



# GEVES PRICE LIST 2022

*Field & Forage*

**Variety and Seed Study and Control Group**



**GEVES**

Expertise & Performance























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



# GEVES

Expertise & Performance

## SUMMARY

	GEVES in a few words	3
	Role and quality	4
	Place an order	5
	Your contacts at GEVES	6
	Supply of samples to the SNES	7
	Order an analysis	9
	All Species	10
	Beets - Chicorys - Potatoe	14
	Protein crops	17
	Cereal	21
	Fodder plants	26
	Seed mixture species	33
	Fiber plants	34
	Corn and sorghum	36
	Oil plants	39
	Micro-cleaning	44
	Cytology	45
	Radiography 2D and tomography	46
	Biostimulation, Biocontrol, evaluation of treatment	47
	Disease test supplies : inoculum and reference material	48
	Sector support	49
	Terms and Conditions	51



# 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

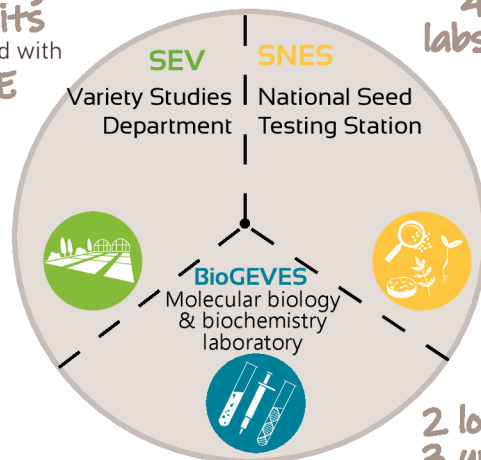
GEVES's Executive Board of Directors is composed of 13 members:

- 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  
+33 (0)2 41 22 58 17



## SNES Management



SNES Director  
Clotilde Polderman-Roussille  
02 41 22 58 10



Assistant  
Estelle Bertel  
02 41 22 58 02

## SNES Customer Services

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



Head of Customer Service and Sampling  
Alice Richard Jolly: +33 (0)2 41 22 58 13

- Order tracking and results +33 (0)2 41 22 58 22  
+33 (0)2 41 22 58 19
- Online ordering - DSN +33 (0)2 41 22 58 21

## SNES Technical Contacts



Head of Physical Analysis Laboratory  
Aurélie Charrier: +33 (0)2 41 22 58 40

- Radiography 2D/3D
- Purity, micro-cleaning
- Water content
- Botanic

Sherif Hamdy +33 (0)2 41 22 58 30  
Philippe Pannetier +33 (0)2 41 22 58 43  
Céline Herbert +33 (0)2 41 22 58 30  
Diogo Tobolski +33 (0)2 41 22 58 94



Head of Germination Laboratory  
Sylvie Ducournau: +33 (0)2 41 22 58 70

- Floral, vegetable, woody, pulses and forest species
- Beetroot, vegetable, forage grasses
- Agricultural crop species

Valérie Blouin +33 (0)2 41 22 58 78  
Pierre Soufflet +33 (0)2 41 22 58 82  
Philippe Garreau +33 (0)2 41 22 58 77



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

- Seed health
- Variety resistance
- Seed treatment evaluation

Isabelle Serandat +33 (0)2 41 22 58 54  
Sophie Perrot +33 (0)2 41 22 58 58  
Geoffrey Orgeur +33 (0)2 41 22 58 56

BioGEVES

Contact the Head of Unit:



## BioGEVES

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



Head of BioGEVES  
René Mathis  
+33 (0)2 41 22 58 34



Customer relationship  
Caroline Le Quilliec  
05 17 06 00 43



Detection Unit  
Thomas Baldwin  
+33 (0)2 41 22 58 39



Biochemistry Unit  
Patricia Lem  
+33 (0)5 17 06 96 13



Genotyping Unit  
Arnaud Remy  
+33 (0)5 17 06 96 17

SEV

Rachel Tessier  
+33 (0)2 41 22 85 93



## SEV



Head of SEV  
Fabien Masson  
+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.

**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.	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
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 <b>NEW</b>	/	/	55.00
Counting by unit.	PA-MY-DEN <b>NEW</b>	/	/	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 NEW	30.00
<b>Identification data sheet of fungal saprophytes</b>		
Sheet containing the main fungal saprophytes present in analysis on media.	PA-T-SAPR NEW	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 - <b>Beets, Chicory.</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>Beets, Chicory.</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	
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>				
Beets (after washing and treatment).	GE-FG-03-4	1 250	/	63.00
Beets (pelleted seeds).	GE-FG-034E	1 250	/	47.90
Chicorys.	GE-FG-18-4	1 250	/	56.00
<b>Germination test on 200 seeds</b>				
Beets (after washing and treatment).	GE-FG-03-2	500	/	48.50
Beets (pelleted seeds).	GE-FG-032E	500	/	33.40
Chicorys.	GE-FG-18-2	500	/	45.10
<b>Germination test on 100 seeds</b>				
Beets (after washing and treatment).	GE-FG-03-1	500	/	31.10
Beets (pelleted seeds).	GE-FG-031E	500	/	23.90
Chicorys.	GE-FG-18-1	500	/	27.10
<b>Cold test germination on 400 seeds</b>				
Beets (after washing and treatment).	GE-EGFG-B4	1 250	/	90.00



# Beets - Chicorys - Potatoe

## Physiological quality

		Size	Duration	Price
<b>Cold test germination on 400 seeds</b>				
Chicorys.	GE-EGFG-4	1 250	/	79.00
<b>Cold test germination on 200 seeds</b>				
Beets (after washing and treatment).	GE-EGFG-B2	500	/	54.00
Chicorys.	GE-EGFG-2	500	/	47.10
<b>Verification of species</b>				
Verification of species after germination test.	GE-ENR	/	/	8.10
<b>Additional determinations in addition to the germination test on 400 seeds</b>				
Percentage of monogerm seed - <b>Monogerm seeds.</b>	GE-FG-MONO	/	/	11.80
Percentage of monogerm seed - <b>Multigerms seeds.</b>	GE-FGMONO1	/	/	25.80
Germination based on full seeds.	GE-FG-AMAN	/	/	8.70
<b>Additional determinations in addition to the germination test on 200 seeds</b>				
Percentage of monogerm seed - <b>Monogerm seeds.</b>	GE-FGMON2 <b>NEW</b>	/	/	7.10
Percentage of monogerm seed - <b>Multigerms seeds.</b>	GE-FGMON21 <b>NEW</b>	/	/	15.30

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Swiss chard</b>				
<b><i>Pseudomonas syringae</i> pv. <i>aptata</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-119	5 000	38 days	225.00
<b>Chard</b>				
<b><i>Xanthomonas campestris</i> pv. <i>campestris</i></b>				
Agar method + pathogenicity test in case of suspect colonies (Anses BHs/99/05).	PA-BA-117	5 000	41 days	200.00

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

		Size	Duration	Price
<b>Beet</b>				
<b><i>Pleospora bjoerlingii</i> (<i>Phoma betae</i>), <i>Colletotrichum dematium</i>, <i>Fusarium oxysporum</i>, <i>Fusarium equiseti</i>, <i>Fusarium</i> (other sections), <i>Verticillium</i> sp.</b>				
Agar method.	PA-ES-BET	400	19 days	91.00
<b><i>Peronospora farinosa</i> (downy mildew)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-BET	500	15 days	88.00
<b><i>Cercospora beticola</i> (leaf spot)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-CE-BET	500	15 days	88.00
<b><i>Uromyces beticola</i> (rust)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-RO-BET	500	15 days	88.00
<b><i>Ramularia beticola</i> (leaf spot).</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-RAM-BET	500	15 days	88.00
<b>Chicory</b>				
<b><i>Alternaria cichorii</i>, <i>Fusarium</i> (all sections), <i>Botrytis cinerea</i></b>				
Agar method.	PA-ES-CHI	400	19 days	91.00

## 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

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Beet</b>				
<b><i>Beet necrotic yellow vein virus</i> (BNYVV)<sup>40</sup></b>				
ELISA.	PA-VI-41	2 000	16 days	213.00
<b><i>Tomato black ring virus</i> (TBRV)</b>				
ELISA.	PA-VI-37	2 000	16 days	150.00

# Beets - Chicorys - Potatoe

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Beet</b>				
<b>Beet mosaic virus (BtMV)</b>				
ELISA.	PA-VI-73			Contact SNES
<b>Tobacco rattle virus (TRV)</b>				
ELISA.	PA-VI-82			Contact SNES

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Beets</b>				
<b>Heterodera schachtii</b>				
Official protocol.	PA-R-BET	75	/	777.00
<b>Aphanomyces cochlidioides</b>				
Official protocol.	PA-R-BET-1			Contact SNES
<b>Rhizoctonia solani</b>				
Evaluation of aggressivity of an isolate.	PA-R-BET-2			Contact SNES
<b>Potato</b>				
<b>Globodera pallida</b> <sup>40</sup>				
Counting of eggs and larvae for resistant varieties. Directive 2007/33/CE.	PA-R-POM-1	8	/	741.00
Foot test (miniaturised test: 4 tubercules).	PA-R-POM-5	8	/	43.50
<b>Globodera rostochiensis</b> <sup>40</sup>				
Counting of eggs and larvae for resistant varieties. Directive 2007/33/CE.	PA-R-POM-3	8	/	714.00
Foot test (miniaturised test: 4 tubercules).	PA-R-POM-6	8	/	43.50

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

## Technological quality: biochemical tests

		Size	Duration	Price
<b>Chicory</b>				
Asparagin content.	BI-B-SPEC-ASN			Contact BioGEVES
<b>Beet</b>				
Betanine (red of Beetroot) assay by spectrophotometry.	BI-B-SPEC-BET			Contact BioGEVES

## Field test by SEV

			Price
DUS testing - <b>Sugar beet</b> .	SEV-DHS-BETS		965.00
DUS testing - <b>Forage beet</b> .	SEV-DHS-BETF		965.00
DUS testing - <b>Chicory</b> .	SEV-DHS-CHI		965.00
Resistance test for leaf blight and tuber blight for <b>Potato</b> . Contact aurelie.mailliard@geves.fr	SEV-PDT-MIL	NEW	/

## PUBLICATIONS

		Price
<b>Germination analysis technical sheet</b>		
Evaluation of <b>Beet</b> seedlings.	GE-T-BET	29.20
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b>		
<i>Beta vulgaris</i> .	AP-C-9	29.20
<b>Identification data sheet of seeds and other impurities</b>		
Asteraceae ( <i>Anthemis arvensis</i> , <i>Glebionis segetum</i> , <i>Chicorium</i> sp., <i>Tripleurospermum inodorum</i> , <i>Helminthotheca echioïdes</i> , <i>Lapsana communis</i> , <i>Lactuca sativa</i> , <i>Sonchus</i> spp., <i>Cirsium arvense</i> , <i>Cirsium vulgare</i> , <i>Centaurea cyanus</i> ).	AP-A-06	29.20
<b>Collection of seeds</b>		
Weed's identification for <b>Beta vulgaris</b> analysis. Contact SNES.	APCS-BET-V	/

