

THE CENTRAL SILK BOARD SILK-WORM SEED REGULATIONS, 2010

New Delhi, 16th March, 2010

G.S.R. 194 (E) - In exercise of the powers conferred by section 13 A of the Central Silk Board Act, 1948 (61 of 1948), the Central Silk Board with the previous approval of the Central Government, hereby makes the following regulations, namely:

CHAPTER - 1 Preliminary

1. Short title and commencement:

- (1) These regulations may be called the Central Silk Board Silkworm Seed Regulations, 2010.
- (2) They shall come into force on the date of their publication in the Official Gazette.

2. Definitions:

- (1) In these regulations, unless the context otherwise requires:
 - (a) **“Act”** means the Central Silk Board Act, 1948 (61 of 1948);
 - (b) **“parent seed”** means the silk-worm seed used to generate seed cocoons for commercial seed production;
 - (c) **“chawki silkworms”** means young silk-worms up to second moult;
 - (d) **“chawki rearing”** means rearing of chawki silkworms to provide optimum conditions providing nutritious feed for the uniform growth of the silk-worms in the initial stages to facilitate the production of disease-free, robust, uniform and high quality cocoons;
 - (f) **“Form”** means forms annexed to these regulations;
 - (g) **“seed producer”** means a person engaged in the production of silkwormseed and registered under section 8E of the Act;

(h) “**specified**” means specified under these regulations.

- (2) Words and expressions used herein and not defined but defined in the Act shall have the meanings respectively assigned to them in the Act.

CHAPTER – 2

Transaction of business of Central Silkworm Seed Committee

3. Meetings of Committee:

- (1) The Committee shall meet at least once in six months.
- (2) A special meeting of the committee may be convened by the Chairperson on the request of at least three members of the Committee.
- (3) The date and place of the meeting shall be determined by the Chairperson.
- (4) The Secretary shall give a fifteen days’ notice of an ordinary meeting and five days’ notice of a special meeting to the members specifying therein the time and the place of meeting and the business to be transacted thereat.
- (5) A notice for the meeting may be given through messenger or by registered post.
- (6) No subject matter other than that for which the notice is given shall be considered at that meeting except with the permission of the Chairman.

Provided that the Chairperson may permit the discussion on such other subject matter only if at least ten days prior notice has been given by the member.

4. Quorum:

- (1) One-third of members shall form the quorum for a meeting.
- (2) If at any ordinary or special meeting the quorum is not there, the Chairperson shall adjourn the meeting to such other day as he may think fit and the business which would have been transacted

at the meeting had there been a quorum, shall be transacted at the adjourned meeting whether there be the quorum present thereat or not.

5. Proceedings of meeting:

- (1) The Secretary shall maintain a record of names and addresses of members of the Committee.
- (2) The Secretary shall maintain the minutes of the meetings of the Committee in a Minutes Book which shall be signed by the person who presided the meeting and a copy of minutes showing, inter-alia, the names of members present at the meeting and the proceedings of the meeting shall be forwarded to the Board.
- (3) The Minutes Book shall be open to inspection by any member at the office of the Secretary during office hours.

6. Disposal of business:

- (1) The business in a meeting shall be transacted in the order in which it is entered in the agenda unless otherwise permitted by the Chairman.
- (2) Every question, which may come up before the Committee, shall be decided by a majority of votes of the members present and voting on such question and one member shall cast only one vote.
- (3) In case of equality of votes, the Chairperson shall have a second or casting vote.

CHAPTER – 3

Programming and planning of silkworm seed production

7. Programming and planning of silkworm seed production:

- (1) The Committee based on the national requirement as a whole and interest of each State in particular shall plan the annual production of silkworm seed.
- (2) The Committee may advise the States to programme, plan and monitor the production and supply of silkworm seed including

the parent seeds and parent seed cocoons for production of commercial seed.

- (3) The Committee shall advise the Central and State Governments on the annual programming and planning of silkworm seed production in the country.

