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## **How to complete ISTA Certificates**

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#### SCOPE

This document provides explanatory notes on how to complete the ISTA Orange International Seed Lot Certificate (OIC) and ISTA Blue International Seed Sample Certificate (BIC).

#### **RELATED DOCUMENTS**

International Rules for Seed Testing current edition

Training tool on completing Certificates <a href="https://learn-ista.org/">https://learn-ista.org/</a>

### **ABBREVIATIONS**

RUL Chair: Chair of the ISTA Rules Committee

RUL Vice-Chair: Vice-Chair of the ISTA Rules Committee HoAT: Head of the Accreditation and Technical Department

ISTA Rules: International Rules for Seed Testing OIC: ISTA Orange International Seed Lot Certificate BIC: ISTA Blue International Seed Sample Certificate BSC: Bulking and Sampling Technical Committee

### **DISCLAIMER**

THIS EXPLANATORY NOTE CANNOT COVER ALL POSSIBLE TESTS AND POSSIBLE OUTCOMES OF TEST RESULTS. THEREFORE, ONLY SOME OF THE POSSIBLE TEST RESULTS ARE MENTIONED. DUE TO THE ANNUAL CHANGES OF THE ISTA RULES, THIS DOCUMENT MAKES NO CLAIM TO BE COMPLETE OR CURRENT AND IS BASED ON THE ISTA RULES EDITION AT THE TIME OF DOCUMENT REVISION (I.E. RULES EDITION 2024. THE REQUIREMENTS AS STATED IN THE CURRENT ISTA RULES ARE THE ONLY VALID ONES AND MUST BE FOLLOWED WHEN ISSUING ISTA CERTIFICATES. USERS OF THIS EXPLANATORY NOTE MUST CONSULT THE CURRENT EDITION OF THE ISTA RULES TO ENSURE COMPLIANCE WITH THE ISTA RULES.

#### INTRODUCTION

This explanatory note aims to cover the major possible data entries on ISTA Orange International Seed Lot Certificates (OIC) and ISTA Blue International Seed Sample Certificates (BIC). The numbering used in this note relates to the numbering on the examples provided as annexes (Annex 1 and Annex 2) attached to this document and acts as a cross reference to the relevant sections of the ISTA Rules.

## **GENERAL**

## **BLANK CERTIFICATES**

Blank OICs and BICs and the eCertificates can only be ordered from the ISTA Secretariat by ISTA accredited member laboratories. These laboratories are ISTA member laboratories that have been accredited and authorised to issue ISTA Certificates by ISTA's Executive Committee. To report results of tests that are in the ISTA Rules the laboratory must be accredited for those tests, either directly or through subcontracting to another ISTA laboratory accredited for those tests (ISTA Rules 1.3.e). Only results of tests within the scope of a laboratory's accreditation, performed on species within their scope may be reported. Reporting on both the OIC and BIC is limited to species included in Table 2C. Consequently, no certificates may be issued for species not listed in the ISTA Rules Table 2C of the current ISTA Rules, except in the case of Seed Mixtures, where for the species tested it is shown as 'Seed Mixture'. The tests must be carried out in accordance with the ISTA Rules. However, additionally and on request, results of tests not covered by the ISTA Rules may be reported on an ISTA Certificate (ISTA Rules 1.5.2.22). The Rules section 1.3.c provides explanation under which circumstances the reporting of results of tests not covered by the ISTA Rules is permitted. The pre-printed declaration on the back of the Certificate must not be altered.

Valid from: 10 02 2024 Version 7.0 Page 2 of 20

#### **COMPLETING THE CERTIFICATES**

ISTA paper Certificates must be completed using a typewriter or machine-printer and can be completed in any language. No certificate may be issued that shows signs of amendment, alteration, or erasure. ISTA eCertificates may be completed in any language. Blank ISTA eCertificates must not be digitally stored. No Certificate can be issued that shows signs of amendment, alteration, or erasure (ISTA Rules 1.4.1). The certificate cannot be handwritten, with the exception of the signature in the case of ISTA paper Certificates. The 'Stamp of Laboratory' and the 'Status of Certificate' (e.g. "ORIGINAL", "DUPLICATE" or "PROVISIONAL") may be stamped instead of typed or printed. ISTA certificates are usually used for international trade and therefore would normally be completed in English, although most entries on the certificate are numbers in the set spaces/boxes on the certificate or species names as scientific names. The Certificate can also be completed in the native language of the laboratory but needs to fulfil customer requirements.

When the Certificates are written in English a "dot" must be used as the decimals separator and not a comma. A comma may be used in other languages such as French or Spanish.

### **BIC ONLY**

The maximum seed lot weight does not apply to a BIC as the ISTA laboratory is only responsible for the testing and not the sampling (ISTA Rules 1.2.2, 1.4.3) but the minimum submitted sample weight and working sample weights do apply (ISTA Rules Table 2C).

Test results of some tests described in the ISTA Rules can only be reported on a BIC, for example results of tests on Seed Mixtures (ISTA Rules 1.5.2.20) and results of other seed determination when testing for the presence of *Aeginetia, Alectra, Orobanche, Phelipanche and Striga* species upon request of the applicant (ISTA Rules 1.5.2.4). In these cases, issuance of an OIC is not permitted.

#### **CERTIFICATE VALIDITY AND EXPIRY**

There is no explicit period of validity for a Certificate. An original ISTA Certificate for a test or combination of tests is valid until it is superseded by another valid original ISTA Certificate subsequently issued on the same seed lot for the same tests (ISTA Rules 1.6).

Not more than one original Certificate with the mark "ORIGINAL" is valid for a seed lot at one time for any particular test. The only exception to this is when issuing "Sublot" certificates. Even then, there is only one original certificate per sublot. The same test results are issued for each sublot (Rules 1.3.i).

A new original Orange International Seed Lot Certificate may be issued to supersede a previous certificate for the same seed lot or sublot under the same reference (i.e. seed lot seal and identification) and the same particular test(s), provided that a new submitted sample from that lot or sublot is taken and tested. The new certificate is only valid for the particular lot or sublot that was re-sampled. If a sublot is re-sampled it becomes a new seed lot and must be given a new seed lot identification mark.

A new original Blue International Seed Sample Certificate may be issued to supersede a previous certificate for the same sample and the same particular test(s), provided that the same sample is re-tested. If a new sample is submitted and tested, it must be regarded as independent from the previous sample, and the results on the previous certificate are not superseded. Previously issued paper certificates do not need to be returned to the issuing laboratory.

## **CERTIFICATE REISSUE**

If an original, duplicate or provisional certificate is lost, a replacement certificate can be issued. In this case, the date entered on the certificate is the same as on the lost certificate (ISTA Rules 1.6).

Another option for lost "ORIGINAL" certificates is for the laboratory to only re-issue replacement certificates as "DUPLICATE" certificates as the number of duplicates to be issued is not limited. A duplicate certificate is an exact printed copy (not a photocopy) of a completed ISTA Certificate except it must be marked "DUPLICATE" in the section 'Status of Certificate' (ISTA Rules 1.2.4 and 1.4.1.f).

A duplicate paper certificate is an exact printed copy, not a photocopy, of a completed original ISTA Certificate, marked DUPLICATE. ISTA eCertificates may be viewed with appropriate access credentials. Therefore, there are no duplicate certificates with eCertificates, only originals (ISTA Rules 1.2.4).