## 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 - Field bean, Faba bean, Lupin, Pea.	PU-IS-02	ISTA weight	/	23.00
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 - Field bean, Faba bean, Lupin, Pea.	SP-IS-02	ISTA weight	/	23.00
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	
<i>Avena fatua</i> - Pea.	SP-AF-3KG2	3 kg	/	60.00
Searching of <i>Orobanche</i> sp. Only on UNTREATED and UNCOATED seeds. Analyse performed on a separate, sealed, submitted subsample.	SP-ORO	ISTA weight	/	66.00
Searching of <i>Striga</i> sp. Only on UNTREATED and UNCOATED seeds. 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. Only on UNTREATED and UNCOATED seeds. Analyse performed on a separate, sealed, submitted subsample.	SP-ORO-STR	ISTA weight	/	98.00
<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
Supplement for moisture content test requiring pre-drying.	TE-SN-03 NEW	/	/	12.00
<b>Determination of bitterness</b>				
Bitter on Lupin.	AMER-LUP1	400	/	60.00
<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>				
Field bean, Faba bean, Lupin, Pea, Soybean.	GE-FG-02-4	1 250	/	47.70
<b>Germination test on 200 seeds</b>				
Field bean, Faba bean, Lupin, Pea, Soybean.	GE-FG-02-2	500	/	39.50
<b>Vigour test</b>				
Conductivity test on 200 seeds on ISTA species. <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>	GE-CON-GLO	500	/	49.90
Accelerated ageing of 200 seeds including germination capacity.	GE-VIEI-2	500	/	78.00

### Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Pea - Detection of 1 pathogen</b>				
<b><i>Pseudomonas syringae</i> pv. <i>pisi</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



# Protein crops

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Pea - Detection of 1 pathogen</b>				
<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>pisi</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>pisi</i></b>				
Supplement fee. Confirmation by pathogenicity test PCR positive isolates.	PA-PP-PSP	/	9 days	67.00
<b>Soybean</b>				
<b><i>Pseudomonas savastanoi</i> pv. <i>glycinea</i></b>				
Agar method + pathogenicity test in case of suspect colonies (Anses BHs/99/04*).	PA-BA-27	5 000	31 days	181.00

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

		Size	Duration	Price
<b>Faba bean-Field bean</b>				
<b><i>Didymella fabae</i> (<i>Ascochyta fabae</i>), <i>Botrytis cinerea</i>, <i>Botrytis fabae</i>, <i>Fusarium</i> (all sections)</b>				
Agar method.	PA-ES-FEV	400	19 days	91.00
<b>Lupin</b>				
<b><i>Colletotrichum lupini</i>, <i>Botrytis cinerea</i>, <i>Fusarium</i> (other sections), <i>Phomopsis</i> sp.</b>				
Agar method.	PA-ES-LUP	400	19 days	91.00
<b>Pea</b>				
<b><i>Didymella pisi</i> (<i>Ascochyta pisi</i>), <i>Didymella pinodes</i> (<i>Mycosphaerella pinodes</i>), <i>Didymella pinodella</i> (<i>Phoma pinodella</i>), <i>Stemphylium botryosum</i>, <i>Fusarium</i> (other sections), <i>Botrytis</i> sp., <i>Sclerotinia</i> sp., <i>Phoma</i> sp.</b>				
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
<b><i>Didymella pisi</i> (<i>Ascochyta pisi</i>)</b>				
Agar method (ISTA 7-005).	PA-ANT-POI	400	19 days	95.00
<b><i>Peronospora viciae</i> (<i>Peronospora pisi</i>) (downy mildew)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-POI	500	15 days	88.00
<b>Chickpea</b>				
<b><i>Mycosphaerella rabiei</i> (<i>Ascochyta rabiei</i>), <i>Botrytis cinerea</i>, <i>Fusarium oxysporum</i>, <i>Fusarium solani</i>, <i>Fusarium</i> (other sections)</b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-POCD	400	19 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-POC	400	19 days	91.00
<b>Soybean</b>				
<b><i>Phomopsis complex</i>.</b>				
<b>Possibility of detection out of ISTA scope on request of <i>Fusarium</i> (all sections), <i>Stemphylium botryosum</i>, <i>Colletotrichum dematium</i>, <i>Botrytis</i> sp., <i>Phoma</i> sp.</b>				
Agar method (ISTA 7-016).	PA-PHO-SOJ	400	19 days	97.00

## Nematology

		Size	Duration	Price
<b>Faba bean</b>				
<b><i>Ditylenchus dipsaci</i> and/or <i>gigas</i></b>				
Filtration (Anses MOA013 parts A and B*). <b>UNTREATED seeds only.</b>	PA-NE-FEV	300 g	16 days	65.00
Test carried out on the whole submitted sample. <b>If the supplied quantity is too important, a new sample will be requested.</b>				
Detection on plants. Filtration (Anses MOA013 parts A and B).	PA-NE-PLAF	/	16 days	73.00

# Protein crops

## Nematology

		Size	Duration	Price
<b>Pea</b>				
<b><i>Ditylenchus dipsaci</i></b>				
Filtration (Anses MOA013 parts A and B*). <b>UNTREATED seeds only.</b>	<b>PA-NE-POIS</b>	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>				

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Pea</b>				
<b><i>Tomato black ring virus (TBRV)</i></b>				
ELISA.	<b>PA-VI-37</b>	2 000	16 days	<b>150.00</b>
<b><i>Pea early browning virus (PEBV)</i></b>				
ELISA (ISTA 7-024).	<b>PA-VI-31</b>	2 000	16 days	<b>145.00</b>
<b><i>Pea enation mosaic virus (PEMV)</i></b>				
ELISA.	<b>PA-VI-57</b>	2 000	16 days	<b>215.00</b>
<b><i>Pea seed borne mosaic virus (PSbMV)</i></b>				
ELISA (ISTA 7-024).	<b>PA-VI-11</b>	2 000	16 days	<b>145.00</b>
<b><i>Bean yellow mosaic virus (BYMV)</i></b>				
ELISA.	<b>PA-VI-60</b>		Contact SNES	
<b><i>Bean leaf roll virus (BLRV)</i></b>				
ELISA.	<b>PA-VI-67</b>		Contact SNES	
<b><i>Southern bean mosaic virus (SBMV)</i></b>				
ELISA.	<b>PA-VI-88</b>		Contact SNES	
<b><i>Broad bean true mosaic virus (BBTMV)</i></b>				
ELISA.	<b>PA-VI-50</b>		Contact SNES	
<b>Soybean</b>				
<b><i>Soybean mosaic virus (SMV)</i></b>				
ELISA.	<b>PA-VI-13</b>		Contact SNES	

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Pea</b>				
<b><i>Ascochyta pisi</i> race C</b>				
Official protocol.	<b>PA-R-POI-1</b>	30	/	<b>89.00</b>
<b><i>Fusarium oxysporum</i> f. sp. <i>pisii</i> race 1</b>				
Official protocol.	<b>PA-R-POI-2</b>	30	/	<b>99.00</b>
<b>BYMV (<i>Bean yellow mosaic virus</i>)</b>				
Official protocol.	<b>PA-R-POI-3</b>	30	/	<b>89.00</b>
<b>PEMV (<i>Pea enation mosaic virus</i>)</b>				
Official protocol.	<b>PA-R-POI-4</b>	30	/	<b>89.00</b>
<b><i>Erysiphe pisi</i></b>				
Official protocol.	<b>PA-R-POI-5</b>	30	/	<b>147.00</b>

*Different prices outside test periods. Contact SNES for tests outside periods (March - April)*

## Genotyping by protein profiling

		Size	Duration	Price
<b>Soybean</b>				
Varietal comparison by isoenzyme electrophoresis.	<b>BI-G-EL-COMP-S</b>		Contact BioGEVES	
Purity control by iso-enzymatic electrophoresis - 100 g.	<b>BI-G-EL-PUR-S-100G</b>		Contact BioGEVES	
Description of a variety for 6 loci on 20 seeds.	<b>BI-G-EL-DVAR-S</b>		Contact BioGEVES	
Purity test of a batch for 6 loci out of 200 seedlings.	<b>BI-G-EL-PUR-S-200G</b>		Contact BioGEVES	

# Protein crops

## Genotyping by molecular biology

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

## Technological quality : biochemical tests

		Size	Duration	Price
<b>Field Bean, Pea</b>				
Protein content (NIRS).	<b>BI-B-NIRS-P</b>			Contact BioGEVES
Antitrypsic factors (assay by spectrophotometry).	<b>BI-B-SPEC-FAT</b>			Contact BioGEVES
Tannin content (assay by spectrophotometry).	<b>BI-B-SPEC-TAN</b>			Contact BioGEVES
Vicin and convicine content (faba) by high performance liquid chromatography (HPLC).	<b>BI-B-HPLC-VCCV</b>			Contact BioGEVES
<b>Soybean</b>				
Protein content (NIRS).	<b>BI-B-NIRS-P</b>			Contact BioGEVES
Antitrypsic factors (assay by spectrophotometry).	<b>BI-B-SPEC-FAT</b>			Contact BioGEVES

## Detection, identification and quantification of GMOs

		Size	Duration	Price
<b>Soybean</b>				
Detection of the adventitious presence of GMOs in raw products (seeds, grains). List of methods available on request.	<b>BI-D-OGM1</b>			Contact BioGEVES
Identification and quantification of GMO events. List of methods available on request.	<b>BI-D-OGM3</b>			Contact BioGEVES

## Field test by SEV

			Price
DUS testing - <b>Field bean, Lupin.</b>	<b>SEV-DHS-FEVLUP</b>		<b>965.00</b>
DUS testing - <b>Lentil.</b>	<b>SEV-DHS-LEN</b>		<b>1180.00</b>
DUS testing - <b>Spring peas.</b>	<b>SEV-DHS-POIP</b>		<b>1180.00</b>
DUS testing - <b>Winter peas.</b>	<b>SEV-DHS-POIH</b>		<b>1180.00</b>
DUS testing - <b>Chickpea.</b>	<b>SEV-DHS-POIC</b>		<b>1180.00</b>
DUS testing - <b>Soybean.</b>	<b>SEV-DHS-SOJ</b>		<b>1080.00</b>