CHAPTER – 4

Quality standards of silkworm seed

8. Quality standards for the kind or variety of silkworm seed:

- (1) The quality standards of the silkworm seed shall conform to the breed characters with respect to fecundity, hatchability, survival and cocoon yield.

Explanation: For the purpose of this regulation.

- (a) “*fecundity*” means number of eggs in a disease free laying;
- (b) “*hatchability*” means number of worms coming out of the eggs represented in percentage;
- (c) “*survival*” means number of worms spinning the cocoons;
- (d) “*cocoon yield*” means number and weight of cocoons obtained from 100 disease free layings.

- (2) The quality standards of parent seed cocoons of the notified kind or variety shall conform to the breed characters to be notified under section 8C of the Act with respect to pupation, cocoon yield and the number of cocoons.

Explanation: For the purpose of this regulation.

“*pupation*” means number of live pupae in seed cocoons represented in percentage.

- (3) A seed producer shall conduct a quality inspection of the parent seed cocoons and purchase only such cocoons that conform to the characters of the notified breed.

- (4) The parent seed cocoon and parent eggs shall be free from pebrine disease and the parent seed cocoons shall not have more than one per cent muscardine affected pupae.

CHAPTER – 5

Conditions for production of seed cocoon

9. Conditions to be complied by the seed cocoon producer.

- (1) A seedcocoon producer shall possess a mulberry garden, disinfectable rearing house or rearing space and rearing appliances such as chawki rearing appliances, rearing trays, cleaning nets, shoot rearing racks or rearing stands and mountages.
- (2) A Seed Cocoon Producer shall possess the knowledge of rearing of parent silkworm races and he shall undergo a training in silkworm rearing for not less than one month in a sericulture institution under State or Central Silk Board or any other recognized institution.

Provided that a seed cocoon producer who is rearing the parent silk-worm races before the commencement of these regulation shall not be required to undergo such training.

- (3) A Tasar seed cocoon producer shall possess a tasar food plantation or a forest patch of food plants exclusively for seed rearing and a Muga seed cocoon producer shall possess a muga food plantation for seed rearing
- (4) An Eri seed cocoon producer shall possess Eri food plantation and a disinfectable rearing house or rearing space with rearing appliances for seed rearing.
- (5) The seed cocoon producer shall.
- (i) procure parent seeds only from the Government parent seed producing farms or grainages;
 - (ii) clean, wash and disinfect the rearing house, rearing appliances and the premises before starting the rearing;

- (iii) rear the silkworms with utmost care to maintain uniform growth and development of larvae;
 - (iv) provide spacing according to the stage of the larvae;
 - (v) maintain temperature and relative humidity in the rearing house according to the stage of the silkworm;
 - (vi) ensure hygiene in the rearing house to prevent diseases;
 - (vii) take precautionary measures to control uzi infestation;
 - (viii) mount silkworm in shade with ventilation;
 - (ix) harvest cocoons only after pupation and store them in single layer in trays;
 - (x) transport cocoons only during cooler hours of the day;
 - (xi) sell seed cocoons to the registered seed producers;
 - (xii) maintain the record of sale of seed cocoons for seed or for reeling and shall not sell the rejected cocoons to any seed producer or dealer;
 - (xiii) present the record of sale as and when required by the Seed Officer for verification;
 - (xiv) allow the Seed Officer to inspect the crop and verify the records of seed purchase, rearing and disposal of cocoon and shall comply with the instructions.
- (6) The seed cocoons which do not meet the quality characters of the notified breed shall be declared unfit for seed and rejected and the seed cocoons so rejected shall be sold only for reeling.
- (7) The seed cocoons which are certified as fit for seed but not purchased for want of demand shall also be sent for reeling.
- (8) The seed cocoon producer who sells the seed cocoons for reeling purpose shall maintain the valid receipt or other documentary evidence in support of the transactions.

- (9) The Tasar and Muga seed cocoon producer shall remove pests and flies from the food plants and clean the ground before transferring the worms.

