



# GEVES PRICE LIST 2022

*vegetable - ornamental - aromatic - fruit*

**Variety and Seed Study and Control Group**



## GEVES

Expertise & Performance







[www.geves.fr](http://www.geves.fr)



# GEVES

Expertise & Performance

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# GEVES: A unique & official organisation in France

GEVES is a **Public Interest Group** with three founding partner organisations:



- The French National Research Institute for Agriculture, Food and Environment (INRAE) - 60%



- The French Ministry of Agriculture and Food (MAA) - 20%



The French Interprofessional Organisation for Seeds and Plants - 20%

This unique set-up ensures GEVES's **independence** and **neutrality** in carrying out its activities in accordance with its regulatory and official missions and mandates. The union of state, research and sector expertise ensures that all aspects of the sector are fully taken into account.

## Governance of GEVES

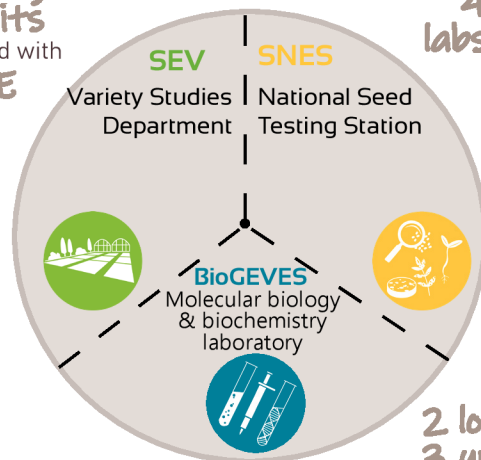
GEVES's Executive Board of Directors is composed of 13 members:

- 6 representatives from INRAE
- 2 representatives from the Ministry of Agriculture and Food
- 2 representatives from GNIS
- 2 staff representatives from GEVES
- The President of the CTPS

as well as a government controller (Ministry of Research) and a State Controller.

## Organisation of GEVES's operating divisions

5 testing stations  
& 7 units  
associated with  
INRAE



4  
labs

2 locations  
3 units





## GEVES's missions

GEVES has official, regulatory missions and carries out testing activities and methodological development which is necessary for:

- ▶ National listing of new varieties in the Official French Catalogue
- ▶ Plant variety protection
- ▶ Official seed testing as part of its NRL mandates for seeds, GMOs, and plant health (RNQP-matrix seeds)

GEVES is also responsible for the national coordination of plant genetic resources on behalf of the Ministry of Agriculture.

GEVES is the National Reference Laboratory for:

- ▶ GMO detection: GMOs in maize (seed) and soya, rapeseed and flax (seed and vegetative parts) by Decree of 19 octobre 2015
- ▶ quality testing of seeds and propagating material by Decree of 1 March 2017
- ▶ in the field of plant health by Decree of 20 November 2020

GEVES is an approved laboratory for certain seed health quality tests

GEVES is accredited by ISTA for all species. It carries out official testing, particularly for seed exports: for phytosanitary passports and certificates as well as Orange and Blue International Certificates (OIC and BIC).

GEVES makes its specialised expertise openly available to the plant and seed sectors, providing high-quality services to a range of private customers.

## Activities

To carry out its missions, GEVES performs a wide range of activities:

- ▶ Description of varieties and evaluation of genetic progress
- ▶ Quality testing for seeds and seedlings
- ▶ Methodological research
- ▶ Management of plant genetic resources
- ▶ Training courses
- ▶ Exams
- ▶ Consulting and expertise
- ▶ International cooperation
- ▶ Monitoring of the French network of seed testing laboratories
- ▶ Organisation of Proficiency Tests (PT)
- ▶ Communication

FOCUS



## Quality, Recognition & Accreditation

GEVES benefits from a global and harmonised Quality Management System.

GEVES is recognised as follows:

- ▶ Certification ISO 9001: version 2015 - BioGEVES and VCUS variety testing (Value for Cultivation, Use and Sustainability)
- ▶ Accreditation of GEVES's SNES and BioGEVES laboratories by Cofrac according to ISO 17025 standard:
  - GEVES Beaucauzé: Cofrac N°1-1316 (since 2002).
  - GEVES Le Magneraud: Cofrac N°1-6176 (since 2004).
- ▶ Accreditation by ISTA since 2001 (N°FRDL0200) for seed testing
- ▶ Entrusted by the CPVO for DUS variety testing since 2012.

## Seed quality testing **SNES**



### ORDER YOUR ANALYSE ONLINE

<http://dsn.geves.info>

- Enter your order
- Print the order summary and attach it to your sample

For faster processing of your request, please order online



### SEND YOUR ORDER VIA POST

- Complete the form corresponding to your order (BIO request or analysis order form) and attach the form to your sample
- Send the sample to:  
**GEVES - Service clients SNES**  
3 rue Henri Becquerel - CS 90024  
49071 Beaucouzé Cedex  
FRANCE

## Biomolecular and biochemical testing **BioGEVES**



### ORDER YOUR ANALYSE ONLINE

[biogeves.analyses@geves.fr](mailto:biogeves.analyses@geves.fr)



### SEND YOUR ORDER VIA POST

- Send the sample to:

#### Detection Unit

##### **BioGEVES**

3 rue Henri Becquerel - CS 90024  
49071 Beaucouzé Cedex  
FRANCE

#### Genotyping/Biochemistry Unit

##### **BioGEVES - Le Magneraud**

CS 40052 - Saint-Pierre d'Amilly  
17 700 Surgères  
FRANCE

## Variety testing at the **SEV**



### REQUEST A DENOMINATION TEST BY EMAIL

[catherine.malatier@geves.fr](mailto:catherine.malatier@geves.fr)



### REQUEST A FIELD TEST DUS (Distinction Uniformity Stability)

[celine.delarue@geves.fr](mailto:celine.delarue@geves.fr)

**GEVES - Service clients SEV**  
25 rue Georges Morel - CS 90024  
49071 Beaucouzé Cedex  
FRANCE

# Your contacts at GEVES

To contact a GEVES staff member by email: [firstname.surname@geves.fr](mailto:firstname.surname@geves.fr)

## Sector support

- ✓ Training courses
- ✓ ILC
- ✓ Audits

SNES / LNR

Thibaut Decourcelle  
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BioGEVES

Contact the Head of Unit:



Rachel Tessier  
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SEV

## SNES Management



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Assistant  
Estelle Bertel  
02 41 22 58 02

## SNES Customer Services

[service.clients@geves.fr](mailto:service.clients@geves.fr)



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- Customer Service SNES

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## SNES Technical Contacts



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- Water content
- Botanic

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Head of Germination Laboratory  
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- Floral, vegetable, woody, pulses and forest species
- Beetroot, vegetable, forage grasses
- Agricultural crop species

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Head of Pathology Laboratory  
Valérie Grimault: +33 (0)2 41 22 58 50

- Seed health
- Variety resistance
- Seed treatment evaluation

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## BioGEVES

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Genotyping Unit  
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## SEV



Head of SEV  
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+33 (0)2 41 22 85 91



SEV Customer Service  
Céline Delarue  
+33 (0)2 41 22 86 00 (field trials)



Denomination Tests  
Catherine Malatier  
+33 (0)2 41 22 86 22



# Supply of samples to the SNES

The following information, listed on the SNES order form, is essential for processing seed samples:

- Treated seed and trade name of product. No treated sample will be accepted for analysis without this information.
- Thousand Seed Weight (TSW). This information is necessary to calculate the weight of sub-samples for bacteriology and virology. If this information is not indicated it will be invoiced.
- Sample size. Unless indicated differently, the sample size to be provided is expressed in number of seeds. If the quantity supplied is less than the quantity requested, the analysis will be carried out on all the seed supplied.

The sample size indicated is the minimum size set by the method (larger sizes can be offered).

- If the quantity supplied is less than the quantity requested, the analysis will be put on standby and we will contact you to send a new sample of the required size or for your agreement to carry out the analysis on all the seeds supplied.
- If you do not have the quantity requested and would like the analysis to be carried out on all the seeds sent, you must indicate this when making your request.

Please take care to send your seeds in anonymous boxes and/or paper sachets without any labels or commercial names.

**If you are looking for a specific method or species which does not feature in our price list, please contact our Customers Service Department which will work with you to put together a testing programme tailored to your technical requirements and price range.**



## PHYSICAL AND PHYSIOLOGICAL QUALITY

The SNES always works in compliance with the ISTA Rules, offering the same level of reliability of results, whatever the final certificate requested.

**Physical quality:** Provide the minimum weight prescribed in the ISTA Rules, Table 2C Column 3. If you are requesting several analyses of counting of all other seeds on the same sample, please provide the necessary quantities for these several tests.

For moisture analysis, the maximum time for receiving samples is 14 days after sampling.

**Physiological quality:** Germination test is carried out on a sample of 400 seeds in accordance with the ISTA Rules. Tests on 200 or 100 seeds are also possible depending on the need for precision. The precision of analyses is indicated in the ISTA tolerance tables.

If a germination test is requested without any specific purity analysis, pure seeds are sorted before the germination test. This analysis is not invoiced except for Grasses (*Poaceae*). This step is an integral part of the ISTA method for the evaluation of germinative faculty.

Quantity to provide for substrate checks, the retest is included in the quantities:

	Top of paper	Rolled	Pleated paper	Sand	Organic growing media
GE-SUB-1	20 sheets	12 sheets	12 sheets	10 kg	8 kg
GE-SUB-2	20 sheets	10 sheets	10 sheets	1 kg	1 kg
GE-SUB-3	16 sheets	10 sheets	2 sheets	1 kg	1 kg
GE-SUB-4	96 sheets	16 sheets	16 sheets	12 kg	10 kg



## SEED HEALTH

Please provide one sample per test requested with the corresponding quantity.

For OIC request, an ISTA method will be chosen if it exists.

**Virology:** Certain types of treatment may affect the analysis, seeds should therefore be sent untreated. If seeds has been treated with a virucidal product, please indicate this information on your request.

**Mycology:** The nomenclature of fungi evolves; we therefore modify the names of pathogens to follow it. We will indicate any pathogen synonyms in brackets in the price list and test results.

# Supply of samples to the SNES

In the nomenclature "sp." means " unidentified species", "spp." means "all species" and the preceding name is the genus. If we cannot determine the species we will give as result the genus name followed by "sp."

The denomination as sections has become obsolete, so the detection of *Fusarium*, apart from the identification (PA-ID-FUS), will be done by section classification. Some species-specific *Fusarium* will remain denominated with the species name (e.g. *F. oxysporum* on cucurbits).

Sections correspond to the classification of Nelson *and al.* ; 1983, amended by Burgess *and al.* ; 1994 and updated with molecular techniques (Leslie et Summerell ; 2006, Carter *and al.* ; 2000, Aoki et O'Donnel ; 1999, Benyon *and al.* ; 2000).

Former name	Current sections	Main species
<i>Fusarium roseum</i>	<i>Roseum</i>	<i>F. avenaceum</i>
	<i>Discolor</i>	<i>F. culmorum</i> , <i>F. graminearum</i> ( <i>Gibberella zeae</i> ), <i>F.roseum</i> ( <i>F. sambucinum</i> ), <i>F.crookwellense</i>
	<i>Arthrosporiella</i>	<i>F. incarnatum</i> ( <i>Fusarium semitectum</i> )
<i>Fusarium sp.</i>	<i>Sporotrichiella</i>	<i>F. poae</i> , <i>F. tricinctum</i> ( <i>Gibberella tricincta</i> ), <i>F. sporotrichioides</i> , <i>F.langsethiae</i>
	<i>Gibbosum</i>	<i>F. equiseti</i> ( <i>Gibberella intricans</i> ), <i>F. acuminatum</i> ( <i>Gibberella acuminata</i> )
<i>Fusarium moniliforme</i>	<i>Liseola ou complexe G. fujikuroi</i>	<i>Gibberella fujikuroi</i> ( <i>F. verticillioides</i> , <i>F.subglutinans</i> ), <i>F. proliferatum</i>
<i>Fusarium oxysporum</i>	<i>F. Elegans</i>	<i>F. oxysporum</i>
<i>Fusarium solani</i>	<i>Martiella - Ventricosum</i>	<i>F. solani</i> ( <i>Haematonectria haematococca</i> )

This test is performed on 400 seeds according to the following criteria:

- Without superficial disinfection for most species. If the presence of saprophytes is to high the result will be "undetermined", a new test with superficial disinfection will be proposed.
- With superficial disinfection for species that are known to have saprophytes that can compromise the analysis.

For treated seeds, a test without superficial disinfection is indicated in the price list and will be chosen.

As the method allows the detection of several pathogens simultaneously, the main pathogens are in bold in this price list and will always be indicated on the certificate. For pathogens not in bold in this price list, their presence will be indicated on the certificate if their presence is high (> 5%) or if they were indicated when the analyses were requested.

For any request for the detection of other fungi, please contact us.



# Order an analysis

## To SNES

### For SNES or COFRAC certificate <sup>1</sup>

	Price
<b>By paper order form</b>	
Handling of the request per submitted sample and issuing of a definitive SNES or COFRAC certificate, in French or English.	8.60
<b>By internet on DSN website</b>	
Handling of the request per submitted sample and issuing of a definitive SNES or COFRAC certificate, in French or English.	6.50
<b>Specific handling</b>	
Handling of the request per submitted sample sent in several packaging or weighing more than 2 kg requiring the preparation of a working sample, and issuing of a definitive SNES or COFRAC certificate, in French or English.	35.70
<b>Supplementary certificates, specific presentation of results, priority</b>	
Provisional certificate, in French or English.	3.70
Duplicate certificate, in French or English.	2.70
Summary table of results, or specific presentation of results.	28.00
Raw results on .csv file (request must be entered online on DSN website).	0.00
Priority processing, per sample.	16.80

<sup>1</sup> A SNES certificate is issued by default, except for COFRAC accredited tests (indicated by a \*) for which a COFRAC certificate will be issued.

## For an international certificate

	Price
<b>By paper order form</b>	
Handling of each submitted sample and issuing of an International Orange or Blue Certificate, in French or English, with priority being given to the related analyses. (EC-01 + SCLI-URBI + BU-ABIODE)	34.00
<b>Supplementary certificates and request for changes</b>	
Provisional international certificate, in French or English.	8.60
Duplicate international certificate, in French or English.	8.60
Adding additional certificates or modification of information on an international certificate (after checking the conformity with ISTA rules).	30.40

## To BioGEVES

### Handling and results

	Price
<b>Handling</b>	
Handling of the sample for treated seeds.	50.00
<b>Results</b>	
Duplicates analysis certificate except photography.	2.50
New edition of result certificate.	25.00
Specific presentation of results - Contact BioGeves.	/

## SEED QUALITY

### Physiological quality

		Size	Duration	Price
<b>Germination test</b>				
Supplement for an analysis in soil or sand if the primary support of the species is "top of" or "pleated" paper - on 400 seeds.	GE-FG-SUP4	/	/	13.50
Supplement for an analysis in soil or sand if the primary support of the species is "top of" or "pleated" paper - on 200 seeds.	GE-FG-SUP2	/	/	7.00
<b>Complementary determinations in addition to the germination test</b>				
Detailed description of seedlings and seeds - on 400 seeds.	GE-FG-DET	1 250	/	36.00
Detailed description of seedlings and seeds - on 200 seeds.	GE-FG-DET2 <b>NEW</b>	500	/	18.00
Percentage of a particular type of seedling.	GE-FG-PCPL	/	/	20.00
Provision of the result of repetitions.	GE-FG-REP	/	/	11.60
<b>Additional testing time required</b>				
Additional duration of 7 days for a germination test on 400 seeds.	GE-FG-7S4	1 250	/	14.10
Additional duration of 14 days for a germination test on 400 seeds.	GE-FG-14S4	500	/	28.20
Additional duration of 7 days for a germination test on 200 seeds.	GE-FG-7S2	500	/	7.10
Additional duration of 14 days for a germination test on 200 seeds.	GE-FG-14S2	500	/	14.20
<b>Verification of species</b>				
Verification of species after germination test.	GE-ENR	/	/	8.10
<b>Tetrazolium viability test - For results within a week, reception of seeds on Tuesday at the latest.</b>				
Tetrazolium test on 400 seeds (excluding ornamental and fruit species).	GE-TZ-1	500	/	150.00
Tetrazolium test on 200 seeds (excluding ornamental and fruit species).	GE-TZ-2	300	/	100.00
Tetrazolium test on 100 seeds (excluding ornamental and fruit species).	GE-TZ-3	200	/	70.00
<b>Energy</b>				
Germination energy (intermediate counting; germination capacity supplement). The date of counting for the energy varies according to the species.	GE-EG	500	/	17.20
<b>Vigour test</b>				
Cold-test on 400 seeds.	GE-CO	1 250	/	60.00
Cold-test on 200 seeds.	GE-CO2	500	/	38.30
Accelerated ageing of 200 seeds including germination capacity.	GE-VIEI-2	500	/	78.00
Controlled deterioration of 200 seeds including germination capacity.	GE-DET-1	500	/	78.00
Conductivity test on 200 seeds on ISTA species.	GE-CON-GLO	500	/	49.90
<i>The moisture content of seeds should be between 10 and 14 %, sample must be send in a sealed foil sachet with the indication of the water content, otherwise it would be determined by us before the test and invoiced (see test TE-SN-01).</i>				
<b>Treatment of seeds</b>				
Treatment of seeds to be performed by SNES. Seeds do not undergo fungicide treatment before the germination test unless specifically requested (except for Beet).	GE-TRAIT	/	/	20.00
<b>Substrate checks</b>				
Determination of the water holding capacity of a substrate including moisture content.	GE-SUB-1	See p.7	/	79.00
Determination of the pH of a substrate.	GE-SUB-2	See p.7	/	51.00
Determination of the conductivity of a substrate.	GE-SUB-3	See p.7	/	51.00
Assessment of the innocuity of a substrate (determination of the % of seedlings intoxicated by the substrate, on 2 sensitive species).	GE-SUB-4	See p.7	/	116.00
Viability determination of seeds in a soil or a substrate.	GE-SUB-5		Contact SNES	
Validation of a new substrate for germination.	GE-SUB-6		Contact SNES	
<b>Automated germination kinetics by image analysis</b>				
Germination kinetics by image analysis (average rate of germination, kinetic curve).	GE-CI		Contact SNES	
Supply of detailed data on imbibition and early elongation of the root.	GE-CI-4		Contact SNES	
Supply of seeds images during germination.	GE-CI-5		Contact SNES	