## PUBLICATIONS

		Price
<b>Method sheet</b>		
Vigour testing – Conductivity - <b>Pea.</b>	<b>VIG-2-M</b>	<b>7.10</b>
<b>Germination analysis technical sheet</b>		
Evaluation of <b>Pea</b> seedlings.	<b>GE-T-POI</b>	<b>29.20</b>
Evaluation of <b>Faba</b> seedlings.	<b>GE-T-FEV</b>	<b>29.20</b>
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b>		
<i>Pisum sativum, Vicia faba.</i>	<b>AP-C-8</b>	<b>29.20</b>
<i>Cicer arietinum.</i>	<b>AP-C-12</b>	<b>29.20</b>
<b>Collection of seeds</b>		
Weed's identification for <i>Pisum sativum</i> and <i>Vicia faba</i> analysis. Contact SNES.	<b>APCS-PIS-S</b>	/



## 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>Wheat, Spelt, Barley, Oats, Rice, Triticale, Rye, Buckwheat.</b>	PU-IS-01	ISTA weight	/	56.00
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>Wheat, Spelt, Barley, Oats, Rice, Triticale, Rye, Buckwheat.</b>	SP-IS-01	ISTA weight	/	123.00
	SP-CER-R1	1 00g	/	103.00
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	
<i>Avena fatua</i> - <b>Wheat, Spelt, Triticale, Rye, Barley, Rice.</b>	SP-AF-3KG1	3 kg	/	174.00
<i>Avena fatua</i> - <b>Oats.</b>	SP-AF-3KG5	3 kg	/	313.00
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>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
Supplement for moisture content test requiring pre-drying.	TE-SN-03 <b>NEW</b>	/	/	12.00
<b>Determination of bitterness</b>				
Bitter on <b>Quinoa.</b>	AMER-QUI	400	/	60.00
<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>				
Wheat, Spelt, Barley, Oats, Rice, Triticale, Rye, Buckwheat.	GE-FG-01-4	1 250	/	44.00
<b>Germination test on 200 seeds</b>				
Wheat, Spelt, Barley, Oats, Rice, Triticale, Rye, Buckwheat.	GE-FG-01-2	500	/	36.20
<b>Vigour test</b>				
Cold Test on 400 seeds.	GE-CO-CE-4	1 250	/	60.00
Cold Test Cereals (200 seeds).	GE-CO-CE-2	500	/	38.30
Accelerated ageing of 200 seeds including germination capacity.	GE-VIEI-2	500	/	78.00

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

		Size	Duration	Price
<b>Oats</b>				
<b><i>Ustilago avenae</i> (loose smut) and <i>Ustilago hordei</i> (smut)</b>				
Seed wash method.	PA-CH-AV	500	15 days	88.00
<b>UNTREATED seeds only.</b>				

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

		Size	Duration	Price
<b>Oats</b>				
<b><i>Pyrenophora chaetomioides (Helminthosporium avenae), Parastagonospora avenae (Septoria avenae), Microdochium spp., Fusarium (all sections), Botrytis sp.</i></b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-AVD	400	19 days	<b>95.00</b>
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-AV	400	19 days	<b>91.00</b>
<b>Wheat, Barley, Rye, Triticale</b>				
<b><i>Tilletia caries (bunt)</i></b>				
Filtration and counting method + viability measure by staining method.	PA-CA-VIAC	50g	15 days	<b>115.00</b>
<b>Wheat</b>				
<b><i>Tilletia caries, Tilletia laevis (Tilletia foetida), Tilletia controversa (bunt)</i></b>				
Filtration and counting method. <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). UNTREATED seeds only.</b>	PA-CA-BLE	50g	15 days	<b>82.00</b>
<b><i>Tilletia indica</i><sup>40</sup>, <i>Tilletia caries, Tilletia laevis (Tilletia foetida), Tilletia controversa (bunt)</i></b>				
Filtration method (Anses MOA 017*). <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). Analyses only carried out on seed lots from France. UNTREATED seeds only.</b>	PA-CA-BLE2	200g	15 days	<b>122.00</b>
<b><i>Tilletia caries (bunt)</i></b>				
Viability measure of spores by detection by PCR on plantlets. <b>Evaluation of the efficiency of treatments. Evaluation of transmission from seed to plantlet.</b>	PA-CA-VIA2			Contact SNES
<b><i>Ustilago tritici (loose smut)</i></b>				
Embryo extraction method. <b>UNTREATED seeds only.</b>	PA-CH-BLE	2 000	15 days	<b>95.00</b>
<b><i>Microdochium spp., Fusarium (section Discolor, section Roseum, section Sporotrichiella and other sections), Parastagonospora nodorum (Septoria nodorum), Bipolaris sorokiniana (Helminthosporium sativum), Helminthosporium sp.</i></b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-BLED	400	19 days	<b>95.00</b>
<b><i>Microdochium spp., Fusarium (section Discolor, section Roseum, section Sporotrichiella and other sections), Parastagonospora nodorum (Septoria nodorum), Bipolaris sativum (Helminthosporium sorokiniana), Helminthosporium sp.</i></b>				
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-BLE	400	19 days	<b>91.00</b>
<b><i>Microdochium spp.</i></b>				
Agar method (ISTA 7-022).	PA-MIC-BLE	400	19 days	<b>95.00</b>
Identification of species by PCR in addition to the analysis of detection.	PA-MIC-BL2	/	19 days	<b>195.00</b>
<b><i>Parastagonospora nodorum (Septoria nodorum)</i></b>				
Agar method (ISTA 7-014).	PA-SE-BLE	400	19 days	<b>94.00</b>
<b><i>Septoria sp.</i></b>				
Identification of species on leaves.	PA-ID-SEP	/	15 days	<b>104.00</b>
<b><i>Urocystis agropyri (flag smut)</i></b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-BLE-URO	500	15 days	<b>88.00</b>
<b>Barley</b>				
<b><i>Tilletia caries, Tilletia laevis (Tilletia foetida), Tilletia controversa (bunt)</i></b>				
Filtration and counting method. <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). UNTREATED seeds only.</b>	PA-CA-ORG	50g	15 days	<b>82.00</b>
<b><i>Tilletia indica</i><sup>40</sup>, <i>Tilletia caries, Tilletia laevis (Tilletia foetida), Tilletia controversa (bunt)</i></b>				
Filtration method (Anses MOA 017*). <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). Analyses only carried out on seed lots from France. UNTREATED seeds only.</b>	PA-CA-ORG2	200g	15 days	<b>122.00</b>
<b><i>Ustilago nuda (loose smut)</i></b>				
Embryo extraction method.	PA-CH-ORG	2 000	15 days	<b>95.00</b>
Embryo extraction method (ISTA 7-013a).	PA-CHI-ORG	4 000	15 days	<b>107.00</b>

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

		Size	Duration	Price
<b>Barley</b>				
<b><i>Ustilago hordei</i> (smut)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-CH-ORLA	500	15 days	<b>88.00</b>
<b><i>Microdochium</i> spp., <i>Fusarium</i> (section <i>Discolor</i>, section <i>Roseum</i>, section <i>Sporotrichiella</i> and other sections), <i>Parastagonospora nodorum</i> (<i>Septoria nodorum</i>), <i>Helminthosporium</i> sp</b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-ORGD	400	19 days	<b>95.00</b>
Seed wash method. <b>Untreated seeds only.</b>	PA-ES-ORG	400	19 days	<b>91.00</b>
<b><i>Ramularia collo-cygni</i></b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-RAM-ORG	500	15 days	<b>88.00</b>
<b><i>Helminthosporium</i> spp. (<i>Pyrenophora</i> spp.)</b>				
Identification of species in addition to detection test.	PA-ID-HEL	/	/	<b>111.00</b>
<b>Rice</b>				
<b><i>Alternaria padwickii</i>, <i>Bipolaris oryzae</i> (<i>Helminthosporium oryzae</i>), <i>Pyricularia oryzae</i> (<i>Magnaporthe grisea</i>), <i>Curvularia</i> sp., <i>Nigrospora oryzae</i>.</b>				
Agar method.	PA-ES-RIZ	400	19 days	<b>120.00</b>
Blotter method (ISTA 7-10, 7-011, 7-012).	PA-ESI-RIZ	400	19 days	<b>120.00</b>
<b>Rye</b>				
<b><i>Tilletia caries</i>, <i>Tilletia laevis</i> (<i>Tilletia foetida</i>), <i>Tilletia controversa</i> (bunt)</b>				
Filtration and counting method. <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). UNTREATED seeds only.</b>	PA-CA-SEI	50g	15 days	<b>82.00</b>
<b><i>Tilletia indica</i><sup>40</sup>, <i>Tilletia caries</i>, <i>Tilletia laevis</i> (<i>Tilletia foetida</i>), <i>Tilletia controversa</i> (bunt)</b>				
Filtration method (Anses MOA 017*). <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). Analyses only carried out on seed lots from France. UNTREATED seeds only.</b>	PA-CA-SEI2	200g	15 days	<b>122.00</b>
<b><i>Ustilago hordei</i> (smut)</b>				
Seed wash method. <b>UNTREATEDseeds only.</b>	PA-CH-SEI	500	15 days	<b>88.00</b>
<b><i>Microdochium</i> spp., <i>Fusarium</i> (toutes sections), <i>Parastagonospora nodorum</i> (<i>Septoria nodorum</i>), <i>Bipolaris sorokiniana</i> (<i>Helminthosporium sativum</i>), <i>Helminthosporium</i> sp.</b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-SEID	400	19 days	<b>95.00</b>
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-SEI	400	19 days	<b>91.00</b>
<b>Triticale</b>				
<b><i>Tilletia caries</i>, <i>Tilletia laevis</i> (<i>Tilletia foetida</i>), <i>Tilletia controversa</i> (bunt)</b>				
Filtration and counting method. <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). UNTREATED seeds only.</b>	PA-CA-TRI	50g	15 days	<b>82.00</b>
<b><i>Tilletia indica</i><sup>40</sup>, <i>Tilletia caries</i>, <i>Tilletia laevis</i> (<i>Tilletia foetida</i>), <i>Tilletia controversa</i> (bunt)</b>				
Filtration method (Anses MOA 017*). <b>Provide the specified quantity of seeds with indication the weight and the number of seeds on the bag (information is under the applicant's responsibility). Analyses only carried out on seed lots from France. UNTREATED seeds only.</b>	PA-CA-TRI2	200g	15 days	<b>122.00</b>
<b><i>Ustilago tritici</i> (loose smut)</b>				
Embryo extraction method. <b>UNTREATED seeds only.</b>	PA-CH-TRI	2 000	15 days	<b>95.00</b>
<b><i>Microdochium</i> spp., <i>Fusarium</i> (all sections), <i>Parastagonospora nodorum</i> (<i>Septoria nodorum</i>), <i>Bipolaris sorokiniana</i> (<i>Helminthosporium sativum</i>), <i>Helminthosporium</i> sp.</b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-TRID	400	19 days	<b>95.00</b>
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-TRI	400	19 days	<b>91.00</b>

## Nematology

### Oats

#### *Ditylenchus dipsaci*

Filtration (Anses MOA013 parts A and B\*). **UNTREATED seeds only**. Test carried out on the whole submitted sample. **If the supplied quantity is too important, a new sample will be requested.**

PA-NE-AV 200g 16 days 65.00

### Rice

#### *Aphelenchoides besseyi*

Grinding + filtration (ISTA 7-025). **UNTREATED seeds only**.