If an original certificate is re-issued because of new or amended test results, it must carry a statement indicating that the new results replace previous results, and referring to the Reg. No. of the superseded certificate (i.e. the unique number printed on the "ORIGINAL" OIC issued). In this case, the date entered on the certificate is the new date of issuing.

Previously issued certificates do not need to be returned to the issuing laboratory.

#### **PROVISIONAL CERTIFICATES**

A provisional certificate is an ISTA Certificate issued before the completion of a test or several tests. It is marked "PROVISIONAL" (ISTA Rules 1.2.5 and 1.4.1.f). As many certificates as required by the applicant marked "PROVISIONAL" can be issued, a certificate must NOT be marked "PROVISIONAL-ORIGINAL" "PROVISIONAL-DUPLICATE".

## DETAILS ON HOW TO COMPLETE AN ISTA ORANGE INTERNATIONAL SEED LOT CERTIFICATE (OIC)

## 1. OIC (see Annex 1)

An OIC is issued when both sampling from the seed lot and testing of the sample are carried out under the responsibility of one ISTA accredited laboratory, or when sampling from the seed lot and testing of the sample are carried out under the authority of different ISTA accredited laboratories. This process of one sampling action made on one seed lot, with test results issued on one OIC to accompany the whole seed lot (or sublots) provides the unique quality control that is the foundation of the ISTA system. The certificate is coloured orange (ISTA Rules 1.2.1).

Where the accredited laboratory carrying out the sampling is different to the one carrying out the testing, this must be stated. The laboratory/Sampling entity which carries out sampling must provide all the information that is necessary to complete the OIC (ISTA Rules 1.3.j). Further requirements as stated in ISTA Rules 1.3.j apply.

Issuance of an OIC is not permitted for the following tests: results of tests on Seed Mixtures (ISTA Rules 1.5.2.20) and the other seed determination when testing for the presence of Aeginetia, Alectra, Orobanche, Phelipanche and Striga species (ISTA Rules 1.5.2.4). This is because currently in the ISTA rules there is no approved sampling method for 'Seed Mixtures' or Aeginetia, Alectra, Orobanche, Phelipanche and Striga species.

## 2. Laboratory stamp

Stamp (seal) of issuing laboratory (ISTA Rules 1.4.2.a and 1.4.3.a)

#### 3. Name of applicant

The name and address of the applicant must be stated. Upon request of the applicant this information can be omitted (ISTA Rules 1.4.1.d).

## 4. Species, cultivar, category, weight of lot etc.

The information entered in this section is provided by the applicant. The laboratory has no responsibility for the correctness of these data and must quote them as stated by the applicant. Other information stated by the applicant, such as country of origin, species, cultivar, weight of lot, certification category, treated seed statement, seed treatment details and applicant's lot reference must also be entered as stated by the applicant (ISTA Rules 1.4.1.d). Additional information provided by the applicant that cannot fit into this section can be stated in section 32, on the reverse side of the certificate.

## 5. Testing and issuing laboratory

- Name
- Address

Valid from: 10 02 2024 Version 7.0 Page 4 of 20 ISTA member code

of the issuing laboratory as it is registered with ISTA and given on the ISTA website (ISTA Rules 1.4.2.a).

## 6. Sampling by

- Name
- ISTA member code

of the laboratory/sampling entity responsible for sampling as it is registered with ISTA and given on the ISTA website (Rules 1.4.2.b).

When the seed lot is located in a different country to the sampling laboratory/ sampling entity, the country where the seed lot has been sampled must be reported either under 'Sampling by' or under 'Additional observations' (ISTA Rules 1.3.j).

#### 7. Marks of lot

Refers to the seed lot identification e.g. the seed lot number (ISTA Rules 1.4.2.c)

The 'Marks of lot', or seed lot identification may take the form of a sequential series of characters or a single reference character. Every container within the lot or sublot must be identified in such a way that the containers of the lot or sublot can be readily recognised by the information provided on the Certificate issued (ISTA Rules 1.3.j).

#### 8. Seal of lot

It is at the laboratory's discretion what to report under 'Seal of lot' and can be a description of the physical seal of the containers or under whose authority the seed lot is sealed. Some examples are: "Stitched label", "Metal seal", "Under the authority of the Ministry of Agriculture of.....", "Under the authority of ISTA Laboratory code.....".

## 9. Status of Certificate

"ORIGINAL", "DUPLICATE", "PROVISIONAL" as applicable (ISTA Rules 1.2.3, 1.2.4, 1.2.5 and 1.4.1.f)

## 10. Number of containers

Number of containers the seed lot is packed in at the time of sampling or N/A for not applicable if the seed lot is being kept as a 'bulk' (ISTA Rules 1.4.2.e). The seed lot must be sealed when sampled but can be as a "bulk" and repacked into smaller bags later. For issuance of an OIC the repacking must be supervised by or be under the control of an ISTA sampler (ISTA Rules 2.5.4.4.c), otherwise the lot must be resampled after repacking in order to issue an OIC.

## 11. Date of sampling

Date of sampling in the format yyyy-mm-dd (ISTA Rules 1.4.1.b).

Note: this date format must be followed in all places where a date is used on an ISTA Certificate.

#### 12. Date sample received

Date when the sample was received by the testing laboratory (format yyyy-mm-dd)

## 13. Date test concluded

Date of the completion of the last test reported on the Certificate (format yyyy-mm-dd)

Valid from: 10.02.2024 Version 7.0 Page **5** of **20** 

#### 14. Test number

Unique test or sample number assigned by the testing laboratory; the number must be unique and traceable throughout the testing process.

## 15. Species

The laboratory must verify the species under analysis; (ISTA Rules 1.5.2.2). The scientific species name has to be stated in accordance with the Table 2C of the ISTA Rules with the exception that the Authority name is not mandatory e.g. "Triticum aestivum subsp. aestivum" would be reported and not "Triticum aestivum L. subsp. aestivum". If the species cannot be determined with certainty on the basis of seed characteristics, only the genus name must be reported e.g. "Malus sp." and "Brassica sp." (Rules 1.4.1.c). The species name stated in this field is the one that the testing laboratory confirms during the analysis. No variety name is reported here.

In the case of seed mixture, for the species tested "Seed mixture" must be entered.

If the seeds tested are coated, the species name must be followed by a description for the kind of coated seeds (ISTA Rules 11.3.7), e.g. the words "seed pellets", "encrusted seed", "seed granules", "seed tapes" or "seed mats" as applicable.

## 16, 17 and 18. Purity

The scientific name of the species of pure seed, in accordance with Table 2C (e.g. Triticum aestivum subsp. aestivum). Where it is impossible to determine the species with certainty on the basis of seed characteristics, reporting must be done to the most precise taxon possible.

The procedure for indistinguishable specie as described at 3.5.2.4 are used at the discretion of the laboratory when the taxon is considered indistinguishable by the laboratory.

The percentage by weight of pure seed, inert matter and other seeds must be reported to one decimal place. The percentage of all components must sum up to 100.0%. Components amounting to less than 0.05% must be reported as "Trace" or "TR" (for "Trace"). If no inert matter or other seeds are found, this must be reported as "0.0" (ISTA Rules 1.5.2.2 and 3.7)-

The scientific name of every species of other seeds found must be listed, in accordance, where applicable, with the current ISTA List of Stabilised Plants Names (e.g. Elymus repens), available at Stabilised Plant Names -International Seed Testing Association. It is not a requirement to use the Authority names when reporting.