CHAPTER – 6

Conditions and requirements for registration of seed producer

10. Conditions for registration of producer.

- (1) A mulberry silkworm seed producer shall possess a matriculate pass certificate and a certificate course in sericulture from a recognized institution for having undergone training in Silkworm seed production for not less than three months in a sericulture institution under State or Central Silk Board or any other recognized institution.

Provided that mulberry silkworm seed producer operating the seed production centre before the commencement of these regulations shall not be required to possess the prescribed qualifications, but he shall undergo a refresher course training in silkworm seed production for a period of not less than ¹[one week].

- (2) A mulberry silkworm seed producer shall.
- (a) undertake to produce a minimum quantity of five lakh Disease free layings per annum from the third year of registration;
 - (b) possess building with separate rooms to conduct various activities of silkworm seed production including seed cocoon preservation, ovi-position and mother moth examination;
 - (c) possess the requisite equipment as specified in Table-1 for production of seed and maintenance of quality standards.

¹ The words “one month” is substituted by the words “one week” vide notification No. G.S.R. 75 dated 31.3.2015

Table 1 : Equipment required for the production of 5 lakhs Disease free layings per annum

Sl. No	Items	Qty (nos.)
General Equipment:		
1.	Cocoon or pupae preservation stand	6
2.	Oviposition stand	2
3.	Seed cocoon or pupae preservation trays	100
4.	Oviposition tray	35
5.	Male moth preservation tray	20
6.	Working stand	3
7.	Egg preservation cabinet	1
8.	Hygrometer	3
9.	Room heater	2
10.	Humidifier	1
11.	Electronic balance	1
12.	Sprayer	1
13.	Generator	1
14.	Refrigerator	1
15.	Cellules	12500
Testing and treating equipment		
1.	Moth crushing unit	1
2.	Moth examination table & stool	1
3.	Centrifuge and accessories	1
4.	Microscope	2
Additional requirements for loose egg production		
1.	Hydrometer	2
2.	Acid treatment bath	1
3.	Egg washing tray	1
4.	Egg drying chamber	1
5.	Egg winnowing machine	1

- (d) procure certified parent seed cocoons from the seed cocoon producers;
 - (e) adhere to the conditions specified in this regulation on production and supply of parent seed cocoons through seed cocoon producers;
 - (f) produce only the kind or variety of hybrid seeds as indicated in the certificate of registration;
 - (g) do not change the venue of the seed production center without the written permission of the Registration Committee;
 - (h) produce the seed adopting the method and procedure maintaining the quality standards as specified in these regulations;
 - (i) conduct seed testing and certify the seed as specified in these regulations;
 - (j) not to refrigerate the crossbreed or acid treated bivoltine silkworm eggs beyond a period of 20 days from one day after the laid on date;
 - (k) not to re-refrigerate the silkworm eggs;
 - (l) maintain upto date record of seed cocoon procurement, quantity of seeds produced, moth examination details and disease incidence and disposal of seeds and submit quarterly reports in Form-1;
 - (m) not to refrigerate the seed cocoons;
 - (j) give free access to the records and products for the Seed Officer or Seed Analyst or any other officer so appointed or authorized by the Registration Committee or Central Silkworm Seed Committee during his visit and assist him to conduct verification of records and tests;
- (3) The silkworm seed producer of Tasar, Muga and Eri shall undergo training for a period of not less than one month in a sericulture institution under State or Central Silk Board or any other recognized institution.