PA-NE-RIZ **NEW** 1 000 16 days 71.00

## Virogoly - Uncoated seeds only

### Wheat, Barley

#### *Barley stripe mosaic virus (BSMV)*

ELISA.

PA-VI-45 Contact SNES

## EVALUATION OF VARIETIES

### Varietal resistance

### Wheat

#### *WSSMV (Wheat spindle streak mosaic virus)*

Detection by ELISA.

PA-R-BLE-1 20 plants / 78.00

#### *SBCMV (Soil-borne cereal mosaic virus)*

Detection by ELISA.

PA-R-BLE-2 20 plants / 78.00

#### *Tilletia caries*

Method by grow -out and detection on plantlets by PCR (declining price depending on the number of varieties, exemple of price: 532€ per variety for a request of 4 varieties in study).

PA-R-BLE-3 Contact SNES

### Barley

#### *BaMMV (Barley mild mosaic virus)*

Detection by ELISA.

PA-R-ORG1 20 plants / 78.00

#### *BaYMV (Barley yellow mosaic virus)*

Detection by ELISA.

PA-R-ORG2 20 plants / 78.00

### Wheat, Barley

#### *BaMMV (Barley mild mosaic virus)*

Detection by PCR.

BI-D-VIR-MOSA1 Contact BioGEVES

#### *BaYMV (Barley yellow mosaic virus)*

Detection by PCR.

BI-D-VIR-MOSA2 Contact BioGEVES

Pathotype identification dCAPS method (Y1/Y2).

BI-D-V-DCAPS Contact BioGEVES

#### *BYDV (Barley yellow dwarf virus)*

Detection and identification of BYDV-MAV, BYDV-PAV, BYDV-SGV and BYDV-RPV by PCR.

BI-D-V-JNO Contact BioGEVES

#### *WDV (Wheat dwarf virus)*

Detection by PCR.

BI-D-VIR-MOSA5 Contact BioGEVES

#### *SBWMV (Soil-borne wheat mosaic virus)*

Detection by PCR.

BI-D-VIR-MOSA4 Contact BioGEVES

#### *SBCMV (Soil-borne cereal mosaic virus)*

Detection by PCR.

BI-D-VIR-MOSA3 Contact BioGEVES

#### *WSSMV (Wheat spindle streak mosaic virus)*

Detection by PCR.

BI-D-VIR-MOSA6 Contact BioGEVES

*Different prices outside test periods. Contact SNES for tests outside periods (March - April)*

## Genotyping by protein profiling

### Durum Wheat

Research and characterisation of LMW1 and LMW2 bands for the varieties of **Durum wheat 1** variety x 5.

BI-G-EL-LMW Contact BioGEVES



## Genotyping by molecular biology

	Size	Duration	Price
<b>Durum Wheat, Bread Wheat, Barley, Triticale</b>			
Varietal purity analysis.	BI-G-BM-SSR-PUR-90		Contact BioGEVES
Seed mixture detection.	BI-G-BM-SSR-PUR-40		Contact BioGEVES
<b>Durum Wheat, Barley, Rice, Triticale</b>			
Varietal identity control.	BI-G-BM-SSR-CID-1		Contact BioGEVES
<b>Bread Wheat</b>			
Varietal identification (french collection, organic, recommended varieties for milling).	BI-G-BM-SSR-CID-2		Contact BioGEVES
Varietal identity control for milling.	BI-G-BM-SSR-CID-3		Contact BioGEVES
Varietal identity control for organic wheat.	BI-G-BM-SSR-CID-4		Contact BioGEVES
<b>Malting Barley</b>			
Varietal identity control for brewery.	BI-G-BM-SSR-CID-5		Contact BioGEVES

## Technological quality : biochemical tests

	Size	Duration	Price
<b>Durum Wheat</b>			
Protein content (NIRS).	BI-B-NIRS-P		Contact BioGEVES

## Other tests

	Size	Duration	Price
<b>Barley</b>			
Morphological control of Barley seeds (character of racilla and crease), on 100 seeds.	SEV-AUT-GROR	/	42.40

## Field test by SEV

		Price
DUS testing - <b>Winter oat</b> .	SEV-DHS-AVH	965.00
DUS testing - <b>Spring oat</b> .	SEV-DHS-AVP	965.00
DUS testing - <b>Winter wheat</b> .	SEV-DHS-BTH	1295.00
DUS testing - <b>Spring wheat</b> .	SEV-DHS-BTP	965.00
DUS testing - <b>Winter barley</b> .	SEV-DHS-ORH	1295.00
DUS testing - <b>Spring barley</b> .	SEV-DHS-ORP	1295.00
DUS testing - <b>Durum wheat</b> .	SEV-DHS-BD	1295.00
DUS testing - <b>Triticale</b> .	SEV-DHS-TRI	1295.00
DUS testing - <b>Rice</b> .	SEV-DHS-RIZ	1295.00

## PUBLICATIONS

		Price
<b>Germination analysis technical sheet</b>		
Evaluation of <b>Cereals</b> seedlings.	GE-T-CER	29.20
<b>Identification data sheet of seeds and other impurities</b>		
<i>Cereals (Avena sativa, Triticum aestivum, Triticum durum, Hordeum vulgare, x Triticosecale, Secale cereale).</i>	AP-C-5	29.20
<i>Sorghum bicolor.</i>	AP-C-17	29.20
<i>Avena fatua-Avena sativa.</i>	AP-A-02	29.20
<b>Collection of seeds</b>		
Weed's identification for <b>Cereals</b> analysis. Contact SNES.	APCS-CER	/

## 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>Preparation of pure seeds for germination test</b>				
All forage grasses species.	PU-PR-GRA NEW	ISTA weight	/	28.40
<b>Purity analysis test</b>				
Purity - Field bean, Faba bean, Lupin, Pea.	PU-IS-02	ISTA weight	/	23.00
Purity leguminous - Bermuda grass, Fenugreek, Birds-foot trefoil, Alfalfa, Black Medick, Phacelia, Plantain, Sainfoin, Clover, Vetch.	PU-IS-FOU1 NEW	ISTA weight	/	42.60
Purity grasses - Festulolium, Tall fescue, Sweet vernal grass, Tall oat grass, Bahia grass, Harding grass, Rye grass, Meadow foxtail.	PU-IS-FOU2 NEW	ISTA weight	/	65.00
Purity grasses - Bent-grass, Yellow oatgrass, Brome, Tufted hair grass, Cocksfoot, Sheep fescue, Red fescue, Meadow fescue, Meadow grass.	PU-IS-FOU3 NEW	ISTA weight	/	76.00
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 - Field bean, Faba bean, Lupin, Pea.	SP-IS-02	ISTA weight	/	23.00
Full counting leguminous - Alfalfa, Black Medick, Clover, Phacelia, Narrow-leaf plantain.	SP-IS-LEG1 NEW	ISTA weight	/	132.00
Full counting leguminous - Fenugreek, Birds-foot trefoil, Sainfoin, Vetch.	SP-IS-LEG2 NEW	ISTA weight	/	200.00
Full counting grasses - Festulolium, Tall fescue, Sweet vernal grass, Tall oat grass, Bahia grass, Harding grass, Rye grass, Meadow foxtail.	SP-IS-GRA1 NEW	ISTA weight	/	280.00
Full counting grasses - Bent-grass, Yellow oatgrass, Brome, Tufted hair grass, Cocksfoot, Sheep fescue, Red fescue, Meadow fescue, Meadow grass.	SP-IS-GRA2 NEW	ISTA weight	/	179.00
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	
Searching of <i>Cuscuta</i> spp. - Trefoil, White clover, Hybrid clover, Micheli's clover, Strawberry clover, Arrowleaf clover.	SP-CU100-T	< 100g	/	80.00
	SP-CU250-T	150 to 300g	/	231.00
	SP-CU500-T	400 to 600g	/	418.00
Searching of <i>Cuscuta</i> spp. - Alfalfa, Black medick, Red clover, Carnation clover, Egyptian clover, Persian clover.	SP-CU100-P NEW	< 100g	/	33.20
	SP-CU250-P	150 to 300g	/	81.00
	SP-CU500-P	400 to 600g	/	157.00
Searching of <i>Avena fatua</i> - Pea, Vetch.	SP-AF-3KG2	3 kg	/	60.00
Searching by Veskof type - Alfalfa, Black medick, Clover.	SP-VE-02	/	/	158.00
Searching by Veskof type - Other species.	SP-VE-AUTR NEW		Contacteur la SNES	
Searching by dehydration standard on Alfalfa.	SP-DESHY	/	/	75.00
Searching of <i>Orobanche</i> sp. Only on UNTREATED and UNCOATED seeds. Analyse performed on a separate, sealed, submitted subsample.	SP-ORO	ISTA weight	/	66.00
Searching of <i>Striga</i> sp. Only on UNTREATED and UNCOATED seeds. 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. Only on UNTREATED and UNCOATED seeds. 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. Only on UNTREATED seeds.	SP-ENR2500	2 500	/	91.00
Pelleting material removal and full counting on 7500 coated seeds. Only on UNTREATED seeds.	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. Only on UNTREATED seeds.	SP-ENR-LIM	7 500	/	215.00

## Physical quality

		Size	Duration	Price
<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>				
Festulolium, Tall fescue, Fenugreek, Timoty, Harding grass, Birdsfoot trefoil, Alfalfa, Black medick, Rye grass, Sainfoin, Clover, Meadow foxtail.	GE-FG-06-4	1 250	/	57.00
Bent-grass, Yellow oatgrass, Brome, Bermuda grass, Cocksfoot, Meadow fescue, Sheep fescue, Red fescue, Tall oat grass, Meadow grass, Vetch.	GE-FG-09-4	1 250	/	66.00
Fodder kale, Forage pea, Forage radish.	GE-FG-18-4	1 250	/	56.00
<b>Germination test on 200 seeds</b>				
Festulolium, Tall fescue, Fenugreek, Timoty, Harding grass, Birdsfoot trefoil, Alfalfa, Black medick, Rye grass, Sainfoin, Clover, Meadow foxtail.	GE-FG-06-2	500	/	39.60
Bent-grass, Yellow oatgrass, Brome, Bermuda grass, Cocksfoot, Meadow fescue, Sheep fescue, Red fescue, Tall oat grass, Meadow grass, Vetch.	GE-FG-09-2	500	/	44.20
Fodder kale, Forage pea, Forage radish.	GE-FG-18-2	500	/	45.10
<b>Fluorescence</b>				
Fluorescence of <b>Rye grass</b> roots on 400 seedlings (germination and identification). Enables distinguishing <i>Lolium perenne</i> showing no fluorescence unlike <i>Lolium multiflorum</i> and <i>Lolium boucheanum</i> these exhibit fluorescent roots.	FLUO-1	/	/	99.00