If no determination has been made the entry in the boxes must be "N" for "not tested" or "NA" for "not applicable".

Individual impurities with an undue effect on the purity results must be calculated and reported (ISTA Rules 3.5.2.7 and 3.6.5).

For weighed replicates: the result of the purity test (if requested) must be reported in the spaces provided for purity tests (ISTA Rules 13.7).

In case of coated seeds: in the case of pelleted seeds only, the percentages of pure pelleted seeds, inert matter, and unpelleted seeds must be reported in the spaces provided for 'Pure seeds', 'Inert matter', and 'Other seeds', respectively (ISTA Rules 11.3.7).

## 19. Number of days

The actual duration of the test must be reported in days, excluding the period of special treatment or method used for promoting germination (ISTA Rules 5.9).

If no determination has been made the entry in the boxes must be "N" for "not tested" or "NA" for "not applicable" (ISTA Rules 1.5.2).

Valid from: 10 02 2024 Version 7.0 Page 6 of 20

#### 20, 21, 22, 23 and 24. Germination % Number

The percentages, calculated to the nearest whole number (see ISTA Rules 5.8.2) must be reported for normal seedlings, hard seeds, fresh seeds, abnormal seedlings and dead seeds. The entries must add up to 100% (ISTA Rules 5.9).

Note: for help with the germination rounding procedure see the Germination Technical Committee Toolbox "Rounding programme" at Germination Toolbox - International Seed Testing Association.

If the result for any of these categories is found to be zero, it must be reported as "0" or "-0-" (ISTA Rules 5.9).

If no determination has been made the entry in the boxes must be "N" for "not tested" or "NA" for "not applicable" (ISTA Rules 1.5.2).

If an applicant requests that the test be terminated when the sample reaches a predetermined germination percentage, before the final count, then only the percentage of normal seedlings is reported. The results of the other categories (abnormal seedlings, hard seeds, fresh seeds and dead seeds) must be reported as "N", because they have not been determined.

For weighed replicates: An "N" must be reported in all the spaces provided for reporting the percentages of the components of the germination tests (ISTA Rules 13.7).

#### 25. Moisture content

Results can only be reported if the sample was submitted in an intact, moisture-proof container from which as much air as possible has been excluded (ISTA Rules 1.3.d, 9.2.5.1).

The result of a moisture content test must be reported in the space provided to the nearest 0.1% (ISTA Rules 9.2.7 and 9.3.2.7).

If no determination has been made the entry in the boxes must be "N" for "not tested" or "NA" for "not applicable" (ISTA Rules 1.5.2).

Note: "N" must not be used for components of a test such as hard or fresh seeds.

If the species being tested is not listed in Table 9A but is listed in Table 2C, the result must be reported according to 1.5.2.22. 'NA' for 'not applicable' must be entered in the moisture test result space on the ISTA Certificate.

## 26. Kind of inert matter

The kind of inert matter from the purity analysis must be reported (ISTA Rules 3.7).

## 27. Other seeds

The scientific name (excluding, or not, the Authority details - see point 15) of every species of other seeds found (as part of the purity analysis), in accordance with the Table 2C of the ISTA Rules and in accordance, where applicable, with the current ISTA List of Stabilised Plant Names (e.g. Elymus repens), available at Stabilised Plant Names - International Seed Testing Association (see ISTA Rules 3.7), e.g. Triticum aestivum subsp. aestivum. Where it is impossible to determine the species with certainty, reporting must be done to the most precise taxon possible.

### 28. Other determinations

Results of tests which do not have specific spaces provided, are reported under "Other determinations" (e.g. test results of Other seed determination, Viability, Vigour, Seed Health, etc.).

In the case of issuing a provisional Certificate (marked "PROVISIONAL"), a statement must be included under 'Other determinations' that a final certificate will be issued upon completion (ISTA Rules 1.2.5).

If results of tests not covered by the ISTA Rules are reported, then the test method must be reported and followed by: "This method is not covered by the International Rules for Seed Testing." (ISTA Rules 1.5.2.22).

Note: results of analysis not covered by the current ISTA Rules can only be included on an ISTA Certificate if the same Certificate includes at least one test result for a test covered by the ISTA Rules (ISTA Rules 1.3.c).

Valid from: 10 02 2024 Version 7.0 Page 7 of 20 In addition to results of tests carried out, it is permissible, at the issuing laboratory's own risk, to make a statement that the seed lot tested meets particular legislative standards, country specific certification standards, or contract specifications.

Note: ISTA takes no responsibility for such statements (ISTA Rules 1.5.4).

#### Other determinations

A. For Purity (ISTA Rules 3.7 and 1.5.2.2) the following must be reported under "Other determinations":

- When the weight of the working sample tested for purity equals or is no more than 10% higher than the weight specified in Table 2C, column 4 (Purity analysis), no statement regarding the weight of the working sample is required on the ISTA Certificate.
- When the weight of the working sample tested for purity deviates from that specified in Table 2C, column 4, the actual weight of the working sample weighed according to ISTA Rules 3.5.1 must be reported on the ISTA Certificate using one of the following, as applicable:
  - When testing a weight that exceeds by 10% the weight specified in Table 2C, column 4, report under Other determinations as: 'Purity: ......g'
  - When testing a weight estimated to contain 2500 seed units, report under Other determinations as: 'Purity: ......g (approx. 2500 seeds)'
  - When the submitted sample received for purity testing weighs less than the weight in Table 2C, column 4, report under "Other determinations" and use the current statement, according to ISTA Rules 2.5.4.5: "The submitted sample weighed only ... g and is not in accordance with the *International Rules for Seed Testing*."
- The percentage of winged seed (as defined in Pure Seed Definitions 47 and 51), if winged seeds are found.

**Upon request for Purity** the following information can be reported to one decimal place in the spaces provided for the "kind of inert matter" and "other seeds" must be reported under "Other determinations":

- The percentage by weight of a specified species, entered immediately after the name of the species to the nearest 0.1%. Species for which the percentage by weight has been requested are listed first.
- Other seeds may be divided into 'other crop seeds' and 'weed seeds'. In this case, the words 'Other crop seeds' must be entered, followed by the percentage by weight of other crop seeds and the name(s) of the species found. This procedure must also be used for 'Weed seeds'.
- Multiple seed units must be reported as '% MSU'.
- Seeds with appendages attached must be reported as '% seeds with appendages attached'.
- The kinds of inert matter, together with the percentage by weight of any particular kind (to one decimal place).
- o The percentage by weight of broken pure seeds
- o The percentages may be reported to more than one decimal place if requested.
- B. For coated seeds the following must be reported under "Other determinations":
  - o The name and number of the seeds of each species found in the examination of the 100 seeds removed from the pellets or tapes must be reported under 'Other determinations' (ISTA Rules 1.5.2.3, 11.3.7).

## Upon request for coated seeds (ISTA Rules 11.3.7):

 Purity test on depelleted seeds. The component parts (pure seed, other seeds and inert matter) may be reported as percentages of their total weight, ignoring the pelleting material. The percentage of pelleting

Valid from: 10.02.2024 Version 7.0 Page **8** of **20** 

- material must be reported separately only on request. The result of this test is to be reported: 'weight of ... material excluded'.
- Purity of seeds removed from tapes. The component parts (pure seed, other seeds, and inert matter) may be reported as percentages of their total weight, ignoring the tape material. The result of this test is to be reported: 'weight of ... material excluded'.