### Seed health - Prior operations

		Size	Duration	Price
Thousand-seed weight, if not indicated on the request for bacteriology, mycology and virology tests.	PA-MMS	/	/	29.40

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Supplement fee for counting of colonies</b>				
1 pathogen in 5 000 seeds.	PA-BA-19	5 000	/	21.00
1 pathogen in 30 000 seeds.	PA-BA-20	30 000	/	52.00
More than 1 pathogen in 5 000 seeds.	PA-BA-81	5 000	/	33.00
More than 1 pathogen in 30 000 seeds.	PA-BA-82	30 000	/	98.00
<b><i>Pseudomonas syringae</i> pv. <i>aptata</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-121	5 000	38 days	231.00
<b><i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-130	/	/	198.00
	PA-BA-123	5 000	34 days	205.00
<b><i>Pseudomonas viridiflava</i></b>				
Agar method + identification of strains by PCR in case of suspect colonies.	PA-BA-124	5 000	29 days	314.00
	PA-BA-126	30 000	29 days	314.00
<b><i>Pseudomonas</i> all pathovars</b>				
Agar method + identification of strains by PCR in case of suspect colonies.	PA-BA-128	30 000	22 days	200.00

## Mycology - See p.7 "Seed health"

		Size	Duration	Price
<b><i>Fusarium</i> spp.</b>				
Identification of <i>Fusarium</i> species in addition to detection test.	PA-ID-FUS	/	19 days	229.00
<b><i>Verticillium dahliae</i></b>				
Agar method.	PA-ES-VERT	400	19 days	91.00
<b>Supplement for spore counting, washing methods</b>				
Counting by classes (0;1-10;11-100;>100).	PA-MY-DCLA NEW	/	/	55.00
Counting by unit.	PA-MY-DEN NEW	/	/	90.00

## Nematology

		Size	Duration	Price
<b><i>Heterodera</i> group <i>Schachtii</i>, <i>Heterodera</i> group <i>Goettingiana</i>, <i>Heterodera</i> group <i>Avenae</i>.</b>				
Detection and identification	PA-NE-SOL1	300 g	30 days	175.00

## Other tests

		Size	Duration	Price
Resistance of fungal isolates to fungicides.	PA-AD-01		Contact SNES	
Study of the efficacy of seed disinfection/treatment products on medium or by bioassay.	PA-AD-02		Contact SNES	
Identification of pathogens isolated and provided on medium.	PA-AD-IP	2 boxes / isolates	19 days	43.00
Isolation of strains from symptoms.	PA-ISOLEM	/	/	43.00
Isolation of strains from seeds.	PA-ISOSEM	/	/	92.00
Identification of pathogens on plant material. Feasibility on a case-by-case basis. <b>Prices below are indicated for information. They will be charged depending on the observed symptoms.</b>	PA-DI-PEC		Contact SNES	
Handling of the sample.	PA-DI-PEC	/	/	49.00
Identification based on symptoms.	PA-DI-MICR	/	/	84.00
Mycological identification after incubation.	PA-DI-MY	/	/	173.00
Bacteriological identification after incubation.	PA-DI-BA	/	/	86.00
Confirmation by pathogenicity test.	PA-DI-PP	/	/	105.00
Virological identification by immunological test.	PA-DI-ELIS	/	/	186.00
Virological identification virologic by biotest.	PA-DI-IND	/	/	59.00
Analytical Profile Index (API).	PA-DI-API	/	/	164.00
PCR.	PA-DI-PCR	/	/	104.00



## EVALUATION OF VARIETIES

### Nematology

		Size	Duration	Price
Detection and identification of <i>Meloidogyne</i> in soil by indexing.	PA-NE-SOL2	1 kg	42 days	188.00

### Determination of the identity and the varietal purity

		Size	Duration	Price
Standard protocol.	SEV-CV	/	/	300.00
Specific study.	SEV-CV1			Contact SEV

### Genotyping by molecular biology

		Size	Duration	Price
Varietal identity control.	BI-G-BM-SSR-CID-1		Contact BioGEVES	
Varietal comparison - SSR.	BI-G-BM-SSR-COMP		Contact BioGEVES	
Genetic purity analysis - SSR - 180 g.	BI-G-BM-SSR-PU-180		Contact BioGEVES	
Genetic purity analysis - SSR - 8 x 10 g.	BI-G-BM-SSR-PUR-10		Contact BioGEVES	
Seed mixture detection.	BI-G-BM-SSR-PUR-40		Contact BioGEVES	
Varietal purity analysis.	BI-G-BM-SSR-PUR-90		Contact BioGEVES	
Varietal description - SSR.	BI-G-BM-SSR-DVAR		Contact BioGEVES	
DNA extraction.	BI-G-BM-EXT		Contact BioGEVES	
Varietal identity control - SNP.	BI-G-BM-SNP-CID		Contact BioGEVES	
Hybrid Conformity - SNP.	BI-G-BM-SNP-CONF		Contact BioGEVES	
Varietal comparison - SNP.	BI-G-BM-SNP-COMP		Contact BioGEVES	
Genetic purity analysis - SNP.	BI-G-BM-SNP-PUR		Contact BioGEVES	
Varietal description - SNP.	BI-G-BM-SNP-DVAR		Contact BioGEVES	
Standardization of DNA concentration & distribution in plate.	BI-G-CUST-GEN-3		Contact BioGEVES	
Analysis of genetic diversity.	BI-G-CUST-GEN-2		Contact BioGEVES	
Migration run - Capillary sequencer - plate.	BI-G-BM-RUN		Contact BioGEVES	
DNA assay.	BI-G-BM-DOS		Contact BioGEVES	
Development of genotyping method.	BI-G-METH		Contact BioGEVES	
Customised genotyping.	BI-G-CUST		Contact BioGEVES	

### Technological quality: biochemical tests

		Size	Duration	Price
SPEC - custom analysis.	BI-B-CUST-DEV-SPEC		Contact BioGEVES	
RMN - custom analysis.	BI-B-CUST-DEV-RMN		Contact BioGEVES	
CPG - custom analysis.	BI-B-CUST-DEV-CPG		Contact BioGEVES	
NIRS - custom analysis.	BI-B-CUST-DEV-NIRS		Contact BioGEVES	
HPLC - custom analysis.	BI-B-CUST-DEV-HPLC		Contact BioGEVES	
Tannin content (assay by spectrophotometry).	BI-B-SPEC-TAN-GEN		Contact BioGEVES	
Fatty acid composition.	BI-B-CPG-AG-GEN		Contact BioGEVES	
Glucosinolate content (HPLC).	BI-B-HPLC-GLU-GEN		Contact BioGEVES	
Antitryptic activity.	BI-B-SPECT-FAT-GEN		Contact BioGEVES	
Glucosinolate content (NIRS).	BI-B-NIRS-NGLS	NEW	Contact BioGEVES	
Spectrochlorophyll.	BI-B-SPEC-CHLO	NEW	Contact BioGEVES	
Customised biochemical molecule assays (NIRS model development, analytical chemistry...).	BI-B-CUST	NEW	Contact BioGEVES	
Oil content (NMR).	BI-B-RMN-H		Contact BioGEVES	
Water content (NMR).	BI-B-RMN-E		Contact BioGEVES	

### Other tests

		Size	Duration	Price
WDV virus detection test by PCR.	BI-D-VIR-WDV		Contact BioGEVES	

### Annual subscription to the variety denomination class test

		Size	Duration	Price
All species - 10 tests.	SEV-DENOS-10			185.00
All species - 20 tests.	SEV-DENOS-20			350.00

## Annual subscription to the variety denomination class test

		Price
All species - 50 tests.	SEV-DENOS-50	825.00
All species - 100 tests.	SEV-DENOS-100	1590.00
All species - 200 tests.	SEV-DENOS-200	3110.00

## PUBLICATIONS

		Price
<b>Germination analysis method sheet</b>		
Germination method of different species.	GE-M-ESP	7.10
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b>		
Purity and determination of other seeds by number: methodology.	AP-M-1	29.20
<b>Identification data sheet of seeds and other impurities</b>		
<i>Echinochloa crus-galli, Echinochloa colona, Panicum capillare, Panicum maximum, Setaria pumila, Setaria veridis.</i>	AP-A-01	29.20
<i>Avena fatua-Avena sativa.</i>	AP-A-02	29.20
Polygonaceae ( <i>Persicaria maculosa, Persicaria lapathifolia, Fallopia convolvulus, Polygonum aviculare, Rumex sp., Rumex acetosella, Rumex maritimus</i> ).	AP-A-03	29.20
<i>Chenopodium sp., Atriplex sp., Amaranthus sp., Reseda sp., Myosotis sp.</i>	AP-A-04	29.20
Asteraceae ( <i>Anthemis arvensis, Glebionis segetum, Chicorium sp., Tripleurospermum inodorum, Helminthotheca echioïdes, Lapsana communis, Lactuca sativa, Sonchus spp., Cirsium arvense, Cirsium vulgare, Centaurea cyanus</i> ).	AP-A-06	29.20
<i>Cuscuta spp.</i>	AP-P-1	29.20
<i>Claviceps purpurea - Sclerotinia sclerotiorum.</i>	AP-P-2	29.20
<b>Self-control kit</b>		
On request, components are sent separately accompanied with an instructional material. Contact SNES.	KIT-AUTO	/
<b>I.D.Seed® On-line picture library, an aid to the identification of seeds - In French</b>		
I.D.Seed® - Complete collection. Resgistration on <a href="http://mediatheque.geves.fr">http://mediatheque.geves.fr</a>	IDSEED-1	0.00
<b>Identification data sheet of fungal pathogens</b>		
One data sheet per pathogen.Contact SNES for a list of available pathogens.	PA-T-PATH <b>NEW</b>	30.00
<b>Identification data sheet of fungal saprophytes</b>		
Sheet containing the main fungal saprophytes present in analysis on media.	PA-T-SAPR <b>NEW</b>	50.00

## SEED QUALITY

## Physical quality

		Size	Duration	Price
<b>Calibration - Provide seeds in sealed foil sachets</b>				
ISTA method (Denker device): inferior or equal to 6 grills.	MN-DK-CAL1	/	/	37.00
ISTA method (Denker device): superior or equal to 6 grills.	MN-DK-CAL2	/	/	48.00
<b>Thousand-seed weight (on purity test performed by SNES)</b>				
Thousand-seed weight on pure seeds.	MMS-01	/	/	29.40
<b>Purity analysis test</b>				
Purity - Vegetables	PU-IS-18	ISTA weight	/	29.60
Percentage of a specific type of other seeds. <b>Specify the search to be performed for each species.</b>	PU-CONS1 <b>NEW</b>	/	/	8.00
Percentage of a specific type of inert materials. <b>Specify the search to be performed for each species.</b>	PU-CONS2 <b>NEW</b>	/	/	8.00
<b>Counting of all other seeds</b>				
Full counting - Vegetables.	SP-IS-17	ISTA weight	/	122.00
Counting of other seeds on purity weight. Indication of the number of other seeds in the specific purity test.	PU-SP-01	/	/	12.00
<b>Limited counting of all other seeds</b>				
Searching of 1 to 4 species (except for <i>Orobanchaceae</i> ). <b>Indicate the name of the species to be searched.</b>	SP-LI-01	ISTA weight	/	57.00
Searching of 5 to 8 species (except for <i>Orobanchaceae</i> ). <b>Indicate the name of the species to be searched.</b>	SP-LI-02	ISTA weight	/	91.00
Searching of more than 8 species (except for <i>Orobanchaceae</i> ). <b>Indicate the name of the species to be searched.</b>	SP-LI-20		Contact SNES	
Searching of <i>Orobanche</i> sp. <b>Only on UNTREATED and UNCOATED seeds.</b> Analyse performed on a separate, sealed, submitted subsample.	SP-ORO	ISTA weight	/	66.00
Searching of <i>Striga</i> sp. <b>Only on UNTREATED and UNCOATED seeds.</b> Analyse performed on a separate, sealed, submitted subsample.	SP-STRIGA	ISTA weight	/	66.00
Searching of <i>Orobanche</i> sp. and <i>Striga</i> sp. <b>Only on UNTREATED and UNCOATED seeds.</b> Analyse performed on a separate, sealed, submitted subsample.	SP-ORO-STR	ISTA weight	/	98.00
<b>Tests on coated seeds</b>				
Purity of coated seeds.	PU-IS-21	2 500	/	30.60
Pelleting material removal and full counting on 2500 coated seeds. <b>Only on UNTREATED seeds.</b>	SP-ENR2500	2 500	/	91.00
Pelleting material removal and full counting on 7500 coated seeds. <b>Only on UNTREATED seeds.</b>	SP-ENR-TOT	7 500	/	275.00
Pelleting material removal and limited counting of other seeds from 1 to 3 botanical species, on 7500 coated seeds. <b>Only on UNTREATED seeds.</b>	SP-ENR-LIM	7 500	/	215.00
<b>Moisture content - Provide seeds in sealed foil sachets from which as much air as possible has been extracted</b>				
Oven method.	TE-SN-01	ISTA weight	/	18.40
<b>Identification of individual seeds</b>				
Visual identification by species.	ID-IS-01	/	/	30.80

## Physiological quality

		Size	Duration	Price
<b>Germination test on 400 seeds</b>				
Vegetables.	GE-FG-18-4	1 250	/	56.00
<i>The germination capacity tests of lamb's lettuce seeds are carried out using several methods on 400 seeds: 2 methods with and without sodium hypochlorite disinfection from January 1st to May 31st and 2 methods with and without sodium hypochlorite disinfection and gibberellin from June 1st to December 31st.</i>				
<b>Germination test on 200 seeds</b>				
Vegetables.	GE-FG-18-2	500	/	45.10
<b>Germination test on 100 seeds</b>				
Vegetables.	GE-FG-18-1	500	/	27.10
<b>Germination tests on bulbs and bulblets</b>				
On 400 seeds.	GE-BULB-4	/	/	131.00
On 200 seeds.	GE-BULB-2	/	/	106.00
<b>Lettuce specific cold-test</b>				
On 400 seeds.	GE-EGFG-4	1 250	/	79.00



## Physiological quality

		Size	Duration	Price
<b>Lettuce specific cold-test</b>				
On 200 seeds.	GE-EGFG-2	500	/	47.10
<b>Verification of species</b>				
Verification of species after germination test.	GE-ENR	/	/	8.10
<b>Vigour test</b>				
Conductivity test on 200 seeds on ISTA species.	GE-CON-GLO	500	/	49.90
<i>The moisture content of seeds should be between 10 and 14 %, sample must be send in a sealed foil sachet with the indication of the water content, otherwise it would be determined by us before the test and invoiced (see test TE-SN-01).</i>				
<b>Usable plants test</b>				
Determination of the rate of usable <b>Tomato</b> plants - 400 seeds.	GE-TX-PL-2	500	/	91.00
Determination of the rate of usable <b>Tomato</b> plants - 200 seeds.	GE-TX-PL-1	300	/	69.00
<b>Treatment of seeds</b>				
Treatment of seeds to be performed by SNES. Seeds do not undergo fungicide treatment before the germination test unless specifically requested (except for Beet).	GE-TRAIT	/	/	20.00