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Brassicaceae (Cabbage, Cauliflower, Broccoli, Radish, Turnip) - Detection of 1 pathogen</b>				
<b><i>Xanthomonas campestris</i> pv. <i>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</i> pv. <i>armoraciae</i> (<i>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</i> pv. <i>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</i> pv. <i>campestris</i> + <i>Xanthomonas campestris</i> pv. <i>armoraciae</i> (<i>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

## Bacteriology - Uncoated seeds only

	Size	Duration	Price
<b>Brassicaceae (Cabbage, Cauliflower, Broccoli, Radish, Turnip) - Detection of 2 pathogens.</b>			
<b><i>Xanthomonas campestris</i> pv. <i>campestris</i> + <i>Xanthomonas campestris</i> pv. <i>armoraciae</i> (<i>raphani</i>)</b>			
Disinfected seeds. 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</i> pv. <i>campestris</i> + <i>Pseudomonas syringae</i> pv. <i>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
<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> (<i>raphani</i>) + <i>Pseudomonas syringae</i> pv. <i>maculicola</i>.</b>			
Agar method + pathogenicity test in case of suspect colonies colonies (ISTA 7-019a without counting of colonies for Xcc and Xca).	PA-BA-08	30 000	41 days 336.00
<b>Pea - Detection of 1 pathogen</b>			
<b><i>Pseudomonas syringae</i> pv. <i>pisi</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>pisi</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>Vetch</b>			
<b><i>Pseudomonas syringae</i> pv. <i>pisi</i></b>			
Agar method +PCR in case of suspect colonies (method derived from Anses BHs/99/03).	PA-BA-99	5 000	33 days 181.00
<b>Pea, Vetch</b>			
<b><i>Pseudomonas syringae</i> pv. <i>pisi</i></b>			
Supplement fee. Confirmation by pathogenicity test PCR positive isolates.	PA-PP-PSP	/	9 days 67.00

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

	Size	Duration	Price
<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>Brome</b>			
<b><i>Ustilago bullata</i> (<i>Ustilago bromivora</i>) and <i>Ustilago striiformis</i></b>			
Seed wash method. UNTREATED seeds only.	PA-CH-BRO	500	15 days 88.00



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

		Size	Duration	Price
<b>Cocksfoot/ Orchard Grass</b>				
<b><i>Epichloe mollis (Neotyphodium typhinum)</i></b>				
Grow-out and serological method.	PA-NT2-DAC	100	40 days	630.00
<b><i>Pyrenophora lolii (Helminthosporium siccans), Pyrenophora dictyoides (Helminthosporium dictyoides), Colletotrichum graminicola (Glomerella graminicola), Fusarium (all sections), Botrytis sp., Helminthosporium sp.</i></b>				
Agar method.	PA-ES-DAC	400	19 days	91.00
<b>Fescue</b>				
<b><i>Epichloe coenophiala (Neotyphodium coenophialum)</i></b>				
Serological method (ISTA 7-015). <b>UNTREATED seeds only.</b>	PA-NT2-FET	100	16 days	524.00
Grow-out and serological method.	PA-NT3-FET	100	40 days	630.00
<b><i>Pyrenophora lolii (Helminthosporium siccans), Pyrenophora dictyoides (Helminthosporium dictyoides), Microdochium spp., Fusarium (all sections), Botrytis sp., Helminthosporium sp.</i></b>				
Agar method.	PA-ES-FET	400	19 days	91.00
<b>Alfalfa</b>				
<b><i>Ascochyta medicaginicola (Ascochyta imperfecta), Fusarium oxysporum, Fusarium avenaceum, Verticillium spp., Stemphylium sp., Sclerotinia sp., Colletotrichum sp., Botrytis cinerea, Fusarium (all sections)</i></b>				
Agar method.	PA-ES-LUZ	400	19 days	91.00
<b>Millet</b>				
<b><i>Ustilago sp., Sporisorium destruens (Sphacelotheca destruens) or Moesziomyces bullatus (Tolyposporium penicillariae)</i></b>				
Seed wash method. Please indicate the Latin name of millet. <b>UNTREATED seeds only.</b>	PA-CH-MIL	500	15 days	88.00
<b>Pea</b>				
<b><i>Didymella pisi (Ascochyta pisi), Didymella pinodes (Mycosphaerella pinodes), Didymella pinodella (Phoma pinodella), Stemphylium botryosum, Fusarium (other sections), Botrytis sp., Sclerotinia sp., Phoma sp.</i></b>				
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
<b><i>Peronospora viciae (Peronospora pisi) (downy mildew)</i></b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-POI	500	15 days	88.00
<b><i>Didymella pisi (Ascochyta pisi)</i></b>				
Agar method (ISTA 7-005).	PA-ANT-POI	400	19 days	95.00
<b>Radish</b>				
<b><i>Hyaloperonospora parasitica (Peronospora parasitica) (downy mildew)</i></b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-RAD	500	15 days	88.00
Grow-out method (viability testing).	PA-MIRADGO	400	42 days	111.00
<b>Rye-grass</b>				
<b><i>Epichloe festuca (Neotyphodium lolii)</i></b>				
Serological method (ISTA 7-015). <b>UNTREATED seeds only.</b>	PA-NT2-RAY	100	16 days	524.00
Grow-out and serological method (viability testing).	PA-NT3-RAY	100	40 days	630.00
<b><i>Pyrenophora lolii (Helminthosporium siccans), Pyrenophora dictyoides (Helminthosporium dictyoides), Microdochium spp., Fusarium (all sections), Botrytis sp., Helminthosporium sp.</i></b>				
Agar method.	PA-ES-RAY	400	19 days	91.00
<b>Clover</b>				
<b><i>Ascochyta medicaginicola (Ascochyta imperfecta), Fusarium oxysporum, Fusarium avenaceum, Verticillium spp., Stemphylium sp., Sclerotinia sp., Colletotrichum sp., Botrytis cinerea, Fusarium (all sections)</i></b>				
Agar method.	PA-ES-TRE	400	19 days	91.00

# Fodder plants

## Nematology

		Size	Duration	Price
<b>Alfalfa</b>				
<b><i>Ditylenchus dipsaci</i></b>				
Detection by Seed Extract PCR and/or morphobiometry (GEVES M-GEVES/SV/MO/001*). <b>UNTREATED seed only. If the supplied quantity is too important, a new sample will be requested.</b>	PA-NE-LUZG <b>NEW</b>	200 g	10 days	<b>55.00</b>
<b>Pea</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>	PA-NE-POIS	70 g	16 days	<b>65.00</b>
<b>Rye-grass</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>	PA-NE-RAY	70 g	16 days	<b>65.00</b>
<b>Clover</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>	PA-NE-TRE	70 g	16 days	<b>65.00</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).	PA-NE-VIA	/	/	<b>96.00</b>
<b>Plants (leaves and stems)</b>				
<b><i>Ditylenchus dipsaci</i></b>				
Filtration (Anses MOA013 parts A and B).	PA-NE-PLAN	/	16 days	<b>73.00</b>

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Alfalfa</b>				
<b><i>Alfalfa mosaic (AMV)</i></b>				
ELISA.	PA-VI-71	2 000	16 days	<b>140.00</b>
<b>Pea</b>				
<b><i>Tomato black ring virus (TBRV)</i></b>				
ELISA.	PA-VI-37	2 000	16 days	<b>150.00</b>
<b><i>Pea early browning virus (PEBV)</i></b>				
ELISA (ISTA 7-024).	PA-VI-31	2 000	16 days	<b>145.00</b>
<b><i>Pea enation mosaic virus (PEMV)</i></b>				
ELISA.	PA-VI-57	2 000	16 days	<b>215.00</b>
<b><i>Bean yellow mosaic virus (BYMV)</i></b>				
ELISA.	PA-VI-60		Contact SNES	
<b><i>Bean leaf roll virus (BLRV)</i></b>				
ELISA.	PA-VI-67		Contact SNES	
<b><i>Southern bean mosaic virus (SBMV)</i></b>				
ELISA.	PA-VI-88		Contact SNES	
<b><i>Broad bean true mosaic virus (BBTMV)</i></b>				
ELISA.	PA-VI-50		Contact SNES	
<b>Pea, Vetch</b>				
<b><i>Pea seed borne mosaic virus (PSbMV)</i></b>				
ELISA (ISTA 7-024).	PA-VI-11	2 000	16 days	<b>145.00</b>
<b>Vetch</b>				
<b><i>Cauliflower mosaic (CaMV)</i></b>				
ELISA.	PA-VI-68		Contact SNES	

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Brome</b>				
<b><i>Xanthomonas campestris</i> pv. <i>graminis</i></b>				
Official protocol.	PA-R-BRO	162	/	246.00
<b>Cabbage</b>				
<b><i>Fusarium oxysporum</i> f. sp. <i>conglutinans</i> race 1</b>				
Official protocol.	PA-R-CHO	45	/	320.00
<b><i>Plasmodiophora brassicae</i></b>				
Official protocol.	PA-R-CHO-1	45	/	231.00
<b>Cruciferous (Mustard, Forage radish)</b>				
<b><i>Heterodera schachtii</i></b>				
Official protocol.	PA-R-CRU	60	/	634.00
<b><i>Meloidogyne incognita</i></b>				
Official protocol.	PA-R-CRU1	45	/	149.00
<b><i>Meloidogyne hapla</i></b>				
Official protocol.	PA-R-CRU2	45	/	149.00
<b><i>Meloidogyne javanica</i></b>				
Official protocol.	PA-R-CRU3	45	/	149.00
<b><i>Meloidogyne chitwoodi</i><sup>40</sup></b>				
Official protocol.	PA-R-CRU4	45	/	158.00
<b>Festulolium, Fescue, Rye-grass, Italian Rye-grass</b>				
<b><i>Xanthomonas translucens</i> pv. <i>graminis</i></b>				
Official protocol.	PA-R-RAY	162	/	227.00
<b>Alfalfa</b>				
<b><i>Ditylenchus dipsaci</i></b>				
Official protocol.	PA-R-LUZ-1	2 000	/	589.00
<b><i>Verticillium albo-atrum</i></b>				
Official protocol.	PA-R-LUZ-2	500	/	464.00
<b><i>Colletotrichum trifolii</i></b>				
Official protocol.	PA-R-LUZ-3	500	/	213.00
Identification of the race.	PA-R-IDCOL	/	/	371.00
<b><i>Sclerotinia trifoliorum</i></b>				
Official protocol.	PA-R-LUZ-4	500	/	348.00
<b><i>Fusarium oxysporum</i> f. sp. <i>medicaginis</i></b>				
Official protocol.	PA-R-LUZ-5	500	/	348.00
<b>Pea</b>				
<b><i>Ascochyta pisi</i> race C</b>				
Official protocol.	PA-R-POI-1	30	/	89.00
<b><i>Fusarium oxysporum</i> f. sp. <i>pisii</i> race 1</b>				
Official protocol.	PA-R-POI-2	30	/	99.00
<b>BYMV (<i>Bean yellow mosaic virus</i>)</b>				
Official protocol.	PA-R-POI-3	30	/	89.00
<b>PEMV (<i>Pea enation mosaic virus</i>)</b>				
Official protocol.	PA-R-POI-4	30	/	89.00
<b><i>Erysiphe pisi</i></b>				
Official protocol.	PA-R-POI-5	30	/	147.00