## **C. For determination of other seeds by number** (ISTA Rules 4.7 and 1.5.2.4) the following must be reported under "Other determinations":

- The actual weight of seed examined to the number of decimal places indicated in the ISTA Rules (ISTA Rules 4.7).
- The scientific name in accordance, where applicable, with the current ISTA List of Stabilised Plant Names (e.g. Elymus repens) available at <u>Stabilised Plant Names International Seed Testing Association</u>, and number of seeds of all the other species found in this weight. If no other seeds are found, this must be indicated on the certificate. It is not a requirement to use the Authority names when reporting.
- Where it is impossible to determine with certainty on the basis of seed characteristics, reporting must be done to the most precise taxon possible.
- o If the full weight prescribed in Table 2C was examined for all other species present, then the words 'Complete test' must be entered, alongside the weight of seed examined.
- If the examination was for only a limited range of other species, then the words 'Limited test' must be entered.
- If the weight examined for all other species was less than the prescribed weight, then the words 'Reduced test' must be entered.
- o If the weight examined was less than the weight prescribed in Table 2C, and only a limited range of other species was examined, then the words 'Reduced-limited test' must be entered.
- If a sample of at least 25 000 seeds was examined, and this sample was below the weight prescribed in Table 2C, then the weight of seed examined and the statement 'Test based on at least 25 000 seeds' must be entered.

**Upon request**, the results may in addition be expressed in some other way, such as 'weight of seeds found' or 'number of seeds per kilogram'.

## D. For coated seeds (ISTA Rules 11.4.7) the following must be reported under "Other determinations":

 The actual weight (or length of tape, or area of mat) and approximate number of pelleted seeds examined must be entered, together with the scientific name and number of seeds of each species sought and found in this weight, length, or area.

**Upon request**, the result may in addition be expressed in some other way, such as number of seeds per kilogram, per metre or per square metre.

The sample weight examined must be reported according to the minimum number of decimals indicated in the ISTA Rules (ISTA Rules 4.7).

# <u>E. For Germination</u> (ISTA Rules 5.9 and 1.5.2.6) the following must be reported under "Other determinations": **As additional information** (ISTA Rules 5.9):

- o the number of seeds tested, if fewer than 400 seeds;
- the germination method using the abbreviations used in Table 5A, including at least substrate and temperature;
- o any special treatment or method used for promoting germination (ISTA Rules 5.6.3);
- the duration in days of any special treatment or method used for promoting germination, except in the case of prestorage;

- the method for evaluating fresh seeds (dissection, tetrazolium or excised embryo see paragraph 5.6.5.3.) when 5% or more of fresh seeds are believed to be present, e.g. "Fresh seeds confirmed by cutting" or "Fresh seeds confirmed by a tetrazolium test".
  - If an applicant requests that the germination test is terminated when the sample reaches a predetermined germination percentage, the following statement must be written: 'Upon request of the applicant, the germination test was terminated after ... days. The prescribed test period is ... days.'
  - When double tests are prescribed in Table 5A Part 2, the result of the first test, with treatment for breaking dormancy, is reported in the appropriate space on the ISTA Certificate, and the result of the second test, without treatment for breaking dormancy, is reported under 'Other determinations'.

Upon request for Germination the following must be reported under "Other determinations":

- The results of parallel or any additional test;
  - o the viability of ungerminated seeds and method used to determine it;
  - the categories of ungerminated seeds (as listed in the Rule 5.6.5.3) and the method used to determine them;
- o In the case of multigerm seed units: the number of normal seedlings produced by 100 units, the number of units which have produced one, two or more than two normal seedlings, or the proportion of units producing one, two or more than two normal seedlings. The proportion is expressed as a percentage of the total number of units which have produced at least one normal seedling.
- The germination percentage obtained within the prescribed time, if the germination period was extended beyond the period indicated in Table 5A. The statement must be entered as follows: "After the prescribed period of ... days, there were ... % normal seedlings."
- The results of other tests made when retesting is necessary

**F. For germination using weighed replicates** (ISTA Rules 13.7) the following additional information must be reported under "Other determinations":

- o number of normal seedlings in the total weight of seed tested;
- o average weight of four replicates;
- average number of normal seedlings in four replicates;
- number of normal seedlings per kilogram; and
- other information as specified in 1.5.2.6 Germination.

For germination using weighed replicates and only upon request (ISTA Rules 13.7) the following information must be reported under "Other determinations":

Other seeds found to be present in the weighed replicates may be reported, giving the scientific name(s) and number(s) of seeds found.

**In certain circumstances** (ISTA Rules 5.6.1 and 2.5.4.5) the following information must be reported under "Other determinations":

It may be necessary to test fewer than 400 seeds. In such cases, at least 100 seeds must be tested in replicates of 25 or 50. If the submitted sample is smaller than prescribed, the sampler shall be notified accordingly and analysis withheld until sufficient seed is received in a single submitted sample, except that in the case of very expensive seed, the analysis may be completed to the extent possible, and the following statement inserted on the certificate: "The sample submitted weighed only ... g and is not in accordance with the *International Rules for Seed Testing*."

Valid from: 10.02.2024 Version 7.0 Page **10** of **20** 

- o Or, in the case of pelleted seeds: "The sample submitted contained only ... pellets (seeds) and is not in accordance with the *International Rules for Seed Testing*."
- G. For tetrazolium test (ISTA Rules 6.7 and 1.5.2.8) the following must be reported under "Other determinations":
  - The statement 'Tetrazolium test: ...% of seeds were viable' must be entered.
  - o In cases where the testing procedure deviates from that prescribed in Table 6A, any deviating procedure must also be reported. The only variations permitted from procedures given in Table 6A are for premoistening time, tetrazolium concentration, staining temperature or staining time. Precise prescriptions about the limitation of the variations are given in Rule 6.5.
  - If individual seeds are tested at the end of the germination test, the result must be reported in accordance with the Rule 1.5.2.6 and 5.9.
  - o In addition, in the case of species of Fabaceae, one of the following, and only one, must be reported:
    - *either* (in cases where the viability percentage of the hard seed is not determined) 'Tetrazolium test: ...% of seeds were viable, ...% of hard seeds found in the test.'
    - **or** (in cases where the viability percentage of the hard seed is determined) 'Tetrazolium test: ...% of seeds were viable, ...% of hard seeds included in the percentage of viable seed'
- Further details may be given at the discretion of the testing station (e.g. percentage of seeds that were empty, with larvae, broken or decayed).
- **H. For seed health tests results** (ISTA Rules 7.6 and 1.5.2.10) the following must be reported under "Other determinations":
  - o either qualitative or quantitative results, as specified in the individual methods;
  - pathogen detected or not detected, as specified in the individual methods;
  - the scientific name of the pathogen detected;
  - the percentage of infected seeds or the number of subsamples for which the pathogen was detected when specified in the individual methods;
  - the method used, including any pre-treatment (ISTA Rules 7.2.2);
  - o the size of the sample or fraction examined;
  - any additional permitted procedure used.
- **I. For moisture test** (ISTA Rules 9.1.7, 9.2.2.7 and 1.5.2.12) the following additional information must be reported under "Other determinations":
  - o For the oven method, the method (i.e. duration and temperature) must be reported.
  - o For the moisture meter method, the statement: 'A moisture meter was used' must be entered.
  - o If germinating seeds were present in the sample, the following statement must be entered: 'Germinating seeds were found in the submitted moisture sample.'
  - o If mouldy seeds were present in the sample, the following statement must be entered: 'Mouldy seeds were found in the submitted moisture sample.'
  - In the case of pelleted seeds, the following statement must be entered: 'The seeds of the submitted moisture sample were pelleted, and the moisture content reported is that of the combined unit comprising and pelleting materials.'
  - For Arachis hypogaea, one of the following statement must be entered: 'The submitted sample for moisture determination consisted of seeds in their pod' or 'The submitted sample for moisture determination consisted of seeds with the pod removed (shelled seeds)'.