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Brassicaceae (Cabbage, Cauliflower, Broccoli, Radish, Turnip) - Detection of 1 pathogen</b>				
<b><i>Xanthomonas campestris pv. campestris</i></b>				
Agar method + pathogenicity test in case of suspect colonies (ISTA 7-019a without counting of colonies).	PA-BA-04	30 000	41 days	190.00
	PA-BA-57	40 000	41 days	227.00
	PA-BA-63	60 000	41 days	326.00
<b>Disinfected seeds</b> . Grinding + agar method + pathogenicity test in case of suspect colonies (ISTA 7-019b without counting of colonies).	PA-BA-105	30 000	41 days	226.00
	PA-BA-58	40 000	41 days	296.00
	PA-BA-64	60 000	41 days	439.00
Agar method + counting of colonies + pathogenicity test in case of suspect colonies (ISTA 7-019a).	PA-BA-03	30 000	41 days	200.00
<b>Disinfected seeds</b> . Grinding + agar method + counting of colonies + pathogenicity test in case of suspect colonies (ISTA 7-019b).	PA-BA-05	30 000	41 days	238.00
<b><i>Xanthomonas campestris pv. armoraciae (raphani)</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-29	30 000	41 days	175.00
	PA-BA-59	40 000	41 days	230.00
	PA-BA-65	60 000	41 days	326.00
<b>Disinfected seeds.</b> Grinding + agar method + pathogenicity test in case of suspect colonies.	PA-BA-30	30 000	41 days	226.00
	PA-BA-60	40 000	41 days	296.00
	PA-BA-66	60 000	41 days	439.00
<b><i>Pseudomonas syringae pv. maculicola</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-10	30 000	41 days	180.00
<b>Disinfected seeds.</b> Grinding + agar method + pathogenicity test in case of suspect colonies.	PA-BA-33	30 000	41 days	230.00
<b>Brassicaceae (Cabbage, Cauliflower, Broccoli, Radish, Turnip) - Detection of 2 pathogens.</b>				
<b><i>Xanthomonas campestris pv. campestris + Xanthomonas campestris pv. armoraciae (raphani)</i></b>				
Agar method + pathogenicity test in case of suspect colonies (ISTA 7-019a without counting of colonies for Xcc and Xca).	PA-BA-06	30 000	41 days	230.00
	PA-BA-61	40 000	41 days	282.00
	PA-BA-78	60 000	41 days	404.00
<b>Disinfected seeds.</b> Grinding + agar method + pathogenicity test in case of suspect colonies (ISTA 7-019b without counting of colonies for Xcc).	PA-BA-07	30 000	41 days	273.00
	PA-BA-62	40 000	41 days	358.00
	PA-BA-67	60 000	41 days	530.00
<b><i>Xanthomonas campestris pv. campestris + Pseudomonas syringae pv. maculicola</i></b>				
Agar method + pathogenicity test in case of suspect colonies colonies (ISTA 7-019a without counting of colonies for Xcc).	PA-BA-45	30 000	41 days	277.00
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-46	30 000	41 days	277.00

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Brassicaceae (Cabbage, Cauliflower, Broccoli, Radish, Turnip) - Detection of 3 pathogens.</b>				
<b><i>Xanthomonas campestris</i> pv. <i>campestris</i> + <i>Xanthomonas campestris</i> pv. <i>armoraciae</i> (raphani) + <i>Pseudomonas syringae</i> pv. <i>maculicola</i>.</b>				
Agar method + pathogenicity test in case of suspect colonies (ISTA 7-019a without counting of colonies for Xcc and Xca).	PA-BA-08	30 000	41 days	336.00
<b>Carrot</b>				
<b><i>Candidatus liberibacter solanacearum</i></b>				
Detection by PCR.	PA-BA-CAND	20 000	10 days	117.00
<b><i>Xanthomonas hortorum</i> pv. <i>carotae</i></b>				
Agar method with counting of colonies and PCR in case of suspect colonies (ISTA 7-020).	PA-BA-02	30 000	29 days	277.00
<b>Carrot, Celery, Fennel, Parsnip</b>				
<b><i>Xanthomonas hortorum</i> pv. <i>carotae</i></b>				
Confirmation by pathogenicity test of PCR positive isolates.	PA-PP-XHC	/	60 days	115.00
Agar method and PCR in case of suspect colonies (ISTA 7-020 without counting of colonies).	PA-BA-01	30 000	29 days	265.00
<b>Cucurbits (Squash, Cucumber, Melon, Watermelon) - Detection of 1 pathogen</b>				
<b><i>Xanthomonas cucurbitae</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-86	5 000	32 days	310.00
<b><i>Pseudomonas syringae</i> pv. <i>peponis</i></b>				
Agar method + identification of strains by PCR in case of suspect colonies.	PA-BA-91	5 000	24 days	310.00
<b><i>Pseudomonas viridiflava</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-93	5 000	32 days	310.00
<b><i>Acidovorax citrulli</i></b>				
SE-PCR, ISF method current version. Confirmation of viability and pathogenicity is possible by grow-out on a new sample of 10 400 seeds.	PA-BA-1121 NEW	10 000	10 days	175.00
	PA-BA-1122 NEW	30 000	10 days	290.00
Grow-out, PCR or pathogenicity test in case of suspect symptoms.	PA-BA-112	10 400	37 days	396.00
<b><i>Pseudomonas syringae</i> all pathovars</b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-90	5 000	22 days	350.00
<b>Cucurbits (Squash, Cucumber, Melon, Watermelon) - Detection of 2 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>lachrymans</i> + <i>Pseudomonas syringae</i> pv. <i>peponis</i></b>				
Agar method + pathogenicity test and/or identification of strains by PCR in case of suspect colonies.	PA-BA-89	5 000	36 days	350.00
<b>Cucurbits (Squash, Cucumber, Melon, Watermelon) - Detection of 3 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>lachrymans</i> + <i>Pseudomonas syringae</i> pv. <i>peponis</i> + <i>Xanthomonas cucurbitae</i></b>				
Agar method + pathogenicity test and/or identification of strains by PCR in case of suspect colonies.	PA-BA-89-1	5 000	43 days	440.00
<b>Bean - Detection of 1 pathogen</b>				
<b><i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (<i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i>) and <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> var. <i>fuscans</i> (<i>Xanthomonas citri</i> pv. <i>fuscans</i>)</b>				
Agar method, identification of strains by qPCR in case of suspect colonies (in house method ANA/PAT/ANS/MO/015 derived from Anses MOA 030*).	PA-BA-13-2	5 000	25 days	165.00
	PA-BA-13-3	10 000	25 days	217.00
	PA-BA-13-4	30 000	25 days	355.00
Agar method with counting of colonies + identification of strains by PCR in case of suspect colonies (ISTA 7-021 option 2).	PA-BA-12	5 000	25 days	200.00
<b><i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i></b>				
Agar method + identification of strains by qPCR in case of suspect colonies (method derived from Anses BHs/99/02).	PA-BA-34-2	5 000	25 days	170.00
	PA-BA-34-3	10 000	25 days	224.00
	PA-BA-35-1	30 000	25 days	392.00
Agar method with counting of colonies + pathogenicity test in case of suspect colonies (ISTA 7-023).	PA-BA-44	5 000	34 days	220.00

## Bacteriology - Uncoated seeds only

	Size	Duration	Price	
<b>Bean - Detection of 1 pathogen</b>				
<b><i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-36	5 000	34 days	192.00
	PA-BA-36-1	10 000	34 days	232.00
	PA-BA-37	30 000	34 days	415.00
<b><i>Xanthomonas axonopodis</i> pv. <i>glycinea</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-120	5 000	34 days	177.00
<b>Bean - Detection of 2 pathogens</b>				
<b><i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (<i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i>) and <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> var. <i>fuscans</i> (<i>Xanthomonas citri</i> pv. <i>fuscans</i>) + <i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i></b>				
Detection and identification on symptoms (leaves or pods) by PCR.	PA-BA-94	/	7 days	245.00
Agar method + identification of strains by qPCR in case of suspect colonies (in house method ANA/PAT/QS/BA/MO/015 derived from Anses MOA 030* and in house method derived from BHs/99/02 respectively).	PA-BA-15-2	5 000	25 days	253.00
	PA-BA-15-3	10 000	25 days	310.00
Agar method + identification of strains by qPCR in case of suspect colonies (in house method ANA/PAT/QS/BA/MO/105 derived from Anses MOA 030* and in house method derived from BHs/99/02 respectively).	PA-BA-15-4	30 000	25 days	470.00
<b><i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (<i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i>) and <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> var. <i>fuscans</i> (<i>Xanthomonas citri</i> pv. <i>fuscans</i>) + <i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Identification of strains by pathogenicity test and/or PCR in case of suspect colonies (in house method ANA/PAT/QS/BA/MO/105 derived from Anses MOA 030*).	PA-BA-48	5 000	34 days	260.00
	PA-BA-50-1	10 000	34 days	315.00
Identification of strains by pathogenicity test and/or PCR in case of suspect colonies (in house method ANA/PAT/QS/BA/MO/015 derived from Anses MOA 030*).	PA-BA-49	30 000	34 days	464.00
<b><i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i> + <i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Agar method + PCR/pathogenicity test in case of suspect colonies (method derived from Anses BHs/99/02).	PA-BA-50	5 000	34 days	260.00
	PA-BA-48-1	10 000	34 days	295.00
	PA-BA-51	30 000	34 days	464.00
<b>Bean - Detection of 3 pathogens</b>				
<b><i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i> + <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (<i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i>) and <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> var. <i>fuscans</i> (<i>Xanthomonas citri</i> pv. <i>fuscans</i>) + <i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Agar method + identification of strains pathogenicity test and/or qPCR in case of suspect colonies (in house method derived from Anses BHs/99/02 and in house method ANA/PAT/QS/BA/MO/015 derived from Anses MOA 030* respectively).	PA-BA-17	5 000	34 days	298.00
	PA-BA-17-1	10 000	34 days	357.00
	PA-BA-18	30 000	34 days	565.00
<b><i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i> + <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (<i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i>) and <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> var. <i>fuscans</i> (<i>Xanthomonas citri</i> pv. <i>fuscans</i>) + <i>Xanthomonas axonopodis</i> pv. <i>glycinea</i></b>				
Agar method + identification of strains pathogenicity test and/or qPCR in case of suspect colonies (in house method derived from Anses BHs/99/02 and in house method ANA/PAT/QS/BA/MO/015 derived from Anses MOA 030* respectively).	PA-BA-102	5 000	34 days	315.00
<b>Bean</b>				
<b><i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> (<i>Xanthomonas phaseoli</i> pv. <i>phaseoli</i>) and <i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i> var. <i>fuscans</i> (<i>Xanthomonas citri</i> pv. <i>fuscans</i>)</b>				
Confirmation by pathogenicity test of PCR positive.	PA-PP-XAP	/	21 days	63.00
<b>Lettuce - Detection of 1 pathogen</b>				
<b><i>Xanthomonas vitians</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-95	30 000	36 days	175.00
<b><i>Pseudomonas cichorii</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-97	30 000	36 days	178.00



## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Lettuce - Detection of 2 pathogens</b>				
<b><i>Xanthomonas vitians</i> + <i>Pseudomonas cichorii</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-98	30 000	36 days	325.00
<b>Corn salad</b>				
<b><i>Acidovorax valerianellae</i></b>				
Grow-out, symptoms observed on plantlets and confirmation by PCR in case of suspect plantlets. <b>For untreated seed, fungal treatment is systematically done in water added to vermiculite.</b>	PA-BA-38	10 000	40 days	215.00
<b>Seeds that require dormancy breaking.</b>	PA-BA-38-2	10 000	47 days	215.00
Grow-out, symptoms observed on plantlets and confirmation by PCR in case of suspect colonies. <b>For untreated seed, a fungal treatment is systematically done in water added to vermiculite.</b>				
Supplement for counting of foci.	PA-BA-41	/	/	15.50
<b>Pea - Detection of 1 pathogen</b>				
<b><i>Pseudomonas syringae</i> pv. <i>pisii</i></b>				
Agar method + pathogenicity test in case of suspect colonies (method derived from Anses BHs/99/03).	PA-BA-21	5 000	28 days	162.00
	PA-BA-70	15 000	28 days	240.00
Agar method + pathogenicity test in case of suspect colonies (ISTA 7-029).	PA-BA-21-1	5 000	31 days	171.00
<b><i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Agar method + pathogenicity test in case of suspect colonies (Anses BHs/99/03).	PA-BA-22	5 000	31 days	175.00
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-84	15 000	31 days	245.00
<b>Pea - Detection of 2 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>pisii</i> + <i>Pseudomonas syringae</i> pv. <i>syringae</i></b>				
Agar method + pathogenicity test in case of suspect colonies (Anses BHs/99/03).	PA-BA-22-2	5 000	31 days	202.00
	PA-BA-85	15 000	31 days	303.00
<b>Pea, Vetch</b>				
<b><i>Pseudomonas syringae</i> pv. <i>pisii</i></b>				
Supplement fee. Confirmation by pathogenicity test PCR positive isolates.	PA-PP-PSP	/	9 days	67.00
<b>Tomato</b>				
<b><i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i></b>				
Agar method. (ISF current version / Anses MA049*).	PA-BA-23-1	30 000	31 days	304.00
	PA-BA-23-3	50 000	31 days	339.00
Supplement fee. Confirmation by pathogenicity test of PCR positive isolates*.	PA-PP-CMM	/	10 days	44.00
Immunofluorescence test (Anses BH/06/01). 5 subsamples of 1 000.	PA-BA-23	5 000	18 days	163.00
Immunofluorescence test (Anses BH/06/01). 5 subsamples of 2 000.	PA-BA-101	10 000	18 days	163.00
Immunofluorescence test (Anses BH/06/01). 10 subsamples of 1 000.	PA-BA-23-4	10 000	18 days	246.00
Immunofluorescence test (Anses BH/06/01). 15 subsamples of 1 000.	PA-BA-23-5	15 000	18 days	249.00
Immunofluorescence test (Anses BH/06/01). 6 subsamples of 5 000.	PA-BA-71	30 000	18 days	78.00
Immunofluorescence test (Anses BH/06/01). 10 subsamples of 5 000.	PA-BA-69	50 000	18 days	243.00
Supplement fee. Confirmation by PCR of macerates IF positive.	PA-BA-PCR	/	/	300.00
<b>Tomato/Capsicum - Detection of 1 pathogen</b>				
<b><i>Pseudomonas syringae</i> pv. <i>tomato</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-25	30 000	31 days	189.00
<b><i>Xanthomonas</i> spp. pathogenic on Tomato and Pepper</b>				
Agar method + identification of strains by PCR in case of suspect colonies (ISF).	PA-BA-26	30 000	26 days	189.00
<b><i>Pseudomonas corrugata</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-92	30 000	31 days	255.00
<b>Tomato/Capsicum - Detection of 2 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>tomato</i> + <i>Xanthomonas</i> spp. pathogenic on Tomato an Capsicum</b>				
Agar method + pathogenicity test and/or identification of strains by PCR in case of suspect colonies (ISF for <i>Xanthomonas</i> ).	PA-BA-40	30 000	31 days	283.00
<b><i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> + <i>Xanthomonas</i> spp. pathogenic on Tomato and Capsicum</b>				
Agar method + identification of strains by PCR and/or pathogenicity test in case of suspect colonies (ISF for <i>Xanthomonas</i> and ISF current version/Anses MOA 049*).	PA-BA-125	30 000	31 days	410.00

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Tomato/Capsicum - Detection of 2 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>tomato</i> + <i>Pseudomonas corrugata</i></b>				
Agar method + identification of strains by pathogenicity test in case of suspect colonies.	PA-BA-127	30 000	31 days	258.00
<b>Tomato/Capsicum - Detection of 3 pathogens</b>				
<b><i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> + <i>Pseudomonas syringae</i> pv. <i>tomato</i> + <i>Xanthomonas</i> spp. pathogenic on Tomato and Capsicum</b>				
Agar method + identification of strains by PCR and/or pathogenicity test in case of suspect colonies (ISF for <i>Xanthomonas</i> and ISF current version/Anses MOA 049*).	PA-BA-96	30 000	31 days	525.00
<b>Tomato/Capsicum</b>				
<b><i>Xanthomonas</i> spp. pathogenic on Tomato and Capsicum</b>				
Supplement fee. Confirmation by pathogenicity test of PCR positive isolates.	PA-PP-XPP	/	10 days	65.00