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

### Technological quality : biochemical tests

		Size	Duration	Price
<b>Alfalfa, Pea</b>				
Tannin content (assay by spectrophotometry).	BI-B-SPEC-TAN		Contact BioGEVES	
<b>Pea</b>				
Antitrypsin factors (assay by spectrophotometry).	BI-B-SPEC-FAT		Contact BioGEVES	

## Genotyping by molecular biology

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

## Field test by SEV

		Price
DUS testing - <b>Cocksfoot, Tall fescue.</b>	SEV-DHS-DACFET	1180.00
DUS testing - <b>Brome.</b>	SEV-DHS-BRO	965.00
DUS testing - <b>Festulolium.</b>	SEV-DHS-FES	965.00
DUS testing - <b>Tall fescue.</b>	SEV-DHS-FETG	1180.00
DUS testing - <b>Field Pea.</b>	SEV-DHS-POIF	965.00
DUS testing - <b>Sainfoin.</b>	SEV-DHS-SAI	965.00
DUS testing - <b>Alfalfa.</b>	SEV-DHS-LUZ	1295.00
DUS testing - <b>Salzmann's restharrow, Fenugreek, Dwarf chickling vetch, Chickling vetch, Hybrid vetch, Narrow-leaved plantain, Field Pea, Berseem clover, Crimson clover, Balansa clover, Persian clover, Clover squarrosus, Arrow-leaf clover, Common Vetch, Hairy vetch, Hungarian vetch, Reddich turfted vetch.</b>	SEV-DHS-AUTFOU	965.00
New assessment of the value in use of a variety of turf in the catalogue : over 3 years, price per year.	SEV-RETEST-GAZ	2070.00

## PUBLICATIONS

		Price
<b>Method sheet</b>		
Vigour testing – Conductivity - <b>Pea.</b>	VIG-2-M	7.10
<b>Germination analysis technical sheet</b>		
Evaluation of <b>Cabbage</b> seedlings.	GE-T-CHOU	29.20
Evaluation of <b>Alfalfa</b> seedlings.	GE-T-LUZ	29.20
Evaluation of <b>Pea</b> seedlings.	GE-T-POI	29.20
Evaluation of <b>Radish</b> seedlings.	GE-T-RAD	29.20
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b>		
<i>Gramineae (Lolium spp., Festuca arundinacea, Festuca cf. ovina rubra, Festuca pratensis, Dactylis glomerata).</i>	AP-C-1	29.20
<i>Trifolium spp.</i>	AP-C-1B	29.20
<i>Brassica napus.</i>	AP-C-4	29.20
<i>Medicago sativa, Trifolium pratense.</i>	AP-C-7	29.20
<i>Pisum sativum, Vicia faba.</i>	AP-C-8	29.20
<i>Vicia sativa.</i>	AP-C-11	29.20
Seed blower calibration for uniform blowing ( <i>Dactylis glomerata, Poa pratensis, Poa trivialis</i> ).	AP-M-2	29.20
<b>Identification data sheet of seeds and other impurities</b>		
<i>Polygonaceae (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
<i>Lathyrus spp. (Lathyrus sylvestris, Lathyrus latifolius, Lathyrus hirsutus, Lathyrus tuberosus, Lathyrus odoratus, Lathyrus aphaca, Lathyrus pratensis, Lathyrus sativus, Lathyrus cicera).</i>	AP-A-05	29.20
<i>Asteraceae (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>Collection of seeds</b>		
Weed's identification for <b>Brassica napus</b> analysis. Contact SNES.	APCS-BRA-N	/
Seeds collection - Weed's identification for <b>Medicago sativa</b> and <b>Trifolium pratense</b> analysis. Contact SNES.	APCS-MED-S	/
Weed's identification for <b>Pisum sativum</b> and <b>Vicia faba</b> analysis. Contact SNES.	APCS-PIS-S	/

# Seed mixture species

## SEED QUALITY

### Physical quality

		Size	Duration	Price
<b>Purity analysis test and determination of the composition of a seed mixture of species</b>				
<b>Only on naked seeds</b>				
Less than 4 components WITH declared composition <sup>2</sup> .	PU-MEL-01	/	60 days	457.00
From 4 components WITH declared composition <sup>2</sup> .	PU-MEL-02		Contact SNES	
WITHOUT declared composition.	PU-MEL-03	/	60 days	750.00
<b>Preparation of pure seed for germination testing</b>				
Seed mixture (less than 4 components) WITH declared composition <sup>2</sup> .	PU-PR-19	/	/	189.00
From 4 components WITH declared composition <sup>2</sup> .	PU-PR-22		Contact SNES	
WITHOUT declared composition.	PU-PR-19-1	/	/	452.00
Preparation of pure seeds in dragees on coated seed mixture.	PU-PR-19-2	/	/	32.00

<sup>2</sup> Provide the % of species in the seed mixture.

### Physiological quality

			Price
<b>Germination test on 400 seeds</b>			
Species mixture by component. All the species of the seed mixture will be analyzed whatever is the proportion, except opposite request.	GE-FG-19-4		/
<b>Germination test on 200 seeds</b>			
Species mixture by component. All the species of the seed mixture will be analyzed whatever is the proportion, except opposite request.	GE-FG-19-2		/

See details of price and size in the chapter of the species.



## 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 - Hemp.	PU-IS-14	ISTA weight	/	40.60
Purity - Flax.	PU-IS-15	ISTA weight	/	30.00
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 - Hemp.	SP-IS-13	ISTA weight	/	70.00
Full counting - Flax.	SP-IS-14	ISTA weight	/	40.60
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>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>				
Hemp, Flax.	GE-FG-14-4	1 250	/	49.20
<b>Germination test on 200 seeds</b>				
Hemp, Flax.	GE-FG-14-2	500	/	37.00

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

		Size	Duration	Price
<b>Hemp</b>				
<b><i>Botrytis cinerea</i>, <i>Sclerotinia sclerotiorum</i></b>				
Blotter method.	PA-ES-CHA	400	23 days	120.00
<b>Flax</b>				
<b><i>Botrytis cinerea</i>, <i>Boeremia exigua</i> (<i>Phoma exigua</i>), <i>Colletotrichum linicola</i> (<i>Colletotrichum lini</i>), <i>Alternaria linicola</i>, <i>Fusarium</i> (all sections)</b>				
Agar method.	PA-ES-LIN	400	23 days	91.00
<b><i>Alternaria linicola</i>, <i>Botrytis cinerea</i>, <i>Colletotrichum linicola</i> (<i>Colletotrichum lini</i>)</b>				
Agar method (ISTA 7-007).	PA-BOT-LIN	400	23 days	90.00

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Hemp</b>				
<b><i>Phelipanche ramosa</i></b>				
Official protocol.	GE-TR-CHOR	/	/	258.00

### Genotyping by molecular biology

		Size	Duration	Price
<b>Flax</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>Flax</b>				
Fatty acid composition (Method GC).	BI-B-CPG-AG		Contact BioGEVES	
Oil content (NMR).	BI-B-RMN-H		Contact BioGEVES	

### Field test by SEV

				Price
DUS testing - <b>Flax, Linseed, Hemp.</b>		SEV-DHS-LINCHA		1080.00

## PUBLICATIONS

			Price
<b>Germination analysis technical sheet</b>			
Evaluation of <b>Hemp</b> and <b>Flax</b> seedlings.		GE-T-LIN	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>Corn, Sorghum</b> .	PU-IS-02	ISTA weight	/	23.00
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>Corn, Sorghum</b> .	SP-IS-02	ISTA weight	/	23.00
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
Supplement for moisture content test requiring pre-drying.	TE-SN-03 <b>NEW</b>	/	/	12.00
<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>				
Corn, Sorghum.	GE-FG-01-4	1 250	/	44.00
<b>Germination test on 200 seeds</b>				
Corn, Sorghum.	GE-FG-01-2	500	/	36.20
<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
Radicle emergence test on 200 seeds (ISTA test) - <b>Corn</b> .	GE-EM	/	/	66.00
<b>Corn root length evaluation after 7 days germination at 15°C (4 replicates of 20 seeds).</b>	GE-RAC	/	/	66.00

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

		Size	Duration	Price
<b>Corn</b>				
<b><i>Bipolaris zeicola</i> (<i>Helminthosporium carbonum</i>), <i>Fusarium</i> (section <i>Liseola</i> and other sections), <i>Cephalosporium</i> sp., <i>Cochliobolus heterostrophus</i> (<i>Helminthosporium maydis</i>), <i>Stenocarpella maydis</i> (<i>Diplodia maydis</i>), <i>Stenocarpella macrospora</i> (<i>Diplodia macrospora</i>), <i>Colletotrichum graminicola</i>, <i>Nigrospora</i> sp.</b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-ES-MAID	400	19 days	95.00
<b><i>Bipolaris zeicola</i> (<i>Helminthosporium carbonum</i>), <i>Fusarium</i> (section <i>Liseola</i> and other sections), <i>Cephalosporium</i> sp., <i>Cochliobolus heterostrophus</i> (<i>Helminthosporium maydis</i>), <i>Stenocarpella maydis</i> (<i>Diplodia maydis</i>), <i>Stenocarpella macrospora</i> (<i>Diplodia macrospora</i>), <i>Colletotrichum graminicola</i>, <i>Nigrospora</i> sp.</b>				
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-ES-MAI	400	19 days	91.00
<b><i>Ustilago maydis</i> and <i>Sporisorium reilianum</i> (<i>Sphacelotheca reiliana</i>)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-CH-MAIS	500	15 days	88.00