- (4) The seed producer of Tasar, Muga and Eri shall produce a minimum of 5000 Disease free layings per annum by the fifth year of Registration and shall possess the following grainage equipment, namely.
- (a) **Tasar** - Microscope, earthen cups, Egg drying tray, sprayer, thermometer, mortar and pestle, egg laying box / nylon net bags;
 - (b) **Muga** - Cocoon preservation rack, trays, kharika, bamboo cages, thermometer, egg carrying boxes, sprayer, heater, microscope and moth examination set;
 - (c) **Eri** - Cocoon preservation rack, trays, moth cages, net pouches, thermometer, egg laying cabinet, egg carrying boxes, sprayer, heater, microscope and moth examination set;
- (5) The Tasar, Muga or Eri seed cocoons shall be preserved in well ventilated rooms with temperature and Relative Humidity maintained at 26~28°C and 75~80 %, respectively

11. Quality standards for production of mulberry silkworm seeds:

1. The seed producer shall clean, wash and disinfect the grainage rooms, premises and appliances before initiating the grainage operations.
2. The seed producer shall procure and maintain multivoltine and bivoltine parent seed cocoons at the ratio of 2-1 for the preparation of cross breed layings.
3. The seed producer shall preserve the seed cocoons or pupae in a single layer providing temperature of $25 \pm 1^{\circ}\text{C}$, relative humidity of $75 \pm 5\%$ and 10 hours light and 14 hours darkness.
4. The male and female moths shall be separated to prevent inbreeding and to facilitate crossing with the desired females and males for preparation of cross breed layings.
5. When moths are coupled, they shall be allowed for pairing for a minimum of three hours but when male moths are used for

second coupling they shall be rested for at least three hours before they are coupled and the male moths coupled for the second time shall be allowed to pair for at least four hours.

6. The male moths shall not be used for more than two mating or pairing.
7. Male moths shall be preserved at 7 to 9°C to retain their vigor and vitality.
8. The moths shall be handled gently without injuring them.
9. The female moths shall be allowed to lay eggs for twenty four hours on labeled egg sheets for oviposition at 25°C ± 1°C temperature and 75 ± 5% relative humidity in semi dark condition.
10. The seed producer shall observe the following method of mother moth examination, to detect pebrine spores.
 - (a) mother moth samples shall be collected after the moths have laid the eggs and the number of mother moths shall be sampled and examined as below:

(i)	First day	-	All the moths (100 %)
(ii)	Second day	-	20 % of the moths
(iii)	Third day	-	20 % of moths
(iv)	Fourth day	-	All the moths (100 %)
 - (b) while collecting moth samples care shall be taken not to exclude moths with morphological deformities or moths which laid poor or deformed eggs;
 - (c) fresh moths stored after drying at 70°C for six hours shall be used for the examination;
 - (d) twenty moths shall be taken in a crushing jar and 80 ml of 0.6% K₂CO₃ (90 ml for dry moths) solution be added and crushed for two minutes at 10000 rpm and the jars

- shall be left for two minutes to settle before filtering it into centrifuge tubes and the filtrate shall be centrifuged at 3000 rpm for three minutes;
- (e) the supernatant shall be rejected and the sediment be dissolved in 2~3 drops of K_2CO_3 (0.6%) solution and mixed well;
 - (f) a smear from the dissolved solution shall be placed on a glass slide using a glass rod and examined under a microscope with a magnification of 600 X to detect the pebrine spores and five fields in each smear shall be examined.
- (11) If there is any incidence of pebrine disease, the seed production shall be discontinued and the eggs, if any, prepared already, shall be destroyed by burning and all prophylactic measures shall be taken to prevent contamination.
 - (12) The incidence of pebrine shall be informed immediately, in writing, to the jurisdictional Seed Officer with necessary details, the source of procurement, lot number, date of purchase, date of examination, stage of examination and the details of test results.
 - (13) After the examination all the egg sheets shall be physically verified and the deformed eggs and layings having less than two hundred and fifty eggs shall be removed.
 - (14) The disease free eggs shall be surface disinfected by dipping the eggs in two per cent formalin for fifteen minutes.
 - (15) In the case of bivoltine hybrid egg production, cocoons of the component races shall be procured and maintained in equal numbers.
 - (16) The seed producer shall separate male and female pupae.
 - (17) The separated male and female pupae shall be labeled and preserved separately in different rooms.
 - (18) For loose egg preparation, starch coated sheets shall be used for egg laying and the eggs shall be separated and washed thoroughly.