## Mycology - See p.7 "Seed health"

		Size	Duration	Price
<b>Asparagus</b>				
<b><i>Fusarium oxysporum</i>, <i>Fusarium</i> (section <i>Discolour</i> and other sections), <i>Botrytis</i> sp.</b>				
Agar method.	PA-ES-ASP	400	19 days	91.00
<b>Eggplant</b>				
<b><i>Alternaria solani</i>, <i>Fusarium oxysporum</i>, <i>Fusarium solani</i>, <i>Fusarium</i> (other sections), <i>Colletotrichum</i> sp., <i>Phomopsis vexans</i>, <i>Botrytis</i> sp., <i>Verticillium</i> sp., <i>Rhizoctonia</i> sp., <i>Didymella</i> sp., <i>Stemphylium</i> sp.</b>				
Agar method.	PA-ES-AUB	400	19 days	91.00
<b>Brassicaceae (Cabbage, Rape, Turnip, Radish, Rocket)</b>				
<b><i>Leptosphaeria maculans</i> and/or <i>Plenodomus biglobosus</i> (<i>Phoma lingam</i>), <i>Alternaria brassicae</i>, <i>Alternaria brassicicola</i>, <i>Alternaria japonica</i>, <i>Sclerotinia sclerotiorum</i>, <i>Botrytis cinerea</i>, <i>Phoma</i> sp.</b>				
Agar method (derivated from ISTA method 7-004).	PA-ES-CHO	400	19 days	91.00
<b><i>Leptosphaeria maculans</i> and/or <i>Plenodomus biglobosus</i> (<i>Phoma lingam</i>)</b>				
Agar method (ISTA 7-004).	PA-PH-CHO	1 000	25 days	226.00
<b><i>Albugo candida</i></b>				
Seed wash method. UNTREATED seeds only.	PA-ALB-CHO	500	15 days	88.00
<b><i>Hyaloperonospora parasitica</i> (downy mildew)</b>				
Seed wash method. UNTREATED seeds only.	PA-MI-CHO	500	15 days	88.00
Grow-out method (viability testing).	PA-MICHOGO	400	42 days	111.00
<b><i>Plasmodiophora brassicae</i></b>				
Grow-out method.	PA-MICHOPL	100	75 days	225.00
<b>Carrot</b>				
<b><i>Cercospora carotae</i></b>				
Seed wash method. UNTREATED seeds only.	PA-CE-CAR	500	15 days	88.00
<b><i>Alternaria dauci</i>, <i>Alternaria radicina</i> (<i>Stemphylium radicinum</i>)</b>				
Agar Method (ISTA 7-001b, 7-002b).	PA-AL-CAR	400	24 days	90.00
<b><i>Alternaria dauci</i>, <i>Alternaria radicina</i> (<i>Stemphylium radicinum</i>), <i>Fusarium</i> (all sections), <i>Phoma</i> sp., <i>Botrytis</i> sp.</b>				
Agar method.	PA-ES-CAR	400	19 days	91.00
<b><i>Septoria carotae</i></b>				
Direct visual observation. UNTREATED seeds only. Analysis stopped at 400 seeds if positive.	PA-SE-CAR	1 000	15 days	75.00
<b><i>Mycocentrospora acerina</i></b>				
Seed wash method. UNTREATED seeds only.	PA-MY-CAR	500	15 days	88.00
<b><i>Phomopsis dauci</i> (<i>Diaporthe angelicae</i>)</b>				
On umbels of Apiaceae. Agar method.	PA-PL-CAR	/	19 days	90.00
<b>Celery</b>				
<b><i>Septoria apiicola</i></b>				
Direct visual observation. UNTREATED seeds only. Analysis stopped at 400 seeds if positive.	PA-SE-CEL	1 000	15 days	75.00
<b><i>Cercospora apii</i></b>				
Seed wash method. UNTREATED seeds only.	PA-CE-CEL	500	15 days	88.00

## Mycology - See p.7 "Seed health"

		Size	Duration	Price
<b>Celery</b>				
<i>Alternaria dauci</i> , <i>Alternaria radicina</i> , <i>Botrytis cinerea</i> , <i>Botrytis</i> sp., <i>Fusarium</i> (all sections)				
Agar method.	PA-ES-CEL	400	19 days	91.00
<b>Cucumber</b>				
<i>Stagonosporopsis cucurbitacearum</i> ( <i>Didymella bryoniae</i> ), <i>Fusarium oxysporum</i> , <i>Fusarium solani</i> , <i>Alternaria cucumerina</i> , <i>Gloeosporium orbiculare</i> ( <i>Colletotrichum orbiculare</i> ), <i>Fusarium</i> (other sections), <i>Phomopsis vexans</i> , <i>Botrytis</i> sp., <i>Cladosporium</i> sp.				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-COND	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-CON	400	19 days	91.00
<b>Squash</b>				
<i>Stagonosporopsis cucurbitacearum</i> ( <i>Didymella bryoniae</i> ), <i>Fusarium oxysporum</i> , <i>Fusarium solani</i> , <i>Alternaria cucumerina</i> , <i>Gloeosporium orbiculare</i> ( <i>Colletotrichum orbiculare</i> ), <i>Fusarium</i> (other sections), <i>Phomopsis vexans</i> , <i>Botrytis</i> sp., <i>Cladosporium</i> sp.				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-COUD	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-COU	400	19 days	91.00
<b>Squash, Melon</b>				
<i>Pseudoperonospora cubensis</i>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-COUR	500	15 days	88.00
<b>Cress</b>				
<i>Alternaria brassicae</i> , <i>Stemphylium botryosum</i> , <i>Botrytis</i> sp., <i>Phoma</i> sp., <i>Fusarium</i> (all sections)				
Agar method.	PA-ES-CRE	400	19 days	91.00
<i>Hyaloperonospora brassicae</i> ( <i>Peronospora brassicae</i> )				
Seed wash method. <b>UNTREATED seeds only. Watercress</b> ( <i>Nasturtium</i> ) <b>seeds only.</b>	PA-MI-CRE	500	15 days	88.00
<b>Spinach</b>				
<i>Peronospora farinosa</i> (downy mildew)				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-EPI	500	15 days	88.00
<i>Botrytis cinerea</i> , <i>Colletotrichum dematium</i> , <i>Fusarium oxysporum</i> , <i>Fusarium</i> (other sections)				
Agar method.	PA-ES-EPI	400	19 days	91.00
<b>Fennel</b>				
<i>Passalora punctum</i> ( <i>Cercosporidium punctum</i> )				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-CE-FEN	500	15 days	88.00
<i>Botrytis cinerea</i> , <i>Fusarium</i> (all sections), <i>Alternaria radicina</i> , <i>Stemphylium botryosum</i> ( <i>Pleospora tarda</i> ), <i>Phoma</i> sp.				
Agar method.	PA-ES-FEN	400	19 days	91.00
<b>Bean</b>				
<i>Colletotrichum lindemuthianum</i> , <i>Botrytis cinerea</i> , <i>Macrophomina phaseolina</i> , <i>Stemphylium botryosum</i> , <i>Boeremia exigua</i> ( <i>Phoma exigua</i> ), <i>Colletotrichum truncatum</i> , <i>Phyllosticta phaseolina</i> , <i>Fusarium</i> (all sections), <i>Rhizoctonia solani</i> , <i>Diaporthe phaseolorum</i> , <i>Sclerotinia sclerotiorum</i> .				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-HARD	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-HARM	400	19 days	91.00
<i>Colletotrichum lindemuthianum</i>				
Blotter roller method (ISTA 7-006).	PA-ESI-HAR	400	19 days	99.00
<b>Lettuce</b>				
<i>Septoria lactucae</i>				
Direct visual observation. <b>UNTREATED seeds only.</b>	PA-SE-LAI	1 000	15 days	75.00
<i>Alternaria dauci</i> , <i>Microdochium panattonianum</i> ( <i>Marssonina panattoniana</i> ), <i>Stemphylium</i> sp., <i>Botrytis</i> sp., <i>Verticillium</i> sp., <i>Fusarium</i> (all sections)				
Agar method.	PA-ES-LAI	400	19 days	91.00
<b>Corn salad</b>				
<i>Peronospora valerianellae</i> (downy mildew)				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-MAC	500	15 days	79.00
Grow-out method (viability testing).	PA-OUT-MAC	400	42 days	100.00



## Mycology - See p.7 "Seed health"

		Size	Duration	Price
<b>Corn salad</b>				
<i>Stagonosporopsis valerianellae (Phoma valerianellae), Botrytis cinerea, Fusarium</i> (all sections)				
Agar method.	PA-ES-MAC	400	28 days	91.00
<i>Stagonosporopsis valerianellae (Phoma valerianellae)</i>				
Detection and identification on leaves.	PA-ID-PHOV	/	15 days	87.00
<b>Melon</b>				
<i>Stagonosporopsis cucurbitacearum (Didymella bryoniae), Gloeosporium orbiculare (Colletotrichum orbiculare), Fusarium solani, Fusarium oxysporum, Fusarium</i> (other sections), <i>Alternaria cucumerina, Botrytis sp., Cladosporium sp.</i>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-MELD	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-MEL	400	19 days	91.00
<b>Onion</b>				
<i>Peronospora destructor (downy mildew)</i>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-OIG	500	15 days	88.00
<i>Urocystis colchici (Urocystis cepulae) (smut)</i>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-CH-OIG	500	15 days	88.00
<i>Alternaria porri, Botrytis allii and/or aclada, Stromatinia cepivora (Sclerotium cepivorum), Fusarium oxysporum, Pyrenochaeta terrestris (Setophoma terrestris), Fusarium sp.</i> (section <i>Liseola</i> and other sections), <i>Botrytis cinerea, Botrytis squamosa</i>				
Agar method.	PA-ES-OIG	400	19 days	91.00
<b>Onion (bulblets)</b>				
<i>Alternaria porri, Botrytis allii and/or aclada, Stromatinia cepivora (Sclerotium cepivorum), Fusarium oxysporum, Pyrenochaeta terrestris (Setophoma terrestris), Fusarium sp.</i> (section <i>Liseola</i> and other sections), <i>Botrytis cinerea, Botrytis squamosa</i>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ESOIGBD	200	19 days	99.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-OIGB	200	19 days	95.00
<b>Watermelon</b>				
<i>Stagonosporopsis cucurbitacearum (Didymella bryoniae), Fusarium oxysporum, Fusarium solani, Alternaria cucumerina, Gloeosporium orbiculare (Colletotrichum orbiculare), Fusarium</i> (other sections), <i>Phomopsis vexans, Botrytis sp., Cladosporium sp.</i>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-PASD	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-PAS	400	19 days	91.00
<b>Capsicum</b>				
<i>Phytophthora capsici</i>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-PIM	500	15 days	88.00
<b>Capsicum, Pepper</b>				
<i>Colletotrichum truncatum (Colletotrichum capsici), Fusarium oxysporum, Fusarium</i> (all sections), <i>Colletotrichum coccodes, Sclerotinia sclerotiorum., Botrytis sp., Verticillium sp.</i>				
Agar method.	PA-ES-POIV	400	19 days	91.00
<b>Leek</b>				
<i>Alternaria porri, Botrytis allii and/or Botrytis aclada, Sclerotinia minor, Fusarium moniliforme, Fusarium oxysporum, Fusarium</i> (other sections), <i>Botrytis sp., Stemphylium sp.</i>				
Agar method.	PA-ES-POR	400	19 days	91.00
<b>Pea</b>				
<i>Didymella pisi (Ascochyta pisi), Didymella pinodes (Mycosphaerella pinodes), Didymella pinodella (Phoma pinodella), Stemphylium botryosum, Fusarium</i> (other sections), <i>Botrytis sp., Sclerotinia sp., Phoma sp.</i>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-POID	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-POI	400	19 days	91.00
<i>Peronospora viciae (Peronospora pisi) (downy mildew)</i>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-POI	500	15 days	88.00
<i>Didymella pisi (Ascochyta pisi)</i>				
Agar method (ISTA 7-005).	PA-ANT-POI	400	19 days	95.00

# Vegetables

## Mycology - See p.7 "Seed health"

		Size	Duration	Price
<b>Chickpea</b>				
<i>Mycosphaerella rabiei (Ascochyta rabiei)</i> , <i>Botrytis cinerea</i> , <i>Fusarium oxysporum</i> , <i>Fusarium solani</i> , <i>Fusarium</i> (other sections)				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-POCD	400	19 days	<b>95.00</b>
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-POC	400	19 days	<b>91.00</b>
<b>Radish</b>				
<i>Hyaloperonospora parasitica (Peronospora parasitica)</i> (downy mildew)				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-RAD	500	15 days	<b>88.00</b>
Grow-out method (viability testing).	PA-MIRADGO	400	42 days	<b>111.00</b>
<b>Rocket</b>				
<i>Hyaloperonospora parasitica</i> (downy mildew)				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-ROQL	500	15 days	<b>88.00</b>
Grow-out method (viability testing).	PA-MI-ROQ	400	42 days	<b>111.00</b>
<b>Tomato</b>				
<i>Alternaria solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium solani</i> , <i>Colletotrichum coccodes</i> , <i>Botrytis cinerea</i> , <i>Fusarium</i> (all sections), <i>Didymella</i> sp., <i>Verticillium</i> sp., <i>Stemphylium</i> sp., <i>Rhizoctonia</i> sp., <i>Sclerotinia</i> sp.				
Agar method.	PA-ES-TOM	400	19 days	<b>91.00</b>

## Nematology

		Size	Duration	Price
<b>Carrot</b>				
<i>Ditylenchus dipsaci</i>				
Filtration (Anses MOA013 parts A and B*). <b>UNTREATED seeds only.</b>	PA-NE-CAR	70 g	16 days	<b>65.00</b>
Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>				
<b>Onion</b>				
<i>Ditylenchus dipsaci</i>				
Filtration (Anses MOA013 parts A and B*). <b>UNTREATED seeds only.</b>	PA-NE-OIG	70 g	16 days	<b>65.00</b>
Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>				
<b>Leek</b>				
<i>Ditylenchus dipsaci</i>				
Filtration (Anses MOA013 parts A and B*). <b>UNTREATED seeds only.</b>	PA-NE-POI	70 g	16 days	<b>65.00</b>
Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>				
<b>Pea</b>				
<i>Ditylenchus dipsaci</i>				
Filtration (Anses MOA013 parts A and B*). <b>UNTREATED seeds only.</b>	PA-NE-POIS	70 g	16 days	<b>65.00</b>
Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>				
<b>Bulbs*, bulblets, bulbs, corms, rhizomes, tubers</b>				
<i>Ditylenchus dipsaci</i>				
Filtration (Anses MOA013 parts A and B). <b>UNTREATED seeds only.</b>	PA-NE-BULB	50 units	16 days	<b>114.00</b>
Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>				
<b>All species</b>				
<i>Ditylenchus dipsaci</i>				
Supplement for measure of viability by staining method (GEVES M-GEVES/SV/MO/001).	PA-NE-VIA	/	/	<b>96.00</b>

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Eggplant</b>				
<i>Tomato black ring virus (TBRV)</i>				
ELISA.	PA-VI-37-1	3 000	16 days	<b>138.00</b>
<b>Carrot</b>				
<i>Alfalfa mosaic (AMV)</i>				
ELISA.	PA-VI-71	2 000	16 days	<b>140.00</b>