# Corn and sorghum

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

		Size	Duration	Price
<b>Corn</b>				
<i>Sclerospora</i> spp., <i>Sclerophthora</i> spp., <i>Peronosclerospora</i> spp.				
Seed wash method. UNTREATED seeds only.	PA-MI-MAIS	500	15 days	88.00
<b>Sorghum</b>				
<i>Bipolaris oryzae</i> ( <i>Helminthosporium oryzae</i> ), <i>Bipolaris cookei</i> ( <i>Helminthosporium sorghicola</i> ), <i>Fusarium</i> section <i>liseola</i> , <i>Fusarium</i> (other sections), <i>Macrophomina phaseolina</i> , <i>Helminthosporium</i> sp.				
Agar method.	PA-ES-SOR	400	19 days	91.00

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Corn - Detection of 1 pathogen</b>				
<b>Maize chlorotic mottle virus (MCMV)</b>				
ELISA on plantlets.	PA-VI-66	1 000	37 days	274.00
<b>Maize dwarf mosaic virus (MDMV)</b>				
ELISA on plantlets.	PA-VI-44	1 000	37 days	273.00
<b>Wheat high plains virus (WHPV)</b>				
ELISA on plantlets.	PA-VI-62	1 000	37 days	274.00
<b>Sugarcane mosaic virus (SCMV)</b>				
ELISA on plantlets.	PA-VI-89	1 000	37 days	274.00
<b>Wheat streak mosaic virus (WSMV)</b>				
ELISA on plantlets.	PA-VI-92	1 000	37 days	274.00
<b>Corn - Detection of 2 pathogens. Specify the 2 required viruses</b>				
<b>Maize chlorotic mottle virus (MCMV), Maize dwarf mosaic virus (MDMV), Sugarcane mosaic virus (SCMV) and Wheat streak mosaic virus (WSMV)</b>				
ELISA on plantlets.	PA-VI-59	1 000	37 days	425.00
<b>Corn - Detection of 3 pathogens. Specify the 3 required viruses</b>				
<b>Maize chlorotic mottle virus (MCMV), Maize dwarf mosaic virus (MDMV), Sugarcane mosaic virus (SCMV) and Wheat streak mosaic virus (WSMV)</b>				
ELISA on plantlets.	PA-VI-96	1 000	37 days	530.00
<b>Corn - Detection of 4 pathogens</b>				
<b>Maize chlorotic mottle virus (MCMV), Maize dwarf mosaic virus (MDMV), Sugarcane mosaic virus (SCMV) and Wheat streak mosaic virus (WSMV)</b>				
ELISA on plantlets.	PA-VI-54	1 000	37 days	750.00

## EVALUATION OF VARIETIES

### Genotyping by protein profiling

		Size	Duration	Price
<b>Corn</b>				
Varietal comparison by isoenzyme electrophoresis.	BI-G-EL-COMP-M			Contact BioGEVES
Hybrid Conformity by isoenzyme electrophoresis.	BI-G-EL-CONF-M			Contact BioGEVES
Description of a lineage for 19 loci out of 4 seedlings.	BI-G-EL-DVAR-M-19			Contact BioGEVES
Description of a lineage for 14 loci out of 4 seedlings.	BI-G-EL-DVAR-M-14			Contact BioGEVES
Identity check test of a line or a hybrid in relation to genitors declared for 14 loci out of 10 grains.	BI-G-EL-CID-M-10			Contact BioGEVES
Identity check test of a line or a hybrid in relation to genitors declared for 14 loci out of 30 grains.	BI-G-EL-CID-M-30			Contact BioGEVES
Purity control by iso-enzymatic electrophoresis - 14I.	BI-G-EL-PUR-M-14			Contact BioGEVES
Purity control by iso-enzymatic electrophoresis - 19I.	BI-G-EL-PUR-M-19			Contact BioGEVES

### Genotyping by molecular biology

		Size	Duration	Price
<b>Corn, Sorghum</b>				
Varietal identity control.	BI-G-BM-SSR-CID-1			Contact BioGEVES
Varietal purity analysis.	BI-G-BM-SSR-PUR-90			Contact BioGEVES

# Corn and sorghum

## Genotyping by molecular biology

	Size	Duration	Price
<b>Corn</b> Hybrid conformity.			Contact BioGEVES
			<b>BI-G-BM-SSR-CONF</b>

## Technological quality: biochemical tests

	Size	Duration	Price
<b>Sorghum</b> Tannin content (assay by spectrophotometry).			Contact BioGEVES
			<b>BI-B-SPEC-TAN</b>

## Detection, identification and quantification of GMOs

	Size	Duration	Price
<b>Corn</b> Detection of the adventitious presence of GMOs in raw products (seeds, grains). List of methods available on request.			Contact BioGEVES
			<b>BI-D-OGM</b>
Identification and quantification of GMO events*. List of methods available on request.			Contact BioGEVES
			<b>BI-D-OGM2</b>

## Field test by SEV

		Price
DUS testing - <b>Corn</b> .	<b>SEV-DHS-MAIS</b>	<b>1080.00</b>
DUS testing - <b>Sorghum</b> .	<b>SEV-DHS-SOR</b>	<b>1080.00</b>

## PUBLICATIONS (only in French)

		Price
<b>Germination analysis technical sheet</b> Evaluation of <b>Corn</b> seedlings.	<b>GE-FAP-ZM</b>	<b>29.20</b>
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b> <i>Zea mays</i> .	<b>AP-C-6</b>	<b>29.20</b>
<b>Identification data sheet of seeds and other impurities</b> <i>Sorghum bicolor</i> .	<b>AP-C-17</b>	<b>29.20</b>
<b>Collection of seeds</b> Seeds collection - Weed's identification for <i>Zea mays</i> analysis. Contact SNES.	<b>APCS-ZEA-M</b>	/



## 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 - Sunflower, Soybean.	PU-IS-02	ISTA weight	/	23.00
Purity - Cabbage-Turnip, Rapeseed, Rutabaga.	PU-IS-17	ISTA weight	/	34.00
<b>Purity analysis test</b>				
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>Full counting</b>				
Full counting - Soybean.	SP-IS-02	ISTA weight	/	23.00
<b>Counting of all other seeds</b>				
Full counting - Sunflower.	SP-IS-15	ISTA weight	/	63.00
Full counting - Cabbage-Turnip, Rapeseed, Rutabaga.	SP-IS-16	ISTA weight	/	106.00
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	
Searching of <i>Orobanche</i> sp. Only on UNTREATED and UNCOATED seeds. Analyse performed on a separate, sealed, submitted subsample.	SP-ORO	ISTA weight	/	66.00
Searching of <i>Striga</i> sp. Only on UNTREATED and UNCOATED seeds. 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. Only on UNTREATED and UNCOATED seeds. Analyse performed on a separate, sealed, submitted subsample.	SP-ORO-STR	ISTA weight	/	98.00
<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
Supplement for moisture content test requiring pre-drying.	TE-SN-03 NEW	/	/	12.00
<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>				
Sunflower.	GE-FG-16-4	1 250	/	46.70
Rapeseed, Mustard, Turnip Rape.	GE-FG-17-4	1 250	/	47.10
<b>Germination test on 200 seeds</b>				
Sunflower.	GE-FG-16-2	500	/	36.50
Rapeseed, Mustard, Turnip Rape.	GE-FG-17-2	500	/	36.00
<b>Vigour test</b>				
Cold Test (400 seeds) - Sunflower.	GE-CO-TO-4	1 250	/	60.00
Cold Test (200 seeds) - Sunflower.	GE-CO-TO-2	500	/	38.30
Vigour test - Early count in cold (200 seeds) - Sunflower.	GE-EM-TO	/	/	32.10
Controlled deterioration of 200 seeds including germination capacity.	GE-DET-1	500	/	78.00
Radicle emergence test on 200 seeds (ISTA test) - Rapeseed.	GE-EM	/	/	66.00
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>				

## Bacteriology - Uncoated seeds only

		Size	Duration	Price
<b>Brassicaceae (Cabbage, Cauliflower, Broccoli, Radish, Turnip) - Detection of 1 pathogen</b>				
<b><i>Xanthomonas campestris</i> pv. <i>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
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 . Grinding + agar method + pathogenicity test in case of suspect colonies (ISTA 7-019b without counting of colonies).</b>				
	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
<b>Disinfected seeds . Grinding + agar method + counting of colonies + pathogenicity test in case of suspect colonies (ISTA 7-019b).</b>				
	PA-BA-05	30 000	41 days	238.00
<b><i>Xanthomonas campestris</i> pv. <i>armoraciae</i> (<i>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. Grinding + agar method + pathogenicity test in case of suspect colonies.</b>				
	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</i> pv. <i>maculicola</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-10	30 000	41 days	180.00
<b>Disinfected seeds. Grinding + agar method + pathogenicity test in case of suspect colonies.</b>	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</i> pv. <i>campestris</i> + <i>Xanthomonas campestris</i> pv. <i>armoraciae</i> (<i>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. Grinding + agar method + pathogenicity test in case of suspect colonies (ISTA 7-019b without counting of colonies for Xcc).</b>	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</i> pv. <i>campestris</i> + <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).	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
<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> (<i>raphani</i>) + <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>Sunflower</b>				
<b><i>Pseudomonas syringae</i> pv. <i>helianthi</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-87	5 000	31 days	240.00
<b><i>Xanthomonas arboricola</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-100	5 000	41 days	240.00
<b><i>Pseudomonas cichorii</i></b>				
Agar method + pathogenicity test in case of suspect colonies.	PA-BA-122	5 000	36 days	245.00

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

		Size	Duration	Price
<b>Brassicaceae (Cabbage, Rape, Turnip, Radish, Rocket)</b>				
<b>Leptosphaeria maculans and/or Plenodomus biglobosus (Phoma lingam), Alternaria brassicae, Alternaria brassicicola, Alternaria japonica, Sclerotinia sclerotiorum, Botrytis cinerea, Phoma sp.</b>				
Agar method (derivated from ISTA method 7-004).	PA-ES-CHO	400	19 days	91.00
<b>Leptosphaeria maculans and/or Plenodomus biglobosus (Phoma lingam)</b>				
Agar method (ISTA 7-004).	PA-PH-CHO	1 000	25 days	226.00
<b>Albugo candida</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-ALB-CHO	500	15 days	88.00
<b>Hyaloperonospora parasitica (downy mildew)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-MI-CHO	500	15 days	88.00
Grow-out method (viability testing).	PA-MICHOGO	400	42 days	111.00
<b>Plasmidiophora brassicae</b>				
Grow-out method.	PA-MICHOPL	100	75 days	225.00
<b>Carnation</b>				
<b>Alternaria papavericola (Helminthosporium papaveris), Fusarium (all sections), Botrytis sp., Alternaria sp.</b>				
Agar method.	PA-ES-OEI	400	19 days	91.00
<b>Sunflower</b>				
<b>Botrytis cinerea, Sclerotinia sclerotiorum, Alternariaster helianthi (Alternaria helianthi)</b>				
Blotter method derivated from ISTA method 7-003.	PA-ES-TOU	400	23 days	117.00
<b>Botrytis cinerea</b>				
Blotter method (ISTA 7-003).	PA-BOT-TOU	400	23 days	120.00
<b>Phomopsis helianthi (Diaporthe helianthi), Botrytis cinerea, Sclerotinia sclerotiorum, Alternariaster helianthi (Alternaria helianthi)</b>				
Agar method with superficial disinfection. <b>UNTREATED seeds only.</b>	PA-PHOTOUD	400	23 days	95.00
Agar method without superficial disinfection. <b>Treated seeds only.</b>	PA-PHO-TOU	400	23 days	90.00
<b>Puccinia helianthi (rust)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-RO-TOU	500	15 days	88.00
<b>Septoria helianthi (leaf spot)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-SEP-TOU	500	15 days	88.00
<b>Pustula tragopogonis (Albugo tragopogonis) (white rust)</b>				
Seed wash method. <b>UNTREATED seeds only.</b>	PA-ALB-TOU	500	15 days	88.00