- (19) Bivoltine eggs for immediate brushing shall be treated in hydrochloric acid with specific gravity of 1.075 for 5 minutes at 46°C or specific gravity of 1.1 for 90 minutes at 25°C to prevent diapause.
- (20) The acid treated eggs shall be washed thoroughly in running water to remove the acid traces completely.
- (21) The washed eggs shall be dried and winnowed to remove light eggs and packed on the same day in loose egg boxes containing about 25000 eggs per box or 50 Disease free layings.
- (22) The hibernated bivoltine hybrid eggs shall be cold stored for breaking diapauses.
- (23) The eggs after release shall be incubated and distributed.
- (24) The seed producer shall ensure that,
 - (a) the eggs are disease free and certified;
 - (b) the average number of eggs per Disease free laying are not less than four hundred and fifty;
 - (c) Disease free layings having less than two hundred and fifty eggs are not retained;
 - (d) Disease free layings having deformed eggs or egg clumps are removed;
 - (e) The hatching of incubated eggs are not less than ninety per cent.
- (25) The seed sold by the seed producer shall be authenticated with stamping including name of the grainage, lot number, variety or kind of silkworm seed, quantity, date of laying and probable date of hatching.
- (26) The seed producer shall keep the record of the test results and certify the seed produced by him to be disease free if found fit after the examination and distribute only the disease free certified silkworm seed.

- (27) The seed producer shall reject the lot if he fails to recover a minimum of twenty per cent Disease free layings from the parent seed cocoons procured.

12. Quality Standards for production of Tasar silkworm seed:

- (1) The grainage rooms, earthen cups and other appliances shall be thoroughly cleaned, washed and disinfected.
- (2) The seed cocoons shall be tied in the form of garlands consisting of one hundred cocoons in twenty bunches of five cocoons each and preserved in a hanging position.
- (3) During summer, the temperature and humidity inside the grainage shall be maintained below 35°C and at 40~60%, respectively.
- (4) Seed cocoons shall be periodically screened and sorted.
- (5) The moths shall be allowed to mate after two to three hours of emergence in dark for four to six hours and allowed to lay eggs in earthen cups or in nylon bags.
- (6) Dead and old moths shall be removed every day.
- (7) The nylon bags in which moths are allowed to lay eggs shall be hung in bunches of two in the oviposition rooms at a temperature of 30°C and relative humidity of eighty to ninety percent.
- (8) The eggs shall be collected immediately after seventy two hours.
- (9) Mother moths shall be subjected to microscopic examination individually to detect pebrine incidence and pebrine infected moths and layings shall be destroyed.
- (10) Eggs shall be washed and disinfected by dipping in 0.5% NaOH solution for 40 seconds and washed thoroughly in water and washed eggs shall be dried in shade under fan and after drying shall be packed in muslin cloth bags in units of two hundred grams and labeled.
- (11) During transportation, the eggs shall not be exposed to temperature above 30°C and relative humidity below seventy percent.

- (12) The eggs prepared during the first fortnight of June every year shall be preserved at $8\pm 2^{\circ}\text{C}$ for eight to ten days, if necessary
- (13) The seed producer shall ensure that:
 - (a) the eggs are certified as disease free
 - (b) the weight of eggs per Disease free laying is not less than two grams
 - (c) the hatching of incubated eggs are not less than eighty percent.

13. Quality Standards for production of Muga silkworm seed:

- (1) The grainage rooms and appliances shall be thoroughly cleaned, washed and disinfected.
- (2) Seed cocoons shall be preserved in a single layer at $26-28^{\circ}\text{C}$, 80-85% relative humidity in semi darkness.
- (3) The moths shall be allowed to mate in bamboo cages after two to three hours of emergence in dark for five to six hours.
- (4) The moths shall be decoupled at night and the females shall be allowed to lay eggs in nylon bags for seventy two hours or shall be tied up individually with kharika.
- (4) Individual moth examination shall be done for detecting pebrine incidence and pebrine infected eggs shall be separated and burnt.
- (6) The eggs shall be washed with formalin or bleaching powder solution and packed after drying in shade in muslin cloth bags or wooden frame box in unit of fifty grams and labeled.