Valid from: 10.02.2024 Version 7.0 Page **11** of **20** 

- J. For thousand seed weight (TSW) determination (ISTA Rules 10.7 and 1.5.2.13) the following must be reported under "Other determinations":
  - The result of a weight determination test must be reported to the number of decimal places given in Table 10A. column 4.
  - The method used (e.g. "Counting the whole pure seed fraction" or "Counting replicates") and the calculated result must be reported.
- K. For excised embryo test (ISTA Rules 12.7 and 1.5.2.14) the following must be reported under "Other determinations":
  - "Excised embryo test: ... % of seeds had viable embryos."
  - Further details may be given at the discretion of the testing station, e.g. percentages of seeds that were empty, insect-damaged or physically damaged.
- L. For X-ray test results (ISTA Rules 14.7 and 1.5.2.16) the following must be reported under "Other determinations":
  - "X-ray test results:
  - ... % filled
  - ... % empty
  - ... % insect-damaged
  - ... % physically damaged".

On request, testing results can be reported as `.....% insect- damaged seeds for 100 seeds tested`

- M. For vigour tests results (ISTA Rules 15.7) the following must be reported under "Other determinations": Conductivity test-CT (ISTA Rules 15.8.1.8)
  - The conductivity result must be expressed in µS cm<sup>-1</sup>q<sup>-1</sup> to the nearest 0.1 µS cm<sup>-1</sup>q<sup>-1</sup>
  - The seed moisture content before the test must be reported. Where the moisture content has been adjusted before the test, both the initial moisture content and the calculated moisture content after adjustment must be reported.
  - The results must be accompanied by a statement of the specific variables used in the test (soaking time and temperature)

## Accelerated ageing-AA (ISTA Rules 15.8.2.8)

- o Results are expressed as a percentage, calculated to the nearest whole number (ISTA Rules 5.8.2) of normal seedlings, abnormal seedlings, hard seeds, fresh seeds and dead seeds. If the result for any of these categories is found to be zero, it must be reported as '0'.
- The seed moisture content before the test must be reported. Where the moisture content has been adjusted before the test, both the initial moisture content and the calculated moisture content after adjustment must be reported.
- The results must be accompanied by a statement of the specific variables used in the test (seed weight per AA box both before and after ageing, ageing time and temperature)

Controlled deterioration-CD (ISTA Rules 15.8.3.6)

Valid from: 10 02 2024 Version 7.0 Page 12 of 20

## **CD** germination test

Results are expressed as a percentage, calculated to the nearest whole number (ISTA Rules 5.8.2), of total germination (normal plus abnormal seedlings) and normal germination. If the result for either of these is found to be zero, it must be reported as '0'.

 The results must be accompanied by a statement of the specific variables used in the test (method used to raise seed moisture content, raised seed moisture content, deterioration period and temperature).

#### CD after deterioration

- $\circ$  The result must be expressed in  $\mu$ S cm<sup>-1</sup> g<sup>-1</sup> to the nearest 0.1  $\mu$ S cm<sup>-1</sup> g<sup>-1</sup>.
- The results must be accompanied by a statement of the specific variables used during deterioration (method used to raise seed moisture content, raised seed moisture content, deterioration period and temperature) and in the conductivity test (soaking time and temperature).

## Radicle emergence-RE (ISTA Rules 15.8.4.6)

- Results are reported as a percentage of seeds with emerged radicles calculated to the nearest whole number (ISTA Rules 5.8.2). If the result is found to be nil, it must be entered as '0'.
- The results must be accompanied by a statement of the temperature used for the test and the time of the radicle emergence counts in hours, e.g. 'Radicle emergence test 90% with emerged radicles after 66 h at 20°C.'

## Tetrazolium vigour test

The result of a seed vigour test using the tetrazolium method must be reported under 'Other determinations'. Results are expressed as a percentage, calculated to the nearest whole number of vigorous seeds, e.g.: 'Tetrazo-lium vigour tests using 0.1 % tetrazolium solution for 3 h at 35 °C: 90 % vigorous seeds.'

## 29. Place and country

State place and country of issue, e.g. Wallisellen, Switzerland

## 30. Date

Date of issuance of the Certificate (format: yyyy-mm-dd)

## 31. Signature

The signature, of the Head of the issuing laboratory or their assignee which confirms the statement on the back of the Certificate as true and at least the job position of the person signing or "Authorised signatory" (ISTA Rules, 1.4.1 e, 1.4.2.m, n)

## 32. Additional observations (on the back of the Certificate)

Any further results which would not fit into the physical space for 'Other determinations' (see point 28) or other observations can be reported on the reverse side of the Certificate in the space provided.

When the seed lot is located in a different country to the sampling laboratory, the country where the seed lot has been sampled must be reported either under 'Sampling by' or under 'Additional observations' (ISTA Rules 1.4.2, I).

## DETAILS ON HOW TO COMPLETE AN ISTA BLUE INTERNATIONAL SEED SAMPLE CERTIFICATE (BIC)

## 33. BIC (see Annex 2)

A BIC is issued when sampling from the seed lot is not done under the responsibility of an ISTA accredited laboratory/sampling entity. The accredited laboratory is responsible only for testing the sample as submitted. It is not responsible for the relationship between the sample and any seed lot from which it may have been derived

Valid from: 10.02.2024 Version 7.0 Page **13** of **20** 

and therefore the maximum seed lot size does not apply for a BIC. The Blue International Seed Sample Certificate refers only to the sample submitted for testing. On the BIC the results reported refer strictly to the sample at the time of sample receipt. The certificate is coloured blue (ISTA Rules 1.2.2).

Test results of some tests described in the ISTA Rules can only be reported on a BIC. Reporting on an OIC is not permitted for results of tests on Seed Mixtures (ISTA Rules 1.5.2.20) and the other seed determination when testing for the presence of *Aeginetia, Alectra*, *Orobanche, Phelipanche and Striga* species (ISTA Rules 1.5.2.4).

The numbering used in this note relates to the numbering on the example provided as Annex 2. Some of the data entries have already been discussed in the previous pages as part of the explanations given on how to issue an OIC, therefore they are not repeated in this section. Numbering specific to the BIC are coloured in blue to indicate that different or additional requirements to the ones for an OIC apply.

## 34. Name of applicant

The name and address of the applicant must be listed as stated by applicant. At the request of the applicant the name and address of the applicant may be omitted. (ISTA Rules 1.4.1d).

#### 35. Number of containers

The number of containers is entered as stated by the applicant. The laboratory has no responsibility for the correctness of these data and must quote them as stated by the applicant.

## 36. Date of sampling

The date of sampling is entered as stated by the applicant (format yyyy-mm-dd). The laboratory has no responsibility for the correctness of these data and must quote them as stated by the applicant.

#### 37. Seal of sample

The laboratory must report if/how the test sample was sealed (e.g. "adhesive patches", "taped", "anti-tamper seal", "metal seal" or "not sealed").