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Carrot</b>				
<b>Arabis mosaic virus (ArMV)</b>				
ELISA.	PA-VI-33-1	3 000	16 days	191.00
<b>Cucumber leaf spot carmovirus (CLSV)</b>				
ELISA.	PA-VI-35-1	3 000	16 days	190.00
<b>Tomato ringspot virus (ToRSV)<sup>40</sup></b>				
ELISA.	PA-VI-38-1	3 000	16 days	140.00
<b>Celery</b>				
<b>Peanut stunt virus (PSV)</b>				
ELISA.	PA-VI-42		Contact SNES	
<b>Strawberry latent ringspot virus (SLRSV)</b>				
ELISA.	PA-VI-36		Contact SNES	
<b>Cucumis sp.</b>				
<b>Arabis mosaic virus (ArMV)</b>				
ELISA.	PA-VI-33-1	3 000	16 days	190.00
<b>Cucumber leaf spot carmovirus (CLSV)</b>				
ELISA.	PA-VI-35-1	3 000	16 days	190.00
<b>Cucumber mosaic virus (CMV)</b>				
ELISA.	PA-VI-56	2 000	16 days	210.00
<b>Tobacco ringspot virus (TRSV)<sup>40</sup></b>				
ELISA.	PA-VI-39-1	3 000	16 days	138.00
<b>Tomato ringspot virus (ToRSV)<sup>40</sup></b>				
ELISA.	PA-VI-38-1	3 000	16 days	140.00
<b>Zucchini yellow mosaic virus (ZYMV)</b>				
ELISA.	PA-VI-40-1	220.00	16 days	220.00
<b>Cucurbita sp., Citrulus sp.</b>				
<b>Arabis mosaic virus (ArMV)</b>				
ELISA.	PA-VI-33	2 000	16 days	213.00
<b>Cucumber leaf spot carmovirus (CLSV)</b>				
ELISA.	PA-VI-35	2 000	16 days	213.00
<b>Tobacco ringspot virus (TRSV)<sup>40</sup></b>				
ELISA.	PA-VI-39	2 000	16 days	223.00
<b>Tomato black ring virus (TBRV)</b>				
ELISA.	PA-VI-37	2 000	16 days	150.00
<b>Tomato ringspot virus (ToRSV)<sup>40</sup></b>				
ELISA.	PA-VI-38	2 000	16 days	213.00
<b>Zucchini yellow mosaic virus (ZYMV)</b>				
ELISA.	PA-VI-40	2 000	16 days	220.00
<b>Squash leaf curl virus (SLCV)</b>				
ELISA.	PA-VI-77		Contact SNES	
<b>Cucurbits - Detection of 1 pathogen</b>				
<b>Cucumber green mottle mosaic virus (CGMMV)</b>				
ELISA (ISTA 7-026).	PA-VI-01-1	2 000	16 days	160.00
	PA-VI-51	10 000	16 days	546.00
<b>Kyuri green mottle mosaic virus (KGMMV)</b>				
ELISA.	PA-VI-63	2 000	16 days	216.00
<b>Melon necrotic spot virus (MNSV)</b>				
ELISA (ISTA 7-026).	PA-VI-01-2	2 000	16 days	160.00
ELISA.	PA-VI-01-7	9 400	16 days	599.00
<b>Squash mosaic virus (SqMV)</b>				
ELISA (ISTA 7-026).	PA-VI-01	2 000	16 days	160.00
<b>Cucurbits - Detection of 2 pathogens</b>				
<b>Squash mosaic virus (SqMV) + Cucumber green mottle mosaic virus (CGMMV)</b>				
ELISA (ISTA 7-026).	PA-VI-01-3	2 000	16 days	258.00

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Cucurbits - Detection of 2 pathogens</b>				
<b>Squash mosaic virus (SqMV) + Melon necrotic spot virus (MNSV)</b>				
ELISA (ISTA 7-026).	PA-VI-01-4	2 000	16 days	258.00
<b>Melon necrotic spot virus (MNSV) + Cucumber green mottle mosaic virus (CGMMV)</b>				
ELISA (ISTA 7-026).	PA-VI-01-5	2 000	16 days	258.00
<b>Cucumber green mottle mosaic virus (CGMMV) + Kyuri green mottle mosaic virus (KGMMV)</b>				
ELISA.	PA-VI-64	2 000	16 days	274.00
<b>Cucurbits - Detection of 3 pathogens</b>				
<b>Squash mosaic virus (SqMV) + Cucumber green mottle mosaic virus (CGMMV) + Melon necrotic spot virus (MNSV)</b>				
ELISA (ISTA 7-026).	PA-VI-01-6	2 000	16 days	400.00
<b>Cucurbits - Detection of 4 pathogens</b>				
<b>Squash mosaic virus (SqMV) + Cucumber green mottle mosaic virus (CGMMV) + Kyuri green mottle mosaic virus (KGMMV) + Melon necrotic spot virus (MNSV)</b>				
ELISA.	PA-VI-65	2 000	16 days	513.00
<b>Spinach</b>				
<b>Beet mosaic virus (BtMV)</b>				
ELISA.	PA-VI-73		Contact SNES	
<b>Watermelon silver mottle virus (WSMV)</b>				
ELISA.	PA-VI-78		Contact SNES	
<b>Bean - Detection of 1 pathogen</b>				
<b>Bean common mosaic virus (BCMV)</b>				
ELISA on plantlets.	PA-VI-02	1 000	37 days	247.00
<b>Bean common mosaic necrotic virus (BCMNV)</b>				
ELISA on plantlets.	PA-VI-03	1 000	37 days	267.00
<b>Tobacco streak virus (TSV)</b>				
ELISA on plantlets.	PA-VI-43	1 000	37 days	257.00
<b>Pea early browning virus (PEBV)</b>				
ELISA.	PA-VI-53	1 000	16 days	205.00
<b>Tomato black ring virus (TBRV)</b>				
ELISA.	PA-VI-37	2 000	16 days	150.00
<b>Tobacco streak virus (TSV)</b>				
ELISA.	PA-VI-61	1 000	16 days	258.00
<b>Bean - Detection of 2 pathogens</b>				
<b>Bean common mosaic virus (BCMV) + Bean common mosaic necrotic virus (BCMNV)</b>				
ELISA on plantlets.	PA-VI-04	1 000	37 days	401.00
<b>Lettuce</b>				
<b>Arabidopsis mosaic virus (ArMV)</b>				
ELISA.	PA-VI-33-1	3 000	16 days	191.00
<b>Cucumber leaf spot carmovirus (CLSV)</b>				
ELISA.	PA-VI-35-1	3 000	16 days	190.00
<b>Lettuce mosaic virus (LMV)</b>				
ELISA.	PA-VI-05	10 000	16 days	158.00
	PA-VI-06	30 000	16 days	299.00
<b>Tomato black ring virus (TBRV)</b>				
ELISA.	PA-VI-37-1	3 000	16 days	138.00
<b>Tobacco ringspot virus (TRSV)<sup>40</sup></b>				
ELISA.	PA-VI-39-1	3 000	16 days	138.00
<b>Tomato ringspot virus (ToRSV)<sup>40</sup></b>				
ELISA.	PA-VI-38-1	3 000	16 days	140.00
<b>Strawberry latent ringspot virus (SLRSV)</b>				
ELISA.	PA-VI-36		Contact SNES	

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Capsicum, Pepper, Tomato</b>				
<b>Pepper mild mottle virus (PMMoV)</b>				
ELISA.	PA-VI-24	1 000	16 days	115.00
ELISA.	PA-VI-09	3 000	16 days	213.00
<b>Tomato black ring virus (TBRV)</b>				
ELISA.	PA-VI-37-1	3 000	16 days	138.00
<b>Alfalfa mosaic (AMV)</b>				
ELISA.	PA-VI-71	2 000	16 days	140.00
<b>Tobacco ringspot virus (TRSV)<sup>40</sup></b>				
ELISA.	PA-VI-39-1	3 000	16 days	138.00
<b>Tomato ringspot virus (ToRSV)<sup>40</sup></b>				
ELISA.	PA-VI-38-1	3 000	16 days	140.00
<b>Tobamovirus (ToBRFV<sup>40</sup>, TMV, ToMV, PMMoV, ToMMV)</b>				
Indexing.	PA-VI-28	1 000	24 days	110.00
Indexing (ISTA 7-028).	PA-VI-20	3 000	24 days	152.00
<b>Tobamovirus (ToBRFV<sup>40</sup>, TMV, ToMV, PMMoV)</b>				
Supplement fee. Confirmation by PCR of indexing positive subsamples.	PA-VI-PCRI	/	/	350.00
<b>Pospiviroids (PSTVd, TCDVd, MPVd, PCFVd, CEVd, CLVd, TPMVd, TASVd)</b>				
RT-PCR.	PA-VI-55	3 000	10 days	188.00
<b>Tomato mosaic virus (ToMV) and/or Tobacco mosaic virus (TMV)</b>				
ELISA.	PA-VI-18	1 000	16 days	113.00
	PA-VI-19	3 000	16 days	160.00
<b>Tobacco mild green mosaic virus (TMGMV)</b>				
ELISA.	PA-VI-94-1	1 000	16 days	117.00
	PA-VI-94	3 000	16 days	127.00
<b>Tomato brown rugose fruit virus (ToBRFV)<sup>40</sup></b>				
RT-PCR (méthode ANSES/LSV/MA066*, primers and probe of Menzel and Winter). <b>UNCOATED seeds only.</b>	PA-VI-93-7	1 000	10 days	130.00
	PA-VI-93-6	3 000	10 days	185.00
Supplement fee. In addition analysis with ISHI primers on request.	PA-VI-ISHI	/	10 days	118.00
Supplement fee. Confirmation by PCR of ELISA positive subsamples.	PA-VI-PCR	/	/	350.00
<b>Arabis mosaic virus (ArMV)</b>				
ELISA.	PA-VI-33-1	3 000	16 days	191.00
<b>Cucumber leaf spot carmovirus (CLSV)</b>				
ELISA.	PA-VI-35-1	3 000	16 days	190.00
<b>Tobacco streak virus (TSV)</b>				
ELISA.	PA-VI-70	3 000	16 days	223.00
<b>Tomato bushy stunt virus (TBSV)</b>				
ELISA.	PA-VI-47	3 000	16 days	210.00
<b>Pea</b>				
<b>Pea early browning virus (PEBV)</b>				
ELISA (ISTA 7-024).	PA-VI-31	2 000	16 days	145.00
<b>Pea enation mosaic virus (PEMV)</b>				
ELISA.	PA-VI-57	2 000	16 days	215.00
<b>Pea seed borne mosaic virus (PSbMV)</b>				
ELISA (ISTA 7-024).	PA-VI-11	2 000	16 days	145.00
<b>Beet yellows virus (BYV)</b>				
ELISA.	PA-VI-58		Contact SNES	
<b>Bean yellow mosaic virus (BYMV)</b>				
ELISA.	PA-VI-60		Contact SNES	
<b>Bean leaf roll virus (BLRV)</b>				
ELISA.	PA-VI-67		Contact SNES	
<b>Southern bean mosaic virus (SBMV)</b>				
ELISA.	PA-VI-88		Contact SNES	



# Vegetables

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Tomato</b>				
<b><i>Pelargonium zonate spot virus (PZSV)</i></b>				
ELISA.	PA-VI-46	3 000	16 days	223.00
<b><i>Pepper veinal mottle virus (PVMV)</i></b>				
ELISA.	PA-VI-86		Contact SNES	
<b><i>Pepino mosaic virus (PePMV)</i></b>				
ELISA and confirmation of positives and indeterminates by RT-PCR. (Internal method derived from Anses MOA 008 – MOA 026).	PA-VI-15	1 000	16 days	145.00
	PA-VI-16	3 000	16 days	175.00
	PA-VI-17	5 000	16 days	305.00
ELISA (Method Anses MOA 026*) and confirmation of positives and indeterminates according by RT-PCR (Internal method).	PA-VI-15CO		Contact SNES	
	PA-VI-16CO		Contact SNES	
	PA-VI-17CO		Contact SNES	

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Eggplant</b>				
<b><i>Verticillium dahliae</i></b>				
Official protocol.	PA-R-AUB-1	45	/	161.00
<b>Cabbage</b>				
<b><i>Fusarium oxysporum f. sp. conglutinans race 1</i></b>				
Official protocol.	PA-R-CHO	45	/	320.00
<b><i>Plasmidiophora brassicae</i></b>				
Official protocol.	PA-R-CHO-1	45	/	231.00
<b>Cucumber</b>				
<b>CMV (<i>Cucurbit mosaic virus</i>)</b>				
Official protocol.	PA-R-CON	45	/	127.00
<b>CGMMV (<i>Cucumber green mottle mosaic virus</i>)</b>				
Official protocol.	PA-R-CON-1	45	/	127.00
<b>ZYMV (<i>Zucchini yellow mosaic virus</i>)</b>				
Official protocol.	PA-R-CON-2	45	/	127.00
<b>WMV (<i>Watermelon mosaic virus</i>)</b>				
Official protocol.	PA-R-CON-3	45	/	127.00
<b><i>Podosphaera xanthii race 1</i></b>				
Official protocol.	PA-R-CON-4	45	/	250.00
<b>Squash</b>				
<b>CMV (<i>Cucurbit mosaic virus</i>)</b>				
Official protocol.	PA-R-COU-1	45	/	123.00
<b>ZYMV (<i>Zucchini yellow mosaic virus</i>)</b>				
Official protocol.	PA-R-COU-2	45	/	127.00
<b>WMV (<i>Watermelon mosaic virus</i>)</b>				
Official protocol.	PA-R-COU-3	45	/	127.00
<b><i>Podosphaera xanthii race 1</i></b>				
Official protocol.	PA-R-COU-4	45	/	250.00
<b>Strawberry</b>				
<b><i>Phytophthora cactorum</i></b>				
Official protocol.	PA-R-FRA-1		Contact SNES	
<b><i>Colletotrichum acutatum race 494a or 688b</i></b>				
Official protocol.	PA-R-FRA-C	45	/	240.00
<b>Bean</b>				
<b>BCMNV (<i>Bean common mosaic necrotic virus</i>)</b>				
Official protocol.	PA-R-HAR-1	30	/	109.00

Different prices outside test periods. Contact SNES for information on the periods according to the species.

## Varietal resistance

		Size	Duration	Price
<b>Bean</b>				
<b><i>Colletotrichum lindemuthianum</i> race 6 or race Kappa (anthracnose)</b>				
Official protocol.	PA-R-HAR-COL	30	/	121.00
<b><i>Pseudomonas savastanoi</i> pv. <i>phaseolicola</i> race 6 (halo blight)</b>				
Official protocol.	PA-R-HAR-3	30	/	148.00
<b><i>Xanthomonas axonopodis</i> pv. <i>phaseoli</i></b>				
Official protocol.	PA-R-HAR-4	30	/	145.00
<b>Lettuce</b>				
<b><i>Bremia lactucae</i> races BI: 1EU / BI: 2EU / BI: 3EU / BI: 4EU / BI: 5EU / BI: 6EU / BI: 7EU / BI: 10EU / BI: 12 to 15EU / BI: 17EU / BI: 18EU / BI: 22 to 25EU / BI: 28EU / BI: 32EU / BI: 34EU / S1 / SF1 or IL4</b>				
Official protocol.	PA-R-LAI-BRE			Contact SNES
<b><i>Bremia lactucae</i> official races for CTPS BI: 16EU / BI: 20EU / BI: 21EU / BI: 26EU / BI: 27EU / BI: 29EU / BI: 30EU / BI: 31EU / BI: 33EU or BI: 35EU</b>				
Official protocol.	PA-R-LAI-BRE1	45	/	55.00
<b><i>Bremia lactucae</i> new races BI: 36EU or BI: 37EU</b>				
Official protocol.	PA-R-LAI-BRE2 <b>NEW</b>	45	/	55.00
<b><i>Bremia lactucae</i></b>				
Late stage resistance.	PA-R-LAI29			Contact SNES
<b><i>Bremia lactucae</i></b>				
Identification of the race.	PA-R-IDBRE	/	/	249.00
<b>LMV (<i>Lettuce mosaic virus</i>) pathotype II (LMV-0) ou pathotype III (LMV-9)</b>				
Official protocol.	PA-R-LAI-LMV	30	/	100.00
<b>LMV (<i>Lettuce mosaic virus</i>)</b>				
Detection of markers linked to resistance genes. Gene mo1. Resistance to the Lettuce virus.	BI-D-GENR			Contact BioGEVES
<b><i>Fusarium oxysporum</i> f. sp. <i>lactucae</i> race 1</b>				
Official protocol.	PA-R-LAI30	45	/	153.00
<b><i>Fusarium oxysporum</i> f. sp. <i>lactucae</i></b>				
Identification of the race.	PA-R-IDFUS	/	/	371.00
<b><i>Nasonovia ribisnigri</i> race 0</b>				
Official protocol.	PA-R-LAI35	45	/	149.00
<b>Corn salad</b>				
<b><i>Peronospora valerianellae</i> race Pv: 1 or Pv: 2</b>				
Official protocol.	PA-R-MAC-PV	45	/	140.00
<b>Melon</b>				
<b><i>Fusarium oxysporum</i> f. sp. <i>melonis</i> races Fom: 0 / Fom: 1 / Fom: 2 or Fom: 1.2</b>				
Official protocol.	PA-R-MEL-FUS	45	/	149.00
<b>CMV (<i>Cucurbit mosaic virus</i>)</b>				
Official protocol.	PA-R-MEL-5	45	/	149.00
<b>MNSV (<i>Melon necrotic spot virus</i>)</b>				
Official protocol.	PA-R-MEL-4	45	/	149.00
<b>MWMV (<i>Moroccan Watermelon mosaic virus</i>)</b>				
Official protocol.	PA-R-MEL-8	45	/	149.00
<b>ZYMV (<i>Zucchini yellow mosaic virus</i>)</b>				
Official protocol.	PA-R-MEL10	45	/	149.00
<b><i>Golovinomyces cichoracearum</i></b>				
Official protocol.	PA-R-MEL-7	45	/	266.00
<b><i>Podospaera xanthii</i> races Px: 1 / Px: 2 / Px: 3 / Px: 5 or Px: 3-5</b>				
Official protocol.	PA-R-MEL-POD	45	/	250.00
<b><i>Podospaera xanthii</i></b>				
Identification of the race.	PA-R-MEL15	/	/	277.00
<b><i>Fusarium oxysporum</i> f. sp. <i>melonis</i></b>				
Identification of the race.	PA-R-IDFOM	/	/	176.00

Different prices outside test periods. Contact SNES for information on the periods according to the species.

