina
		5	Bencilpenicilina
		6	Ciprofloxacina
		7	Clortetraciclina
		8	Dicloxacilina
		9	Doxiciclina
		10	Enrofloxacina
		11	Eritromicina
		12	Norfloxacina
		13	Ofloxacino

	14	Oxitetraciclina.	
	15	Sulfaclopiridazina	
	16	Sulfadiazina	
	17	Sulfadimetoxina	
	18	Sulfadoxina	
	19	Sulfamerazina	
	20	Sulfametazina	
	21	Sulfametizol	
	22	Sulfametoxasol	
	23	Sulfametoxipiridazina	
	24	sulfanilamida	
	25	Sulfapiridina	
	26	Sulfaquinoxalina	
	27	Sulfatiazol	
	28	Tetraciclina	
	29	Tilosina	
	30	Trimetoprim	
	Determinación de metales pesados (hasta 2 analitos) en alimentos agropecuarios por Plasma Inductivamente Acoplado a Espectrometría de Masa (ICP-MS)	31	Cadmio
		32	Arsénico
		33	Plomo