#### 38. Date sample received

The date of sample receipt in the laboratory (format yyyy-mm-dd) must be stated.

#### 39. Species

The requirements listed in this explanatory note under "15. Species" are also valid for the BIC. In addition the following applies:

#### For Seed Mixtures

o For the species tested 'Seed Mixture' must be entered (ISTA Rules 1.3.b).

## 40, 41 and 42. Purity

The requirements listed in this explanatory note under "16., 17. and 18. Purity" are also valid for the BIC. In addition, the following applies:

For Seed Mixtures as described in 18.1.1 and 1.5.2.20.1

Valid from: 10.02.2024 Version 7.0 Page **14** of **20** 

## 43. Number of days

The actual duration of the test must be reported in days, excluding the period of special treatment or method used for promoting germination (ISTA Rules 5.9). If no determination has been made, the entry must be "N" for "not tested" or "NA" for "not applicable". (ISTA Rules 1.5.2).

Note: "N" must not be used for components of a test such as hard or fresh seeds.

### 44 to 48. Germination

The requirements listed in this explanatory note for these germination related spaces are also valid for the BIC. In addition the following applies:

## For Germination on Seed Mixtures

No germination results are reported in the "Germination" section of a Certificate, and an 'N' must be entered there), but the result of each fraction is reported under 'Other determinations'.

#### 49. Other determinations

The requirements listed in this explanatory note under "28. Other determinations" are also valid for the BIC. In addition the following applies:

## For Purity on Seed Mixtures

 The actual weight of seeds examined to the minimum number of decimal places indicated in the table at ISTA Rules 3.5.1 of the ISTA Rules must be reported, i.e. 'Seed Mixture test....g of seed examined.' (ISTA Rules 1.5.2.20).

#### For Other seeds by number on Seed Mixtures

The results must be reported as described in the Rule 4.7.

#### For Germination on Seed Mixtures (ISTA Rules 18.8.3, 1.5.2.20.3)

Test results are reported only for those species for which methods are given in the appropriate Chapter of the ISTA Rules , under "Other determination".

- The results of the germination test for each component are reported to the nearest whole number under the categories normal seedlings, hard seed, fresh seed, abnormal seedlings and dead seeds. When 400, 200 or 100 seeds are tested, the results are reported as a percentage, and the number of seeds tested is also reported. Tolerances as described in the Rule 5.8.1 are applied to tests of 400, 200 and 100 seeds.
- When less than 100 seeds are tested, the actual number of seeds in each category is reported, together with the total number of seeds tested.
- The germination method used for all the component species must be reported on the Certificate.
- No germination results are reported in the 'Germination' section of a Certificate.

## For Thousand Seed Weight determination (TSW) on Seed Mixtures

- The thousand-seed weight determination for mixture components does not follow Chapter 10 but is determined by counting the number and determining the weight of all pure seeds of a mixture component. The thousand seed weight is calculated using the weight and number of seeds of each component (ISTA Rules 18.7).
- o The results as calculated according to 18.7 must be reported under 'Other determinations'.

For testing on presence of Aeginetia, Alectra, Orobanche, Phelipanche and Striga species (ISTA Rules 1.5.2.4) and upon request

o Test for presence of .....species - ... seeds of were found in ... g of seed examined.'

Valid from: 10.02.2024 Version 7.0 Page **15** of **20** 

- o If no seeds were found it can be reported as: 'No seeds of .......... were found in ... g of seed examined.'
- The sample weight examined must be reported according to the minimum number of decimals indicated in 4.7 of the ISTA Rules.

## 50. Signature

The signature, of the Head of the issuing laboratory or their assignee which confirms the statement on the back of the Certificate as true and at least the job position of the person signing or "Authorised signatory" (ISTA Rules 1.4.1.e, 1.4.3.g,h)

#### **ANNEX**

Annex1: Orange International Seed Lot Certificate with reference numbers added Annex 2: Blue International Seed Sample Certificate with reference numbers added

## **DISTRIBUTION LIST**

Available for free download from the ISTA website to anyone interested in learning about how to issue ISTA Orange or Blue International Certificates.

# REVISION HISTORY FLORINA I HAVE NOT ADDED TEXT HERE IN CASE YOU DO NOT WANT TO MAKE THE CHANGES I HAVE SUGGESTED: STEVE

Version #	Changes
3.0	Page 3: Inserted a revision table and removed margin marks to indicates changes throughout the document. Updated document throughout to include current reporting details in the 2017 Edition of the ISTA Rules.
	Page 4: How to deal with lost ISTA certificates added.  Page 5: Provided extra details on where "Additional information" from the applicant can be reported.  Page 6: Provided clarification that verification of the species under test is an ISTA test method.  Page 7: Provided the link to the ISTA Toolbox for the "Rounding programme" for germination results  Several pages: Sampling Entity introduced
4.0	Several changes to align the procedure to the valid ISTA Rules 2020 Reference to the learning tool
5.0	Several changes to align the procedure to the valid ISTA Rules 2021  New layout of the document
6.0	eCertificate addition Tetrazolium vigour test included Refence to the ISTA List of Stabilised Plant Names included Fresh seed explanation Website links updated
7.0	Explanations aligned to the ISTA Rules 2024 in several areas of the procedure

Valid from: 10.02.2024 Version 7.0 Page **16** of **20** 

Annex 1: Orange International Seed Lot Certificate with reference numbers added

-	ISTA  ORANGE INTERNATIONAL SEED LOT CERTIFICATE  BULLETIN INTERNATIONAL ORANGE DE LOT DE SEMENCES  INTERNATIONAL FR. ORANGE REPLICHT ÜBER EINE SAATGI ITPARTIE											
	INTERNATIONALER ORANGE-BERICHT ÜBER EINE SAATGUTPARTIE											
	(See back - Voir au verso - Rückseite beachten)  STATED BY APPLICANT — INFORMATIONS DU REQUÉRANT — ANGABEN DES ANTRAGSTELLERS Without responsibility of the laboratory - Sans responsabilité du laboratoire - Ohne Verantwortung der Prüfstelle											
	Name of applicant Nom du requérant Name des Antragstellers  Species, cultivar, catégorie, poids du lot, etc. Espèce, cultivar, catégorie, Gewicht der Partie usw.											
				INFORM	ATION - INFO	PRMATIONS	- ANGABEN					
	Testing and issuing laboratory Laboratoire d'essai qui délivre le bulletin :  Untersuchende und berichtende Prüstelle											
	Sampling by Échantillonnage Probenahme du	Sampling by Échantillonnage par :										
	Marks of lot Marques du lot		4	7					Status of Certificate Nature du Bulletin			
	Seal of lot Plomb du lot	der Partie		В	HEW.				Status des Be	richts		
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	Reine Samen	Unschädliche Verunrei- nigungen	Andere Samen	Anzahl Tage	Normale Keimlinge	Harte Samen	Frische Samen	Anomale Keimlinge	Tote Samen	GEHALT (Frischeinwaage) %		
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		atter - Nature des	s matières inertes -	Art der unschädl.								
	26											
	Other seeds - Si	emences d'autres	s plantes - Andere S	amen / Species	s (scientific names)	- Espèces (noms	scientifiques) - Ar	rten (wissenschaft)	iche Namen)	Sugar.		
	27											
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#### DECLARATION OF THE SIGNATORY -- DÉCLARATION DU SIGNATAIRE -- ERKLÄRUNG DURCH DEN UNTERZEICHNETEN

I certify that sampling, sealing and testing have been carried out in accordance with the International Rules for Seed Testing of the ISTA and that the tests have been made at a laboratory accredited by the International Seed Testing Association to issue International Seed Analysis Certificates.