## Varietal resistance

		Size	Duration	Price
<b>Capsicum</b>				
<b>PVY (Potato virus Y) races PVY: 0 / PVY: 1 or PVY: 1.2</b>				
Official protocol.	PA-R-PIM-PVY	45	/	147.00
<b>TMV : 0 (Tobacco mosaic virus race 0)</b>				
Official protocol.	PA-R-PIM-4	45	/	146.00
<b>PMMoV (Pepper mild mottle virus) races PMMoV: 1.2 or PMMoV: 1.2.3</b>				
Official protocol.	PA-R-PIM-PMM	45	/	146.00
<b>TSWV (Tomato spotted wilt virus)</b>				
Official protocol.	PA-R-PIM-7	45	/	146.00
<b>Meloidogyne incognita</b>				
Official protocol.	PA-R-PIM-8	45	/	106.00
<b>Pea</b>				
<b>Ascochyta pisi race C</b>				
Official protocol.	PA-R-POI-1	30	/	89.00
<b>Fusarium oxysporum f. sp. pisi race 1</b>				
Official protocol.	PA-R-POI-2	30	/	99.00
<b>BYMV (Bean yellow mosaic virus)</b>				
Official protocol.	PA-R-POI-3	30	/	89.00
<b>PEMV (Pea enation mosaic virus)</b>				
Official protocol.	PA-R-POI-4	30	/	89.00
<b>Erysiphe pisi</b>				
Official protocol.	PA-R-POI-5	30	/	147.00
<b>Tomato</b>				
<b>Verticillium dahliae</b>				
Official protocol.	PA-R-TOM-1	60	/	143.00
<b>Fusarium oxysporum f. sp. lycopersici races Fol: 0 / Fol: 1 or Fol: 2</b>				
Official protocol.	PA-R-TOM-FUS	60	/	143.00
<b>Passalora fulva races Pf: 0 or Pf: 2.4.5</b>				
Official protocol.	PA-R-TOM-PF	45	/	143.00
<b>Fusarium oxysporum radialis f. sp. lycopersici</b>				
Official protocol.	PA-R-TOM-7	60	/	143.00
<b>Stemphylium spp.</b>				
Official protocol.	PA-R-TOM-8	45	/	143.00
<b>TMV: 0 (Tobacco mosaic virus) races TMV: 0 / TMV: 1 or TMV: 2</b>				
Official protocol.	PA-R-TOM-TMV	45	/	141.00
<b>TMV: 0 (Tobacco mosaic virus)</b>				
Detection of markers linked to resistance genes. Gene Tm1. Resistance to the Tomatovirus.	BI-D-GENR			Contact BioGEVES
Detection of markers linked to resistance genes. Tm2 and Tm2 <sup>2</sup> genes. Resistance to the Tomatovirus.	BI-D-GENR			Contact BioGEVES
<b>TSWV (Tomato spotted wilt virus)</b>				
Official protocol.	PA-R-TOM10	45	/	138.00
<b>Meloidogyne incognita</b>				
Official protocol.	PA-R-TOM14	45	/	99.00
<b>Pseudomonas syringae pv. tomato</b>				
Official protocol.	PA-R-TOM15	45	/	76.00
<b>Pyrenochaeta lycopersici</b>				
Official protocol.	PA-R-TOM16	60	/	335.00
<b>ToBRFV (Tomato brown rugose fruit virus)<sup>40</sup></b>				
Official protocol.	PA-R-TOM17 <b>NEW</b>	45	/	185.00
<b>Passalora fulva</b>				
Identification of the race.	PA-ID-PF	/	/	267.00
<b>Tomato rootstock</b>				
<b>Verticillium dahliae</b>				
Official protocol.	PA-R-TPG-1	90	/	146.00

Different prices outside test periods. Contact SNES for information on the periods according to the species.

## Varietal resistance

		Size	Duration	Price
<b>Tomato rootstock</b>				
<b>Fusarium oxysporum f. sp. lycopersici</b> races Fol: 0 / Fol: 1 or Fol: 2				
Official protocol.	PA-R-TPG-FUS	90	/	146.00
<b>Passalora fulva</b> races Pf: 0 or Pf: 2.4.5				
Official protocol.	PA-R-TPG-PF	90	/	146.00
<b>Fusarium oxysporum radialis f. sp. lycopersici</b>				
Official protocol.	PA-R-TPG-7	90	/	146.00
<b>Stemphylium spp.</b>				
Official protocol.	PA-R-TPG-8	90	/	146.00
<b>TMV: 0 (Tobacco mosaic virus)</b> races TMV: 0 / TMV: 1 or TMV: 2				
Official protocol.	PA-R-TPG-TMV	90	/	144.00
<b>TSWV (Tomato spotted wilt virus)</b>				
Official protocol.	PA-R-TPG10	90	/	144.00
<b>Meloidogyne incognita</b>				
Official protocol.	PA-R-TPG14	90	/	99.00
<b>Pseudomonas syringae pv. tomato</b>				
Official protocol.	PA-R-TPG15	90	/	78.00
<b>Pyrenochaeta lycopersici</b>				
Official protocol.	PA-R-TPG16	90	/	325.00

Different prices outside test periods. Contact SNES for information on the periods according to the species.

## Genotyping by molecular biology

		Size	Duration	Price
<b>Cabbage, Strawberry, Lettuce, Pea, Radish</b>				
Varietal identity control.	BI-G-BM-SSR-CID-1		Contact BioGEVES	
Varietal purity analysis.	BI-G-BM-SSR-PUR-90		Contact BioGEVES	

## Technological quality: biochemical tests

		Size	Duration	Price
<b>Cabbage, Radish, Other Brassicaceae</b>				
Glucosinolate content (HPLC).	BI-B-HPLC-GLU		Contact BioGEVES	
Fatty acid composition (CPG method).	BI-B-CPG-AG		Contact BioGEVES	
<b>Field Bean, Pea</b>				
Protein content (NIRS).	BI-B-NIRS-P		Contact BioGEVES	
<b>Capsicum/Pepper</b>				
Capsaicin and dihydrocapsaicin content (capsaicinoids) (HPLC).	BI-B-HPLC-CAP		Contact BioGEVES	
<b>Pea</b>				
Antitrypsic factors (assay by spectrophotometry).	BI-B-SPEC-FAT		Contact BioGEVES	

## Field test by SEV

		Price
DUS testing - Cucumber, Lettuce, Melon, Pepper, Tomato Cycle 1.	SEV-DHS-POTMAJ1	1690.00
DUS testing - Cucumber, Lettuce, Melon, Pepper, Tomato Cycle 2.	SEV-DHS-POTMAJ2	1595.00
DUS testing - Other vegetables species Cycle 1.	SEV-DHS-POTMIN1	1125.00
DUS testing - Other vegetables species Cycle 2.	SEV-DHS-POTMIN2	1065.00

## PUBLICATIONS (only in French)

		Price
<b>Method sheet</b>		
Vigour testing – Conductivity - Pea.	VIG-2-M	7.10
<b>Germination analysis technical sheet</b>		
Evaluation of Carrot seedlings.	GE-T-CAR	29.20

		Price
<b>Germination analysis technical sheet</b>		
Evaluation of <b>Cabbage</b> seedlings.	GE-T-CHOU	29.20
Evaluation of <b>Bean</b> seedlings.	GE-T-HAR	29.20
Evaluation of <b>Lettuce</b> seedlings.	GE-T-LAI	29.20
Evaluation of <b>Onion</b> seedlings.	GE-T-OIG	29.20
Evaluation of <b>Pea</b> seedlings.	GE-T-POI	29.20
Evaluation of <b>Radish</b> seedlings.	GE-T-RAD	29.20
Evaluation of <b>Tomato</b> seedlings.	GE-T-TOM	29.20
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b>		
<i>Pisum sativum, Vicia faba.</i>	AP-C-8	29.20
<i>Cicer arietinum.</i>	AP-C-12	29.20
<i>Allium</i> sp. ( <i>Allium cepa, Allium porrum, Allium schoenoprasum</i> ).	AP-C-13	29.20
Solanaceae. ( <i>Solanum lycopersicum, Solanum melongena, Capsicum annuum</i> ).	AP-C-14	29.20
<i>Daucus carota, Petroselinum</i> sp.	AP-C-15	29.20
Cucurbitaceae. ( <i>Curcubita</i> spp., <i>Cucumis</i> spp., <i>Citrullus lanatus</i> ).	AP-C-16	29.20
<b>Identification data sheet of seeds and other impurities</b>		
Asteraceae ( <i>Anthemis arvensis, Glebionis segetum, Chicorium</i> sp., <i>Tripleurospermum inodorum, Helminthotheca echioides, Lapsana communis, Lactuca sativa, Sonchus</i> spp., <i>Cirsium arvense, Cirsium vulgare, Centaurea cyanus</i> ).	AP-A-06	29.20
<b>Collection of seeds</b>		
Weed's identification for <i>Pisum sativum</i> and <i>Vicia faba</i> analysis. Contact SNES.	APCS-PIS-S	/
Weed's identification for <b>Vegetables</b> analysis. Contact SNES.	APCS-VEG	/



## SEED QUALITY

### Physical quality

		Size	Duration	Price
<b>Thousand-seed weight (on purity test performed by SNES)</b>				
Thousand-seed weight on pure seeds.	MMS-01	/	/	29.40
<b>Purity analysis test</b>				
Purity - Fruit crops, Ornamentals.	PU-IS-18	ISTA weight	/	29.60
Percentage of a specific type of other seeds. Specify the search to be performed for each species.	PU-CONS1 NEW	/	/	8.00
Percentage of a specific type of inert materials. Specify the search to be performed for each species.	PU-CONS2 NEW	/	/	8.00
<b>Counting of all other seeds</b>				
Full counting - Fruit crops, Ornamentals.	SP-IS-17	ISTA weight	/	122.00
Counting of other seeds on purity weight. Indication of the number of other seeds in the specific purity test.	PU-SP-01	/	/	12.00
<b>Limited counting of all other seeds</b>				
Searching of 1 to 4 species (except for <i>Orobanchaceae</i> ). Indicate the name of the species to be searched.	SP-LI-01	ISTA weight	/	57.00
Searching of 5 to 8 species (except for <i>Orobanchaceae</i> ). Indicate the name of the species to be searched.	SP-LI-02	ISTA weight	/	91.00
Searching of more than 8 species (except for <i>Orobanchaceae</i> ). Indicate the name of the species to be searched.	SP-LI-20		Contact SNES	
<b>Moisture content - Provide seeds in sealed foil sachets from which as much air as possible has been extracted</b>				
Oven method.	TE-SN-01	ISTA weight	/	18.40
<b>Identification of individual seeds</b>				
Visual identification by species.	ID-IS-01	/	/	30.80

### Physiological quality

		Size	Duration	Price
<b>Germination test on 400 seeds</b>				
Flowers, Trees, Shrubs.	GE-FG-20-4 NEW	1 250	/	65.00
<b>Germination test on 200 seeds</b>				
Flowers, Trees, Shrubs.	GE-FG-20-2 NEW	500	/	52.00
<b>Germination tests on bulbs and bulblets</b>				
On 400 seeds.	GE-BULB-4	/	/	131.00
On 200 seeds.	GE-BULB-2	/	/	106.00
<b>Tetrazolium viability test on 400 seeds - For results within a week, reception of seeds on Tuesday at the latest.</b>				
On species that take a very long time to prepare and analyse - Walnut, Olive, Hazelnut, Dogwood, Oak.	GE-TZ-3-4 NEW	500	/	190.00
On species that take a long time to prepare and analyse - Stone fruits, Hornbeam, Rosemary, Lavender, Maple, Beech, Ash.	GE-TZ-2-4 NEW	500	/	160.00
On species with standard preparation and analysis times - Ligustrum, Apple, Pear, Amelanchier, Mahonia, Sorbier, Conifers.	GE-TZ-1-4 NEW	500	/	150.00
<b>Tetrazolium viability test on 200 seeds - For results within a week, reception of seeds on Tuesday at the latest.</b>				
On species that take a very long time to prepare and analyse - Walnut, Olive, Hazelnut, Dogwood, Oak.	GE-TZ-3-2 NEW	300	/	130.00
On species that take a long time to prepare and analyse - Stone fruits, Hornbeam, Rosemary, Lavender, Maple, Beech, Ash.	GE-TZ-2-2 NEW	300	/	110.00
On species with standard preparation and analysis times - Ligustrum, Apple, Pear, Amelanchier, Mahonia, Sorbier, Conifers.	GE-TZ-1-2 NEW	300	/	100.00
<b>Tetrazolium viability test on 100 seeds - For results within a week, reception of seeds on Tuesday at the latest.</b>				
On species that take a very long time to prepare and analyse - Walnut, Olive, Hazelnut, Dogwood, Oak.	GE-TZ-3-1 NEW	200	/	100.00
On species that take a long time to prepare and analyse - Stone fruits, Hornbeam, Rosemary, Lavender, Maple, Beech, Ash.	GE-TZ-2-1 NEW	200	/	80.00

# Ornamental and Fruit crops

## Physiological quality

		Size	Duration	Price
<b>Tetrazolium viability test on 100 seeds - For results within a week, reception of seeds on Tuesday at the latest.</b>				
On species with standard preparation and analysis times - <b>Ligustrum, Apple, Pear, Amelanchier, Mahonia, Sorbier, Conifers.</b>	<b>GE-TZ-1-1 NEW</b>	200	/	<b>70.00</b>
<b>Verification of species</b>				
Verification of species after germination test.	<b>GE-ENR</b>	/	/	<b>8.10</b>

## Nematology

		Size	Duration	Price
<b>Bulbs*, bulblets, bulbs, corms, rhizomes, tubers</b>				
<b><i>Ditylenchus dipsaci</i></b>				
Filtration (Anses MOA013 parts A and B). <b>UNTREATED seeds only.</b> Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>	<b>PA-NE-BULB</b>	50 units	16 days	<b>114.00</b>
<b>All species</b>				
<b><i>Ditylenchus dipsaci</i></b>				
Supplement for measure of viability by staining method (GEVES M-GEVES/SV/MO/001).	<b>PA-NE-VIA</b>	/	/	<b>96.00</b>

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Cyclamen</b>				
<b>Tomato spotted wilt virus (TSWV)</b>				
ELISA.	<b>PA-VI-49</b>			Contact SNES

## EVALUATION OF VARIETIES

### Genotyping by molecular biology

		Size	Duration	Price
<b>Apricot, Cherry tree, Hydrangea, Kiwi, Hazel tree, Walnut tree, Palm, Peach, Poplar, Apple Tree, Pear Tree, Plum tree, Willow</b>				
Varietal identity control.	<b>BI-G-BM-SSR-CID-1</b>			Contact BioGEVES
<b>Palm</b>				
Varietal identity control for export (True-to-type nature).	<b>BI-G-BM-SSR-CID-6</b>			Contact BioGEVES
Varietal identity control for production (True-to-type nature).	<b>BI-G-BM-SSR-CID-7</b>			Contact BioGEVES
<b>Poplar</b>				
Varietal identity control among french cultivars.	<b>BI-G-BM-SSR-CID-8</b>			Contact BioGEVES

### Bud sample for genotyping

		Price
Cost of sampling for 1 INRAE site and 1 applicant/breeder.	<b>SEV-ECHF-FOR</b>	<b>335.00</b>
Cost for 1 sampled variety.	<b>SEV-ECHF-VAR</b>	<b>36.00</b>
Packaging by INRAE examiner for 1 site and for 1 to 5 varieties.	<b>SEV-ECHF-COND5</b>	<b>131.00</b>
Packaging by INRAE examiner for 1 site and for 6 to 10 varieties.	<b>SEV-ECHF-COND10</b>	<b>263.00</b>
Packaging by INRAE examiner for 1 site and for 11 to 50 varieties.	<b>SEV-ECHF-COND50</b>	<b>544.00</b>
Cost of sending for 1 site (possible to pick the samples directly on the site).	<b>SEV-ECHF-ENV</b>	<b>109.00</b>