14. Quality Standards for production of Eri silkworm seed:

- (1) The grainage rooms and appliances shall be thoroughly cleaned, washed and disinfected.
- (2) The seed cocoons shall be procured and transported only during cooler hours after complete pupation.
- (3) The seed cocoons shall be preserved in single layer at temperature of $26-28^{\circ}\text{C}$ and relative humidity of 75-80% in well ventilated room in semi-darkness.

- (4) The moths shall be preserved in mating cages in dark and allowed for pairing for eight to ten hours.
- (5) Female moths shall be placed in nylon bag or Kharika after decoupling to lay eggs.
- (6) Mother moth examination shall be conducted to detect pebrine incidence.
- (7) Eggs shall be washed in formaldehyde solution, dried and packed in muslin cloth bags or perforated egg boxes in unit of sixty grams and labeled.
- (8) The eggs shall not be exposed to direct sunlight, heat or chemicals and shall be transported only during cool hours.

CHAPTER – 7

15. Conditions and requirements for registration of chawki silkworm rearer:

- (1) The chawki silkworm rearer shall possess a matriculate pass certificate and a certificate course in sericulture from a recognized institution for having undergone training in chawki silkworm rearing for not less than three months in a sericulture institution under State or Central Silk Board or any other recognized institution.

Provided that a chawki silkworm rearer operating the chawki rearing centre before the commencement of these regulations shall not be required to possess the prescribed qualification, but he shall undergo a refresher course training on chawki silkworm rearing for not less than a period of ¹[one week].

- (2) The chawki silkworm rearer shall rear a minimum quantity of 1.5 lakh Disease free layings per annum from the third year of registration.
- (3) The registered chawki rearer shall possess a minimum of two acres of chawki mulberry garden of improved variety with irrigation facility or sufficient mulberry trees.

¹ The words "one month" is substituted by the words "one week" vide notification No. G.S.R. 75 dated 31.3.2015

- (4) The registered chawki rearer shall possess the chawki rearing house with rooms for storing leaf, rearing silkworms and other equipment.
- (5) The registered chawki rearer shall possess the appliances or equipment as specified in Table-2.

Table 2: Equipment/appliances required for setting up chawki rearing centre

Sl. No	Item	Quantity No
1.	Chawki rearing stands	4
2.	Rearing trays	400
3.	Sprayer	1
4.	Leaf chopping device	1
5.	Humidifier	2
6.	Room heater	2
7.	Incubation frame	200
8.	Brushing nets	200
9.	Bed cleaning nets	400
10.	Microscope	1
11.	Feeding stands	6
12.	Iron stand with basin	2
13.	Disinfection mask	1
14.	Wet and dry bulb thermometer	2
15.	Flame gun with cylinder	1
16.	Generator	1

16. Conditions to be complied with by the registered chawki silkworm rearer:

The registered chawki silkworm rearer shall:

- (i) procure only the certified hybrid seed from a silkworm seed producer that meet the quality standards as specified in these regulations;

- (ii) rear and transact only the variety or kind of silkworm as indicated in the certificate of registration;
- (iii) not change the venue of the chawki rearing centre without the written permission of the Registration Committee;
- (iv) rear the chawki worms adopting the following method and procedure, namely.
 - (a) the number of larvae per 100 Disease free layings shall be not less than thirty eight thousand in the case of cross breed and not less than forty four thousand in the case of bivoltine hybrids;
 - (b) the larvae shall be of uniform size and should be free from diseases;
 - (c) maintain a mulberry garden;
 - (d) clean, wash and disinfect the rearing house, rearing appliances and the premises before starting each rearing;
 - (e) collect the silkworm eggs, transport during cool hours and shall protect them from direct sunlight and heat shock during transportation;
 - (f) incubate the eggs at 25°C and eighty percent relative humidity;
 - (g) use tender mulberry leaves for rearing the chawki silkworm larvae;
 - (h) ensure hygiene in the chawki rearing house;
 - (i) provide spacing according to the stage of the larvae;
 - (j) ensure that the larvae settle for moult uniformly and feeding is resumed in time and reject the larvae which do not settle for moult and report if such irregularity in growth and performance is more than ten percent, to the nearest Seed Officer.
 - (k) take suitable prophylactic measures during moulting and resumption of feeding after the moult.