Je, soussigné, certifie que l'échantillon-nage, le plombage et les essais ont été effectués conformément aux Règles Inter-nationales de l'ISTA pour les essais de semences dans un laboratoire accredité, par ladite Association Internationale d'Essais de Semences, à délivrer des Bulletins d'Analyse internationaux.

Ich bestätige hiermit, dass Probeziehung, Ich bestätige hiermit, dass Probeziehung, Plombierung und Untersuchungen in Übereinstimmung mit den Internationalen Vorschriften der ISTA für die Prüfung von Saatgut durchgeführt worden sind. Die Prüfstelle ist von der Internationalen Vereinigung für Saatgutprüfung zur Ausstellung von Internationalen Saatgut-Unter-suchungsberichten akkreditiert.

ADDITIONAL OBSERVATIONS - OBSERVATIONS COMPLÉMENTAIRES - ZUSÄTZLICHE BEMERKUNGEN

#### DEFINITIONS - DÉFINITIONS - DEFINITIONEN

Number determinations - endorsements of test results have the fol-

Complete test. An examination of the full quantity of seed shown in Table 2C, column 5, of the International Rules for Seed Testing in which all other species found to occur are reported.

Limited test. An examination in which only those species designated by the applicant are reported

Reduced test. An examination of a quantity of seed less than that shown in Table 2C, column 5, of the International Rules for Seed

The above terms should be used separately or, where appropriate,

## Dénombrements - les termes utilisés dans l'expression des résultats

d'analyse ont le sens suivant:

Essai complet. Essai pour lequel la totalité de l'échantillon d'analyse prescrit dans la colonne 5 du Tableau 2C des Règles Internationales pour les Essais de Semences est utilisée pour la recherche des semences de toutes les autres espèces.

Essai limité. Essai pour lequel seules les espèces nommément désignées par le requérant sont mentionnées sur le Bulletin d'analyse.

Essai sur échantillon réduit. Essai pour lequel une quantité de semences inférieure à celle prescrite dans la colonne 5 du Tableau 2C des Règles Internationales pour les Essais de Semences est utilisée.

Les termes ci-dessus doivent être utilisés séparément ou, le cas

Zahlenmässige Bestimmungen - die Angaben der Untersuchungsergebnisse haben folgende Bedeutung:
Vollständige Untersuchung. Eine Untersuchung der gesamten in Tabelle 2C, Spalte 5 der Internationalen Vorschriften für die Prüfung von Saatgut angegebenen Saatgutmenge, bei welcher alle anderen darin gefundenen Arten berichtet werden.

Begrenzte Untersuchung. Eine Untersuchung, bei welcher lediglich die vom Antragsteller bezeichneten Arten berichtet werden.

Abgekürzte Untersuchung. Eine Untersuchung einer geringeren Saatgutmenge als in Tabelle 2C, Spalte 5 der Internationalen Vorschriften für die Untersuchung von Saatgut angegeben.

Die obengenannten Ausdrücke sollen getrennt voneinander, oder wo angängig, in Verbindung miteinander verwendet werden.

#### CERTIFICATES - BULLETINS - BERICHTE

The certificates should be typed and if the result of a determination is negative it should be entered as -0-, otherwise the results should be entered as -7- or -10-. If a determination has not been made the words "Not tested" (abbreviated "N") should be entered in the space provided. TR = Trace.

No attention should be paid to a certificate unless it contains the stamp of the issuing laboratory and the signature of the director or his assignee as well as the test number and date of issue. No certificate should be accepted which shows signs of amendment, alteration or

The analysis results on the Orange International Seed Lot Certificate relate only to the seed lot as a whole at the time of sampling.

If a different result is found and confirmed in a subsequent test the issuing laboratory cannot be held liable for compensation.

Un Bulletin doit être, autant que possible, dactylographié. Si le résultat de certaines déterminations est négatif, l'espace prévu pour l'indication du résultat doit être rempli: -0-, sinon, les résultats doivent être ainsi indiqués: -7- ou -10-. Si on n'a pas effectué certaines déterminations, l'espace prévu pour l'indication du résultat doit être rempli par les mots: "Non déterminé" (en abrégé "N"). TR = Trace. TR = Trace.

Doit être considéré comme sans valeur un Bulletin ou ne figurent pas le No. d'analyse, le cachet du laboratoire qui l'a délivré, la date de sa délivrance, et la signature du directeur ou de son délégué.

Un Bulletin présentant des signes de surcharges ou de corrections, ou des ratures, ne doit pas être accepté.

Les résultats des analyses indiqués sur le Bulletin International Orange de Lot de Semences se rapportent uniquement au lot de semence considéré comme un tout au moment de l'échantillonnage.

Si un résultat d'analyse différent est ultérieurement obtenu et confirmé, le laboratoire qui a délivré le Bulletin ne peut être tenue pour passible d'une indemnité.

Der Bericht soll mit Maschine geschrieben sein. Wenn das Ergebnis einer Untersuchung negativ ist, soll die entsprechende Rubrik wie folgt ausgefüllt werden: -0-. Alleinstehende Ziffern in folgender Weise: -7-oder -10-. Nicht durchgeführte Untersuchungen werden in der betreffenden Rubrik durch die Worte "Nicht geprüft" (abgekürzt "N") gekennzeichnet. TR = Spuren.

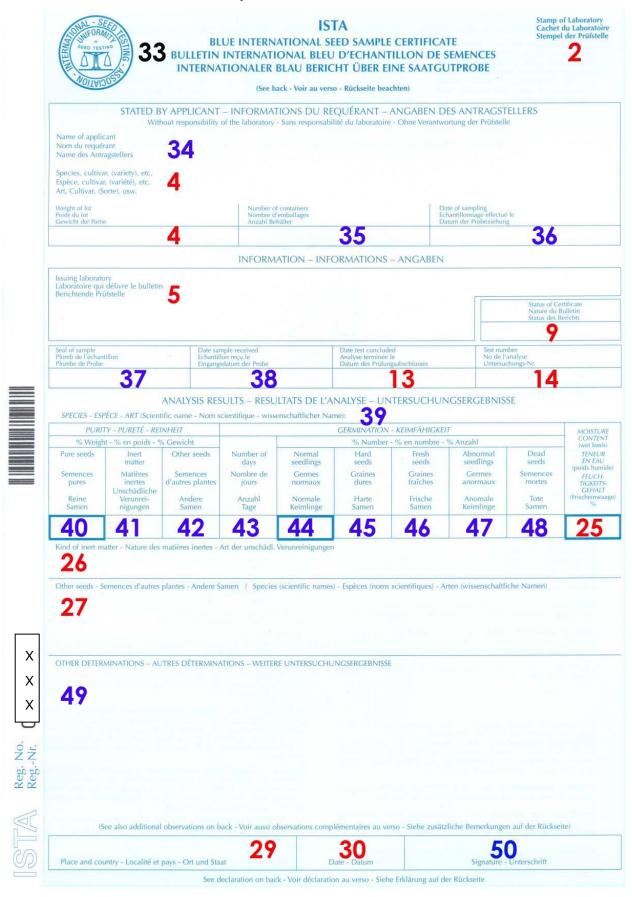
Berichte, in denen Untersuchungsnummer, Datum der Probeziehung, Stempel der Prüfstelle oder Ausstellungsdatum und Unterschrift des verantwortlichen Leiters fehlen, sind ungültig, In gleicher Weise ungültig sind Berichte, welche Ausbesserungsspuren, Abänderungen oder Radierungen erkennen lassen.