### Field test by SEV

		Price
DUS testing - <b>Fruit trees and rootstock</b> - New variety, installation year.	<b>SEV-DHS-FRU1</b>	<b>765.00</b>
DUS testing - <b>Fruit trees and rootstock</b> - New variety, following years.	<b>SEV-DHS-FRU2</b>	<b>1530.00</b>
DUS testing - <b>Ornamentals species.</b>	<b>SEV-DHS-ORN</b>	<b>1940.00</b>
DUS testing - <b>Vine</b> - New variety, installation year.	<b>SEV-DHS-VIG1</b>	<b>765.00</b>
DUS testing - <b>Vine</b> - New variety, following years.	<b>SEV-DHS-VIG2</b>	<b>1530.00</b>

## PUBLICATIONS (only in French)

		Price
<b>Identification data sheet of seeds and other impurities</b>		
<i>Lathyrus</i> spp. ( <i>Lathyrus sylvestris</i> , <i>Lathyrus latifolius</i> , <i>Lathyrus hirsutus</i> , <i>Lathyrus tuberosus</i> , <i>Lathyrus odoratus</i> , <i>Lathyrus aphaca</i> , <i>Lathyrus pratensis</i> , <i>Lathyrus sativus</i> , <i>Lathyrus cicera</i> ).	AP-A-05	29.20

## SEED QUALITY

### Physical quality

		Size	Duration	Price
<b>Thousand-seed weight (on purity test performed by SNES)</b>				
Thousand-seed weight on pure seeds.	MMS-01	/	/	29.40
<b>Purity analysis test</b>				
Purity - <b>Aromatic, Medicinal.</b>	PU-IS-18	ISTA weight	/	29.60
Percentage of a specific type of other seeds. <b>Specify the search to be performed for each species.</b>	PU-CONS1 <b>NEW</b>	/	/	8.00
Percentage of a specific type of inert materials. <b>Specify the search to be performed for each species.</b>	PU-CONS2 <b>NEW</b>	/	/	8.00
<b>Counting of all other seeds</b>				
Full counting - <b>Aromatic, Medicinal.</b>	SP-IS-17	ISTA weight	/	122.00
Counting of other seeds on purity weight. Indication of the number of other seeds in the specific purity test.	PU-SP-01	/	/	12.00
<b>Limited counting of all other seeds</b>				
Searching of 1 to 4 species (except for <i>Orobanchaceae</i> ). <b>Indicate the name of the species to be searched.</b>	SP-LI-01	ISTA weight	/	57.00
Searching of 5 to 8 species (except for <i>Orobanchaceae</i> ). <b>Indicate the name of the species to be searched.</b>	SP-LI-02	ISTA weight	/	91.00
Searching of more than 8 species (except for <i>Orobanchaceae</i> ). <b>Indicate the name of the species to be searched.</b>	SP-LI-20		Contact SNES	
<b>Moisture content - Provide seeds in sealed foil sachets from which as much air as possible has been extracted</b>				
Oven method.	TE-SN-01	ISTA weight	/	18.40
<b>Identification of individual seeds</b>				
Visual identification by species.	ID-IS-01	/	/	30.80

### Physiological quality

		Size	Duration	Price
<b>Germination test on 400 seeds</b>				
Aromatics, Medicinals.	GE-FG-18-4	1 250	/	56.00
<b>Germination test on 200 seeds</b>				
Aromatics, Medicinals.	GE-FG-18-2	500	/	45.10

### Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Dill, Coriander, Parsley - Detection of 1 pathogen</b>				
<b><i>Pseudomonas viridiflava</i></b>				
Agar method + PCR in case of suspect colonies.	PA-BA-104	30 000	31 days	262.00
<b><i>Pseudomonas syringae</i> pv. <i>apii</i></b>				
Agar method + PCR in case of suspect colonies.	PA-BA-106	30 000	56 days	252.00
<b><i>Pseudomonas syringae</i> pv. <i>coriandricola</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-107	30 000	56 days	250.00
<b>Dill, Coriander, Parsley - Detection of 2 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>apii</i> + <i>Pseudomonas syringae</i> pv. <i>coriandricola</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-108	30 000	56 days	310.00
<b><i>Pseudomonas syringae</i> pv. <i>apii</i> + <i>Pseudomonas viridiflava</i></b>				
Agar method + PCR + pathogenicity test in case of suspect colonies.	PA-BA-109	30 000	60 days	310.00
<b><i>Pseudomonas syringae</i> pv. <i>coriandricola</i> + <i>Pseudomonas viridiflava</i></b>				
Agar method + PCR + pathogenicity test in case of suspect colonies.	PA-BA-110	30 000	60 days	310.00
<b>Dill, Coriander, Parsley - Detection of 3 pathogens</b>				
<b><i>Pseudomonas syringae</i> pv. <i>apii</i> + <i>Pseudomonas syringae</i> pv. <i>coriandricola</i> + <i>Pseudomonas viridiflava</i></b>				
Agar method + PCR + pathogenicity test in case of suspect colonies.	PA-BA-111	30 000	60 days	357.00
<b>Dill, Coriander, Parsley</b>				
<b><i>Candidatus liberibacter solanacearum</i></b>				
Detection by PCR.	PA-BA-CAND	20 000	10 days	117.00

## Mycology - See p.7 "Seed health"

		Size	Duration	Price
<b>Dill</b>				
<i>Stemphylium botryosum</i> , <i>Alternaria radicina</i> ( <i>Stemphylium radicinum</i> ), <i>Fusarium</i> (Discolour section and other sections), <i>Botrytis</i> sp.				
Agar method.	PA-ES-ANF	400	19 days	91.00
<b>Basil</b>				
<i>Fusarium oxysporum</i> , <i>Fusarium</i> (Discolour section and other sections), <i>Botrytis</i> sp.				
Agar method.	PA-ES-BAS	400	19 days	91.00
<b>Peronospora spp.</b>				
Grow-out test.	PA-MIBASGO	400	42 days	111.00
	PA-MIBASG3	3 000	42 days	225.00
<b>Lavender</b>				
<i>Phomopsis lavandulae</i> , <i>Botrytis</i> sp., <i>Fusarium</i> (all sections), <i>Phoma</i> sp.				
Agar method.	PA-ES-LAV	400	19 days	91.00
<b>Parsley</b>				
<i>Septoria petroselinii</i>				
Direct visual observation. UNTREATED seeds only.	PA-SE-PER	1 000	15 days	75.00
Direct visual observation + counting. UNTREATED seeds only.	PA-SE-PERD	1 000	15 days	87.00
<i>Plasmopara nivea</i>				
Seed wash method. UNTREATED seed only.	PA-MI-PER	500	15 days	88.00
<i>Alternaria petroselinii</i> ( <i>Stemphylium radicinum</i> var. <i>petroselinii</i> ), <i>Alternaria dauci</i> , <i>Fusarium</i> (all sections), <i>Botrytis</i> sp.				
Agar method.	PA-ES-PER	400	19 days	91.00

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Basil</b>				
<i>Peronospora belbahrii</i>				
Official protocol.	PA-R-BAS	450	/	156.00

Different prices outside test periods. Contact SNES for information on the periods according to the species.

### Genotyping by molecular biology

		Size	Duration	Price
<b>Poppy</b>				
Varietal identity control.	BI-G-BM-SSR-CID		Contact BioGEVES	

### Technological quality: biochemical tests

		Size	Duration	Price
<b>Stevia</b>				
Steviosid and rebaudiosid A content by high performance liquid chromatography (HPLC).	BI-B-HPLC-STEV		Contact BioGEVES	

### Field test by SEV

				Price
DUS testing - Aromatic, Medicinal plants.	SEV-DHS-AROMED			1940.00



# Micro-cleaning

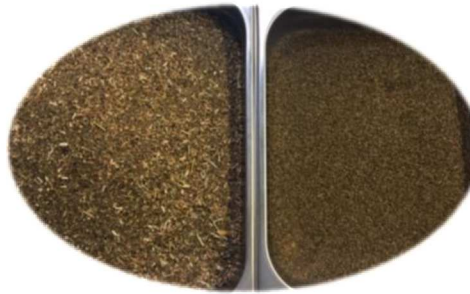
Micro-cleaning of seed lots consists in determining the percentage of waste in raw seed lots, from a harvest, using sorting machines, laboratory replicates of industrial machines.

This activity enables the establishment of an optimal sorting diagram for the seed lot. It is an essential step in defining the industrial process for quality sorting in the factory, whatever the species. Moreover, the commercial value of a lot is estimated through precise knowledge of its quality.

## HOW IT IS DONE ?

Each species has his own morphological characteristics. Each morphological characteristic is associated with a sorting device, which settings are adjusted very precisely.

The complete sorting of a seed lot is carried out on a sorting line composed of several sorting machines ensuring complementarity on many criteria. In order to achieve the defined standards, the knowledge of characteristics, the expertise and the know-how of operators are essential.



Sorting on a raw batch of carrot before/after micro-cleaning

## EQUIPMENTS

The SNES owns 20 different types of equipment in order to clean every types of seeds. Our training and expertise contribute to producing quality sorting, representative of the work provided in the factory. After the various sorting operations, analyses of specific purity and germination capacity can also be carried out at the SNES to ensure the quality of the seed lot.

Requests for information or analyses: [contact.mn@geves.fr](mailto:contact.mn@geves.fr)

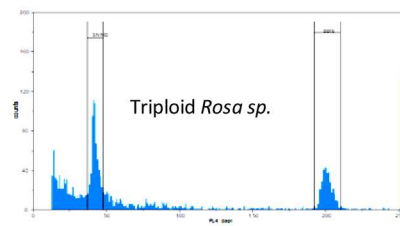
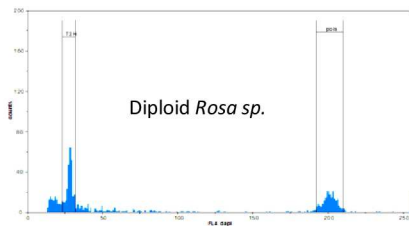
## Evaluation of ploidy level from plants or seeds.

Cytology analyses carried out in the SNES aim to determine the level of ploidy by chromosome counting of root meristematic cells and/or flow cytometry. Ploidy defines the number of chromosome copies of a cell. The level of ploidy is characteristic of the species or variety. These analyses can be carried out from seeds or from plants on many species.

### FLOW CYTOMETRY

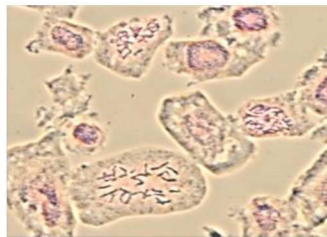
Flow cytometry is a technique based on the marking of DNA with fluorochromes. The cytometer allows a precise measurement of the amount of fluorescence emitted by the cells after marking and excitation by a light beam. The measurement of the quantity of fluorescence emitted will then be compared to a control with a known level of ploidy. This will allow to conclude on the ploidy level of the tested sample.

Flow cytometry is mainly used to determine the level of ploidy of a series of plants and variety. In some cases, flow cytometer is also used to identify species with a very similar morphology or mutilated or poorly formed seeds.

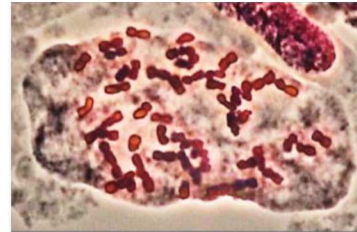


### MICROSCOPY

Chromosomal counting by microscopy is a technique that also makes it possible to define the level of ploidy. This is an essential step for species that do not have a reference for cytometry. Chromosome counting is carried out on meristematic root cells whose mitotic division has been blocked at the metaphase stage. The chromosomes are then observed and counted using a phase contrast microscope.



Metaphase cells of Festulolium



Metaphase cells of Gardenia

Requests for information or analyses: [contact.cyto@geves.fr](mailto:contact.cyto@geves.fr)

# Radiography 2D and tomography

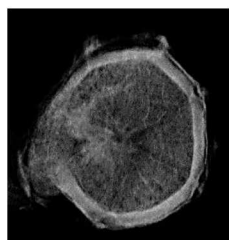
## Tools for evaluating seed quality.

### WHY USE 2D OU 3D RADIOGRAPHY?

Radiography allows the internal morphology of seeds to be visualised. The objective is to understand or predict problems of physical or germinative quality. This tool also allows the phenotyping of precise characters of interest according to the demand.

### WHAT IS THE DIFFERENCE BETWEEN 2D RADIOGRAPHY AND TOMOGRAPHY?

2D radiography is a non-destructive method that allows rapid observation of different criteria on seeds (physical damage, empty seeds, insect damage, etc.). This technology allows a qualitative diagnosis of the state of the internal morphology. The Physical Analysis laboratory is ISTA accredited for these analyses.



Empty seed



Physical damages



Insect damages

3D radiography (tomography) is a technology whose method consists of generating a 3D image of the internal structure of an object. This tool applied to seeds allows the measurement of different characteristics and very precise quantitative data to be obtained. The possible applications are diverse: characterisation of genotypes/varieties/batches, quantification of pathogen/insect damage, physical damage...



Evaluation of the quality of the coating



Quantification of insect damages



Quantification of cracks on a Corn seed

		Tariff
2D radiography on seeds without interpretation (per digital image).	RX-IS-02	22.60 €
2D X-ray image interpretation for the determination of empty/full seeds or the detection of insect/physical damage (%).	RX-SUP-01	14.00 €
Supply of 2D radio image in .jpg format, per image supplied.	RX-SUP	NEW 0.95 €
2D X-ray image interpretation for a particular determination or for specific measurements.	RX-SUP-02	bea-tomographe@geves.fr
For any request for information or analysis in 3D tomography:	TOMO	bea-tomographe@geves.fr
<ul style="list-style-type: none"> <li>- Measurements of coating characteristics;</li> <li>- Insect damage detection and associated volume measurements;</li> <li>- Measurement of internal seed constituents ;</li> <li>- Measurement of seed filling rate;</li> <li>- Detection and measurement of mechanical cracks and other damage ;</li> <li>- Other measures of interest.</li> </ul>		

# Biostimulation, Biocontrol, evaluation of treatment

GEVES provides its expertise for the characterization and evaluation of the effect of your treatments applied to seeds, seedlings or plants.



Whether for biocontrol or biostimulant products, physical or chemical treatments, GEVES proposes to support you in the development of suitable evaluation methodologies and/or to carry out tests under controlled conditions. For *in vitro* and/or *in vivo* screening, or for the evaluation of disinfection, protection, stimulation or phytotoxicity effects of your innovative products or technologies, test the impact of your treatments in preventive and/or curative application.

SNES does not supply seeds or products. The sample size to be provided is 1000 seeds per modality for selectivity and effectiveness assays. If only effectiveness trials are required, the sample size will be determined in relation to the project and the initial request.

**A multidisciplinary team composed of qualified experts, member of the private-public Biocontrol consortium, GEVES develops new, internationally recognised methods, and participates in numerous research programs.**

## APPLICATION OF PRODUCTS ON SEEDS

Treatment of seeds is possible depending on the type of treatment and use. For more information, please contact SNES. Depending on the quantity of seeds to be treated and the formulation of the product, 3 different tools can be used: Orbital agitator (20 g, liquid formulation); Hege bowl (500 g); Satec Concept treatment machine (up to 2 kg).

		Price
Application of a seed treatment product by SNES in the case of a treatment evaluation.	GE-APPLI	40.60

## SELECTIVITY TESTS

To check the selectivity of a treatment, the germination test should be determined on 400 seeds.

		Price
Vegetables.	GE-FG-18-4	56.00
Cereals.	GE-FG-01-4	44.00
Oilseeds.	GE-FG-17-4	47.10

## EVALUATION OF TREATMENTS FOR SEED AND PLANT PROTECTION

		Contact
Evaluation of phytochemical products.	PA-EVAL-CHI	geoffrey.orgueur@geves.fr
Evaluation of biocontrol products, physical treatments and disinfection process.	PA-EVAL-BIO	

## Few examples of available pathosystems<sup>3</sup>

<b>Wheat</b>	<i>Fusarium</i> spp. ( <i>Fusarium graminearum</i> , <i>Fusarium avenaceum</i> , <i>Fusarium culmorum</i> ).	<b>Maize</b>	<i>Fusarium graminearum</i> .
	<i>Tilletia caries</i> .		<i>Fusarium verticillioides</i> .
	<i>Microdochium nivale</i> .		<i>Pythium</i> sp.
<b>Rapeseed</b>	<i>Puccinia striiformis</i> , <i>Puccinia triticina</i> .	<b>Beet</b>	<i>Aphanomyces cochlioides</i> , <i>Pythium</i> sp.
	<i>Plasmodiophora brassicae</i> .		<i>Plasmopara halstedii</i> .
	<i>Phoma lingam</i> .		<i>Verticillium dahliae</i> .
	<i>Alternaria brassicicola</i> .	<b>Lettuce</b>	<i>Fusarium oxysporum</i> .