## Virology - Uncoated seeds only

		Size	Duration	Price
<b>Sunflower</b>				
<b>Cucumber mosaic virus (CMV)</b>				
ELISA.	PA-VI-56	2 000	16 days	210.00
<b>Tobacco streak virus (TSV)</b>				
ELISA.	PA-VI-61	1 000	16 days	258.00

## EVALUATION OF VARIETIES

### Varietal resistance

		Size	Duration	Price
<b>Rapeseed</b>				
<b>Plasmidiophora brassicae pathotypes P1+ / P1- / P2+ / P2- / P3- or P5-</b>				
Official protocol.	PA-R-COLZA	45	/	243.00
<b>Identification of Plasmidiophora brassicae pathotype</b>				
From galls, per sample.	PA-RIDPLA1	/	/	406.00
From soil, per sample.	PA-RIDPLA3	/	/	609.00

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

## Varietal resistance

### Sunflower

#### **Plasmopara halstedii races 100 / 304 / 307 / 314 / 334 / 703 / 704 / 710 / 714 or 774**

Official protocol on 30 plants (hybrids).

For all requests for 9 races during the CTPS test period (April-May) or any request for 9 races outside CTPS test periods but on a minimum of 20 varieties, a 20% discount will be carried out.

PA-R-TOURN1 45 / 87.00

#### **Plasmopara halstedii race 714-PI8**

Official protocol on 30 plants (hybrids).

For all requests for 9 races during the CTPS test period (April-May) or any request for 9 races outside CTPS test periods but on a minimum of 20 varieties, a 20% discount will be carried out.

PA-R-TOURN3 NEW 45 / 87.00

#### **Plasmopara halstedii races 100 / 304 / 307 / 314 / 334 / 703 / 704 / 710 / 714 or 774**

Official protocol on 60 plants (lines).

PA-R-TOURN2 45 / 150.00

#### **Plasmopara halstedii race 714-PI8**

Official protocol on 60 plants (lines).

PA-R-TOURN4 NEW 45 / 150.00

#### **Plasmopara halstedii**

Identification of the race.

PA-ID-PLA / / 283.00

Resistance to mephenoxam, by isolate.

PA-RIDPLA2 / / 88.00

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

## Genotyping by protein profiling

### Rapeseed

Varietal comparison by isoenzyme electrophoresis.

BI-G-EL-COMP-C Contact BioGEVES

Hybrid conformity by Isoenzyme electrophoresis.

BI-G-EL-CONF-C Contact BioGEVES

Description of a variety for 6 loci out of 10 seedlings.

BI-G-EL-DVAR-C Contact BioGEVES

Purity test of a batch for 6 loci out of 100 seedlings.

BI-G-EL-PUR-C-100P Contact BioGEVES

## Genotyping by molecular biology

### Rapeseed, Sunflower

Varietal purity analysis.

BI-G-BM-SSR-PUR-90 Contact BioGEVES

Varietal identity control.

BI-G-BM-SSR-CID-1 Contact BioGEVES

### Rapeseed

Hybrid conformity.

BI-G-BM-SSR-CONF Contact BioGEVES

## Technological quality : biochemical tests

### Rapeseed

Glucosinolate content on whole plants or parts of plants (HPLC).

BI-B-HPLC-GLU-2 Contact BioGEVES

### Rapeseed, Sunflower

Oil content (NMR).

BI-B-RMN-H Contact BioGEVES

### Camelina, Rapeseed, Sunflower

Fatty acid composition (CPG method).

BI-B-CPG-AG Contact BioGEVES

### Camelina, Rapeseed, White and brown Mustard

Glucosinolate content (HPLC method).

BI-B-HPLC-GLU-1 Contact BioGEVES

Glucosinolate content (NIRS).

BI-B-NIRS-GLU NEW Contact BioGEVES

Protein content (NIRS).

BI-B-NIRS-P NEW Contact BioGEVES

Oil content (NIRS).

BI-B-NIRS-H NEW Contact BioGEVES

## Detection, identification and quatification of GMOs

### Rapeseed

Detection of the adventitious presence of GMOs in raw products (seeds, grains). List of methods available on request.

BI-D-OGM1 Contact BioGEVES

## Detection, identification and quantification of GMOs

	Size	Duration	Price
<b>Rapeseed</b>			
Identification and quantification of GMO events. List of methods available on request.	BI-D-OGM3		Contact BioGEVES

## Field test by SEV

		Price
DUS testing - <b>Rapeseed</b> .	SEV-DHS-COL	1295.00
DUS testing - <b>Sunflower</b> .	SEV-DHS-TOU	1080.00
Checking the pollen beetles trap characteristic - <b>Rapeseed</b> . Contact patrick.bagot@geves.fr	SEV-COL-MEL <b>NEW</b>	/

## PUBLICATIONS (only in French)

		Price
<b>Method sheet</b>		
Vigour testing – <b>Rapeseed</b> .	VIG-1-M	7.10
Vigour testing – Conductivity - <b>Pea</b> .	VIG-2-M	7.10
Germination method of <b>Rapeseed</b> .	GE-M-COL	7.10
<b>Germination analysis technical sheet</b>		
Evaluation of <b>Sunflower</b> seedlings.	GE-T-TOU	27.90
Evaluation of <b>Rapeseed</b> seedlings.	GE-FAP-BN	29.20
<b>Technical sheet for analysis of specific purity and counting of all other seeds</b>		
<i>Helianthus annuus</i> .	AP-C-2	29.20
<i>Glycine max</i> .	AP-C-3	29.20
<i>Brassica napus</i> .	AP-C-4	29.20
<b>Identification data sheet of seeds and other impurities</b>		
<i>Chenopodium sp.</i> , <i>Atriplex sp.</i> , <i>Amaranthus sp.</i> , <i>Reseda sp.</i> , <i>Myosotis sp.</i>	AP-A-04	29.20
<i>Claviceps purpurea</i> - <i>Sclerotinia sclerotiorum</i> .	AP-P-2	29.20
<b>Collection of seeds</b>		
Weed's identification for <b>Brassica napus</b> analysis. Contact SNES.	APCS-BRA-N	/
Weed's identification for <b>Helianthus annuus</b> analysis. Contact SNES.	APCS-HEL-A	/



# Micro-cleaning

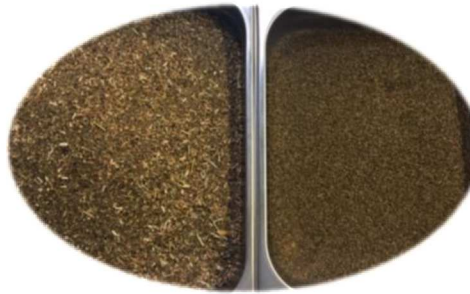
Micro-cleaning of seed lots consists in determining the percentage of waste in raw seed lots, from a harvest, using sorting machines, laboratory replicates of industrial machines.

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)

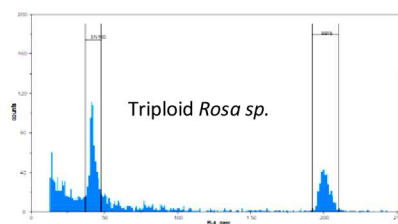
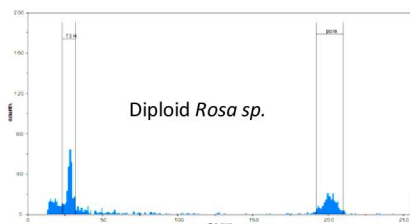
## Evaluation of ploidy level from plants or seeds.

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.

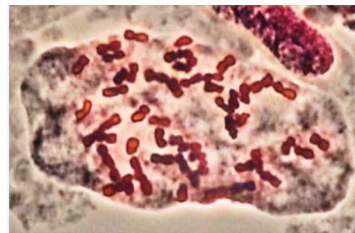


### MICROSCOPY

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

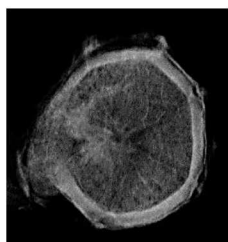
## Tools for evaluating seed quality.

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

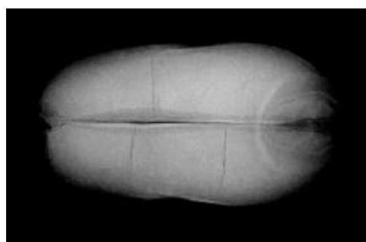
Radiography allows the internal morphology of seeds to be visualised. The objective is to understand or predict problems of physical or germinative quality. This tool also allows the phenotyping of precise characters of interest according to the demand.

### 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

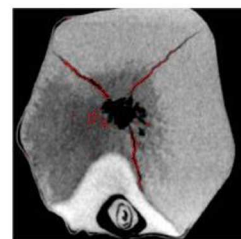
3D radiography (tomography) is a technology whose method consists of generating a 3D image of the internal structure of an object. This tool applied to seeds allows the measurement of different characteristics and very precise quantitative data to be obtained. The possible applications are diverse: characterisation 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	NEW	160.00
Specific preparation of 5 g of galls of <i>Plasmodiophora brassicae</i> (for inoculation of 50 to 100 plantlets).	PA-AD-PLAD	NEW	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	NEW	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>	
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>	Fabienne BRUN
Organisation of inter-laboratory comparisons tests on request.	<b>Quotation</b>	eil.semences@geves.fr
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

	Price	Contact
<b>To apply for training</b>		
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
<b>For the setting up of an expertise in an international context</b>		
Technical expertise and visit.	/	kaat.hellyn@geves.fr
<b>Collective reading of results</b>		
Collective reading of germination results, details of abnormal and debriefing of the results reading. Fee per sample.	<b>GE-LECT 90.00 €</b>	<b>NEW</b> service.clients@geves.fr

# 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)



**GEVES**  
Expertise & Performance

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 Beaucozéd 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 Beaucozéd 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***