Die Untersuchungsergebnisse auf dem orangefarbenen internationalen Bericht über eine Saatgutpartie beziehen sich nur auf die Saatgutpartie als Ganzes zur Zeit der Probenahme.

Wird zu einem späteren Zeitpunkt ein von den vorstehenden Werten abweichendes Resultat ermittelt und bestätigt, so kann die Prüfstelle nicht haftbar gemacht werden.

Valid from: 10 02 2024 Version 7.0 Page 18 of 20

Annex 2: Blue International Seed Sample Certificate with reference numbers added



Valid from: 10.02.2024 Acc-P-07-How to complete ISTA Certificates

#### DECLARATION OF THE SIGNATORY -- DÉCLARATION DU SIGNATAIRE -- ERKLÄRUNG DURCH DEN UNTERZEICHNETEN

I certify that testing has been carried out in accordance with the International Rules for Seed Testing of the ISTA and that the tests have been made at a laboratory accredited by the International Seed Testing Association to issue International Seed Analysis Certificates.

Je, soussigné, certifie que l'analyse a été effectuée conformément aux Règles Internationales de l'ISTA pour les essais de semences dans un laboratoire accredité, par ladite Association Internationale d'Essais de Semences, pour délivrer des Bulletins d'Analyse internationaux.

Ich bestätige hiermit, dass die Unter suchung in Übereinstimmung mit den Internationalen Vorschriften der ISTA für die Prüfung von Saatgut durchgeführt wor-den ist. Die Prüfstelle ist von der Inter-nationalen Vereinigung für Saatgutprüfung zur Ausstellung von Internationalen Saat-gut-Untersuchungsberichten akkreditiert.

ADDITIONAL OBSERVATIONS - OBSERVATIONS COMPLÉMENTAIRES - ZUSÄTZLICHE BEMERKUNGEN

#### DEFINITIONS - DEFINITIONS - DEFINITIONEN

Number determinations - endorsements of test results have the fol-

Complete test. An examination of the full quantity of seed shown in Table 2C, column 5, of the International Rules for Seed Testing in which all other species found to occur are reported.

Limited test. An examination in which only those species designated by the applicant are reported.

**Reduced test.** An examination of a quantity of seed less than that shown in Table 2C, column 5, of the International Rules for Seed Testing.

The above terms should be used separately or, where appropriate, in combination.

Dénombrements - les termes utilisés dans l'expression des résultats

d'analyse ont le sens suivant:

Essai complet. Essai pour lequel la totalité de l'échantillon d'analyse prescrit dans la colonne 5 du Tableau 2C des Règles Internationales pour les Essais de Semences est utilisée pour la recherche des semences de toutes les autres espèces

Essai limité. Essai pour lequel seules les espèces nommément désignées par le requerant sont mentionnées sur le Bulletin d'analyse.

Essai sur échantillon réduit. Essai pour lequel une quantité de semences inférieure à celle prescrite dans la colonne 5 du Tableau 2C des Règles Internationales pour les Essais de Semences est utilisée.

Les termes ci-dessus doivent être utilisés séparément ou, le cas échéant, conjointement.

Zahlenmässige Bestimmungen - die Angaben der Untersuchungsergebnisse haben folgende Bedeutung;
Vollständige Untersuchung, Eine Untersuchung der gesamten in Tabelle 2C, Spalte 5 der Internationalen Vorschriften für die Prüfung von Saatgut angegebenen Saatgutmenge, bei welcher alle anderen darin gefundenen Arten berichtet werden.

Begrenzte Untersuchung. Eine Untersuchung, bei welcher lediglich die vom Antragsteller bezeichneten Arten berichtet werden.

**Abgekürzte Untersuchung.** Eine Untersuchung einer geringeren Saatgutmenge als in Tabelle 2C, Spalte 5 der Internationalen Vorschriften für die Untersuchung von Saatgut angegeben.

Die obengenannten Ausdrücke sollen getrennt voneinander, oder wo angängig, in Verbindung miteinander verwendet werden.

#### CERTIFICATES BULLETINS BERICHTE

The certificates should be typed and if the result of a determination is found to be nil it should be entered as 0, otherwise the results should be entered as 7 or 10. If a determination has not been made the words "Not tested" (abbreviated N) should be entered in the space provided. TR = Trace.

No attention should be paid to a certificate unless it contains the stamp of the issuing laboratory and the signature of the director or his assignee as well as the test number and date of issue. No certificate should be accepted which shows signs of amendment, alteration or

The analysis results on the Blue International Seed Sample Certificate relate only to the sample on the date it was received by the issuing laboratory.

If a different result is found and confirmed in a subsequent test the issuing laboratory cannot be held liable for compensation.

Un Bulletin doit être dactylographié. Si le résultat de certaines déterminations est nul, l'espace prévu pour l'indication du résultat doit être rempli: 0, sinon, les résultats doivent être ainsi indiqués: 7 ou 10. Si on n'a pas effectué certaines déterminations, l'espace prévu pour l'indication du résultat doit être rempli par les mots: "Non déterminé" (en abrégé N). TR = Trace.

Doit être considéré comme sans valeur un Bulletin ou ne figurent pas le No. d'analyse, le cachet du laboratoire qui l'a délivré, la date de sa délivrance, et la signature du directeur ou de son délégué.

Un Bulletin présentant des signes de surcharges ou de corrections, ou des ratures, ne doit pas être accepté.

Les résultats des analyses indiqués sur le Bulletin International Bleu d'Échantillon de Semences se rapportent uniquement à l'échantillon soumis, à la date à laquelle il a été reçu par le laboratoire qui délivre le Bulletin.

Si un résultat d'analyse différent est ultérieurement obtenu et con-firmé, le laboratoire qui a délivré le Bulletin ne peut être tenue pour passible d'une indemnité.

Der Bericht soll mit Maschine geschrieben sein. Wenn das Ergebnis einer Untersuchung Null ist, soll die entsprechende Rubrik wie folgt ausgefüllt werden: 0. Alleinstehende Ziffern in folgender Weise: 7 oder 10. Nicht durchgeführte Untersuchungen werden in der betreffenden Rubrik durch die Worte "Nicht geprüft" (abgekürzt N) gekennzeichnet. TR = Spuren.

Berichte, in denen Untersuchungsnummer, Datum der Probeziehung, Stempel der Prüfstelle oder Ausstellungsdatum und Unterschrift des verantwortlichen Leiters fehlen, sind ungültig. In gleicher Weise ungültig sind Berichte, welche Ausbesserungsspuren, Abänderungen oder Radierungen erkennen lassen.

Die Untersuchungsergebnisse auf dem blaufarbenen internationalen Bericht über eine Saatgutprobe beziehen sich nur auf die Einsendungsprobe zum Zeitpunkt des Einganges bei der berichterstat-tenden Prüistelle.

Wird zu einem späteren Zeitpunkt ein von den vorstehenden Werten abweichendes Resultat ermittelt und bestätigt, so kann die Prüfstelle nicht haftbar gemacht werden.

Valid from: 10 02 2024 Version 7.0 Page 20 of 20