<sup>3</sup>Available pathosystems presented in evaluation of varieties as well as in seed health quality are all adaptable for evaluation of treatments.

## EVALUATION OF BIOSTIMULANT PRODUCTS FOR GERMINATION AND/OR SEEDLING GROWTH

Two types of trials can be performed either under favourable conditions for the plant species (i.e. those applied in selectivity trials), or under penalizing conditions (i.e. abiotic stress).

		Price / Contact
<b>Monitoring of seed germination on 200 seeds</b>		
Germination energy (intermediate count; in addition to germination capacity).	GE-EG	17.20
Counting dates for energy vary according to the species.		
Germination kinetics by image analysis (average rate of germination, kinetic curve).	GE-CI	sylvie.ducournau@geves.fr
<b>Seedling development tests</b>		
<b>Corn</b> root length evaluation after 7 days germination at 15°C (4 replicates of 20 seeds).	GE-RAC	66.00
Dry biomass of 4 replicates of 20 seedlings after germination test.	GE-BIOM	NEW 48.00
Growth kinetics by image analysis (Eloncam bench).	GE-ELON	sylvie.ducournau@geves.fr
<b>Screening in partnership with Screenseed</b>		
Automated screening in microplate (96 wells) for the evaluation of treatments on seed germination.	GE-CRI	sylvie.ducournau@geves.fr

# Disease test supplies : inoculum and reference material

The available pests are listed on [www.geves.fr](http://www.geves.fr). Specific preparation of isolate can also be done in the form of inoculum or artificially contaminated seeds.  
Warning: For the handling of quarantine pests, laboratories must be authorised to hold (Regulation 2019/829)

## Specifics preparations of pests' inoculum

		Size	Duration	Price
<b>Specific preparation</b>				
Suspension of <i>Ditylenchus dipsaci</i> larvae (exemple of price: 1270€ to inoculate 9000 plants).	PA-AD-DIT			Contact SNES
Beet seedlings contaminated with viruliferous aphids <i>Myzus persicae</i> carrying yellowing virus BChV ( <i>Beet chlorosis virus</i> ).	PA-AD-MYZ			Contact SNES
<b>Other isolates and inoculum</b>				
One tray of 140 seedlings infected by a race of stripe/yellow rust ( <i>Puccinia striiformis</i> ). Contact <a href="mailto:jean-philippe.maigniel@geves.fr">jean-philippe.maigniel@geves.fr</a> .	PA-AD-ROU2	/	/	104.00
100 mg of a vial of spores of stripe rust ( <i>Puccinia striiformis</i> ) or brown rust ( <i>Puccinia recondita</i> ) or crown rust ( <i>Puccinia coronata</i> ).	PA-AD-ROU	/	/	50.00
Inoculum supplied in Petri dishes.	PA-AD-INOC			Contact SNES
Inoculum supplied as contaminated cotyledons, plants or fresh leaves.	PA-AD-INOP			Contact SNES
Inoculum supplied in artificially contaminated grains that have lost germination capacity or artificially contaminated seeds that have maintained a germination capacity.	PA-AD-INOG			Contact SNES
Inoculum supplied in liquid suspension.	PA-AD-INOL			Contact SNES
Cyst of <i>Globodera pallida</i> <sup>40</sup> or <i>Globodera rostochiensis</i> <sup>40</sup> .	PA-AD-GLO			Contact SNES
Cyst of <i>Heterodera schachtii</i> .	PA-AD-HET			Contact SNES

## Reference material : isolates and seeds

		Price
<b>Bioagressors isolates</b>		
Specific preparation of reference isolate in Petri dishes (2 dishes/strain), dessicated (Bos) (1 g) or population of free living nematodes or cysts (around 20).	PA-AD-FOU	150.00
Specific preparation of 5 g of galls of <i>Meloidogyne incognita</i> (for inoculation of 15 to 20 plantlets).	PA-AD-MEL <b>NEW</b>	160.00
Specific preparation of 5 g of galls of <i>Plasmodiophora brassicae</i> (for inoculation of 50 to 100 plantlets).	PA-AD-PLAD <b>NEW</b>	160.00
<b>Specific preparation</b>		
50 to 100 seeds of germinated Sunflower seeds contaminated by <i>Plasmopara halstedii</i> (downy mildew).	PA-AD-TOU2	137.00
Lettuce seedlings infected with 1 race of <i>Bremia lactucae</i> , 30 cotyledons in the test period.	PA-AD-BREM	160.00
<i>Erysiphe pisi</i> , 2 seedlings with presence of sporulation.	PA-AD-ERYS	160.00
2 cotyledons of Melon infected by 1 race of <i>Golovinomyces cichoracearum</i> (powdery mildew).	PA-AD-GOL	160.00
2 cotyledons of Melon infected by 1 race of <i>Podosphaera xanthii</i> (powdery mildew).	PA-AD-POD	160.00
2 Lettuce seedlings infected with <i>Nasonovia ribisnigri</i> race Nr: 0 with presence of apterae.	PA-AD-NAS	160.00
30 leaves of Basil contaminated by <i>Peronospora belbahri</i> .	PA-AD-BEL <b>NEW</b>	160.00
<b>Controls/differential hosts vegetables (MATREF) for one sowing unit (1 g for Bremia, 200 seeds for other pathogens)</b>		
Complete pack of differential hosts for <i>Bremia</i> of Lettuce.	PA-HD-BLAI	326.00
Carrot.	PA-HD-CAR	43.80
Squash.	PA-HD-COU	77.00
Watermelon.	PA-HD-PAS	77.00
Bean.	PA-HD-HAR	60.00
Lettuce.	PA-HD-LAI	60.00
Corn salad.	PA-HD-MAC	43.80
Melon.	PA-HD-MEL	77.00
Capsicum.	PA-HD-PIM	88.00
Pea.	PA-HD-POI	60.00
Tomato.	PA-HD-TOM	77.00
Tomato Rootstock.	PA-HD-PGTO	88.00



## INTER-LABORATORY COMPARATIVE TESTS

Inter-laboratory comparative tests enables comparison between laboratories or methods in different laboratories. For more information, visit our website [www.geves.fr](http://www.geves.fr).

The organisation of comparative tests includes planning and delivery of documents to participants, preparation of samples, definition of a reference, interpretation of results and issuing of a final report.

Not included : supply of seeds cost (billed at actual price), and the shipment cost (billed on the basis of a Chronopost shipment).

## Inter-laboratory proficiency tests – PT & Other comparisons

	Price	Contact
Purity – <b>All species</b> (based on 15 participants).	<b>165.00</b>	Fabienne BRUN eil.semences@geves.fr
Germination – <b>All species</b> (based on 15 participants).	<b>112.00</b>	
Moisture content – <b>All species</b> (based on 15 participants).	<b>72.00</b>	
Thousand-seed weight – <b>All species</b> (based on 15 participants).	<b>65.00</b>	
Organisation of inter-laboratory comparisons tests on request.	<b>Quotation</b>	
Supply of reference samples for internal laboratory control.	<b>Quotation</b>	
Expertise in the case of atypic results on seeds assay or deviation found (control card for recognized laboratories).	<b>Quotation</b>	

## AUDITS

According to various standards (ISTA, recognition in the context of certification), laboratory audits can be carried out to analyse your organisation.

One-day audit includes an analysis of a pre-audit file, the conducting of the audit as well as the audit report.

Contact : Fabienne Brun (audit.semences@geves.fr).

## REFERENCE MATERIALS AND DOCUMENTS SUPPLIES (available only in French)

Find all our publications and reference materials in the different chapters of the price list and on our website [www.geves.fr](http://www.geves.fr).

## TRAININGS - EXPERTISES

### To apply for training

	Price	Contact
Technical training with SNES.	/	Fabienne BRUN
Seed quality analysis, inter or in-company, at SNES or on-site.		formation.semences@geves.fr
Technical training with BioGEVES.	/	biogeves.analyses@geves.fr
Technical training with SEV.	/	rachel.tessier@geves.fr

### For the setting up of an expertise in an international context

Technical expertise and visit.	/	kaat.hellyn@geves.fr
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### Collective reading of results

Collective reading of germination results, details of abnormal and debriefing of the results reading. Fee per sample.	<b>GE-LECT</b>	<b>90.00 €</b>	<b>NEW</b>	service.clients@geves.fr
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# OUR PUBLICATIONS • AND REFERENCE MATERIAL

## Reference Collections



## Technical Data



## Seed Control Kit



More information at [www.geves.fr](http://www.geves.fr)

**Contact :** [Inr.semences@geves.fr](mailto:Inr.semences@geves.fr)



Groupe d'Étude et de contrôle  
des Variétés Et des Semences

# Terms and Conditions

## Article 1 – General Information

The present general terms and conditions of sale apply for services which appear in the GEVES price list (Variety and Seed Study and Control Group), public interest group governed by the constitutive convention of July 17, 1989, having made the object of an approval order dated July 17, 1989 and its modified constitutive convention of April 17, 2014 whose head office is located 25 rue George Morel, CS 90024, 49071 Beaucoz  Cedex FRANCE.

The main official missions of GEVES are to conduct studies or analyses of:

- characterization and/or identification of varieties,
- agronomic quality of varieties,
- physical, physiological and sanitary control of seed.

## Article 2 - Object and field of application

The analyses carried out within the framework of any order are in accordance with the present general terms of sale.

The placing of an order implies full acceptance of these general terms of sale which prevail on any other document of the customer, unless otherwise agreed between the customer and GEVES.

Geves reserves itself the right to modify the present general terms of sale.

## Article 3 - Orders

### 3-1) Order taking

The orders are definitive only when the present general terms of sale are fully accepted by the legal representative of the customer or any person duly appointed for that purpose.

The customer has to respect the terms of the supply of material described in the GEVES price list.

### 3-2) Modification of the order

The terms of the orders transmitted to GEVES are irrevocable for the customer, except written acceptance from GEVES. On this assumption, GEVES will not be held anymore by the deadlines agreed upon at the moment of the initial order.

### 3-3) Refusal of order

If a customer places an order to GEVES, without having carried out the payment of preceding orders despite reminder from GEVES, GEVES can repudiate the order, without the customer being able to claim any allowance, whatever the reason.

GEVES reserves itself the right to refuse any order.

## Article 4 - Delivery of the results

### 4-1) Delivery time

The delivery time of the results are given only on a purely informative and indicative basis; those depending in particular on arrival of the orders, the respect of the conditions of preparation of the samples sent by the customer (weight, number, packing for example), request for more information, or complementary analyses. For each service, useful information is available on the GEVES website ([www.geves.fr](http://www.geves.fr)). In any assumption, the delivery within the deadlines can intervene only if the customer is up to date of his obligations with GEVES.

GEVES shall endeavor to meet agreed deadlines with the customer.

Delays of delivery of results cannot lead to any penalty or allowance, nor to justify the cancellation of the order.

### 4-2) Terms

The delivery of the results is made by paper form or by electronic way.

### 4-3) Complaints

The complaints are to be forwarded to the customer service of GEVES whose contacts appear in the GEVES price list. GEVES acknowledges to the customer the receipt of the complaint, deals with it and defines an appropriate treatment as soon as possible. GEVES shall inform the plaintiff of the progress of the claim and the conclusions.

## Article 5 - Return

Except explicit indication of the customer validated by the customer service of GEVES whose references are indicated on the GEVES price list, no material submitted for analysis will be returned to the customer.

## Article 6 - Guarantee - Liabilities

### 6-1) Scope

GEVES provides services. As such, GEVES is under the obligation of best effort. It could not be held responsible for non-satisfactory results from the point of view of the customer, for causes of which it does not have the control. GEVES will have, if necessary, to issue reserves on the results.

### 6-2) Exclusions

If the elements provided by the customer do not allow the fulfillment of the ordered service, GEVES will inform the customer. If this situation persists, the liability of GEVES could in no way be required.

In particular, GEVES could not be held responsible for sampling (except for Orange ISTA Certificates for which GEVES is responsible for sampling), the collecting, the conditioning and the transport of the samples, which is the customer's entire liability. Moreover, the samples received at GEVES shall be in good condition of conservation and shall not present identified risk for the staff of GEVES or for the environment. When a phytosanitary treatment has been applied, the customer shall inform GEVES.

The customer waives all right to take any action against GEVES for all losses or all direct or indirect damages resulting from the services, as well as in the situation where the services of GEVES would be unsuitable for the uses of the customer.

## Article 7 - Tariff - Price

The rates applied to the orders are those indicated in the GEVES price list, unless particular conditions negotiated with GEVES.

Any order made on the basis of a quotation established by GEVES will be taken into account only after signature of the quotation, by the legal representative of the customer or any

person duly elected for that purpose.

Prices are indicated exclusive of VAT, based on current rates and will be increased by current taxes of all types on the invoicing date.

Amounts are indicated in Euros. Payments should be made in Euros.

The transport fees of the samples provided to GEVES for analysis are always at the charge of the customer.

## Article 8 - Invoicing

Any order, even if it is cancelled during the execution of the service, will give rise to an invoice. Elements of identification of the customer and ordered services are indicated on the invoices. The customer service of GEVES whose references appear in GEVES price list can be contacted for any question related to the invoice.

## Article 9 - Payment

### 9.1) – Time for payment

The maximum payment time is 60 days from the date of emission of the invoice.

### 9.2) – Terms

The payments shall be made:

- by French postal or bank check or credit or postal transfer addressed to: GEVES, 25 rue George Morel, CS 90024, 49071 Beaucoz  Cedex FRANCE
- by signed and accepted draft or promissory note.

GEVES does not authorize any discount for cash payment or on a former date to those resulting from these general terms of sale.

### 9.3) - Delay of payment

Any sum still not paid at the due date by the customer will give rise to the payment of penalties at the rate of the European Central Bank plus 10 points and a lump sum of 40 Euros for recovery costs in compliance with Decree n  2012-1115. These penalties are payable automatically without prior notice from GEVES on the date following the due date. Moreover, GEVES reserves itself the faculty to apply to the competent court of law to stop this non-fulfillment, under penalty per day of delay.

## Article 10 - Confidentiality - Rights of ownership

GEVES guarantees the confidentiality of the results of analysis, unless the detection of a quarantine pathogen. Under such circumstances, GEVES has to communicate immediately to the qualified services of the ministry in charge of agriculture all information relating to the material in which the quarantine pathogen was identified.

This exception also applies to other situations, such as the detection of fortuitous presence of GMO, if the regulation in force imposes to GEVES to communicate information to the qualified services of the French State.

The results provided by GEVES can in no way being modified, reproduced or diffused even in a partial way, to third party, without the preliminary authorization of GEVES. Duplicates can be obtained on request at the customer service of GEVES whose references are indicated on GEVES price list.

## Article 11 - Personal data

For any processing of personal data carried out in connection with this Quotation, the Parties shall comply with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data, as transposed into French Law No 2018-493 of 20 June 2018.

Each Party represents and warrants to the other Party that it will strictly comply with GDPR for any processing of personal data in connection with this Quotation.

Personal data collected and processed by the Parties in the context of this contractual relation are necessary for its execution (legal basis). They are kept for a period of 10 years (retention period) from the date of the end of the Quotation.

## Article 12 – Agreement of proof

In accordance with Articles 1316-1 to 1316-4 of the Civil code, documents in electronic form are admitted as evidence in the same way as paper-based documents.

The Parties expressly agree that this Quotation concluded in electronic form and signed in a dematerialized way, as well as the documents relating to it:

- Constitute the original documents ;
- Are drawn up and kept under conditions that guarantee their integrity ;
- Are perfectly valid between them. As such, the Parties undertake not to challenge the validity, enforceability or probative value of this Quotation and the documents relating to it on the basis of their conclusion or transmission by electronic means ;
- Constitute written evidence within the meaning of the aforementioned Articles 1316-1 to 1316-4 of the Civil Code. Thus, this Quotation concluded by electronic means is deemed to be evidence of the content of the Quotation, of the identity of the signatories and of their consent to the obligations arising from the Quotation.

## Article 13 - Force majeure

The emergence of a case of force majeure causes the suspension of the execution of the obligations of GEVES.

## Article 14 - Attribution of jurisdiction

For all disputes relating to the services carried out by GEVES, including those relatives to the interpretation of the general terms of sale, the jurisdictions of Angers shall be qualified.

## Article 15 - Applicable law

The present general terms of sale, and any question which it would omit to treat, shall be exclusively governed by the French law.

By appending his signature on the Quotation, the customer:

- recognizes and accepts without reserve the present general terms of sale and that those will apply to all the further orders until communication of new general terms of sale by GEVES,
- declares that he has read and accepts them,
- waives its own purchasing conditions.





**GEVES**  
Expertise & Performance

**Groupe d'Étude et de contrôle  
des Variétés Et des Semences**

Visit our website:  
***www.geves.fr***