- (l) maintain temperature of $28 \pm 1^{\circ}\text{C}$ and relative humidity of $85 \pm 5\%$ in the rearing house during chawki silkworm rearing.
- (m) transport the chawki worms during cool hours of the day;
- (v) conduct testing of chawki worms as per the following procedure, namely:
 - (a) weak larvae shall be picked during first and second moult and homogenised with 0.6% K_2CO_3 solution using a mortar and pestle;
 - (b) the homogenate shall be allowed to settle for three minutes in a beaker and filtered;
 - (c) the sediment shall be dissolved in a few drops of 0.6 per cent K_2CO_3 solution and the smears shall be examined under a microscope.
- (vi) not refrigerate the eggs or chawki worms;
- (vii) maintain up to date record of hybrid seed procurement, larvae examination details, disease incidence and disposal of chawki worms and submit quarterly reports in Form-2.
- (viii) give free access to the records and products to the Seed Officer or Seed Analyst or any other officer so appointed or authorised by the Committee, during his visit and provide such assistance as may be required;
- (ix) if there is any incidence of disease, he shall discontinue the rearing and reject and destroy the entire batch of larvae and shall take all prophylactic measures to prevent contamination;
- (x) inform immediately such incidence in writing to the Seed Officer and seed producer with the necessary details such as the source of seed, lot number, date of purchase, date of examination, stage of examination and the details of test results;
- (xi) certify the chawki worms as 'tested ok' if found disease free and authenticate with stamping including his name and date of transaction;

CHAPTER – 8

- 17. Conditions and requirement for registration of a dealer in silkworm seed and chawki silkworms:** The dealer shall possess:
- (i) a matriculate pass certificate and a certificate course in sericulture from a recognized institution for having undergone training in handling of seed, cocoons and chawki silkworm larvae for not less than three months in a sericulture institution under State or Central Silk Board or any other recognized institution;
 - (ii) building to store and preserve the silkworm seed;
 - (iii) equipment or appliances comprising of stands, trays, egg storing cages, hygrometer, room heater, humidifier, electronic balance, power sprayer and incubator.
- 18. Conditions to be complied with by the registered dealer in silkworm seed and chawki silkworms:** A registered dealer shall:
- (i) procure and transact certified seed that meet the quality standards as specified under these regulations;
 - (ii) transact only the kind or variety of silkworm seed as indicated in the certificate of registration;
 - (iii) not change the venue or the premises of business without the written permission of the Registration Committee;
 - (iv) transport silkworm eggs or chawki silkworms only during the cool hours of the day;
 - (v) not refrigerate the cross breed and acid treated bivoltine hybrid silkworm seed beyond the permissible safe period of twenty days from one day after the laid on date;
 - (vi) not re-refrigerate the silkworm eggs;
 - (vii) maintain all the details and documents regarding procurement and disposal of seed and submit quarterly reports in Form-3;

- (viii) give free access to the records and products to the Seed Officer during his visit and assist him in conducting verification of records and tests to ensure that the procedure of seed preservation and standards are followed.
- (ix) authenticate the seed sold by him with stamping including name, date of transaction, stage of the seed sold.

CHAPTER – 9

Export and Import of Silkworm Seed

19. Conditions and standards for export and import of silkworm seed:

- (1) No person shall export or import the silkworm seeds unless:
 - (i) he is a registered seed producer or a registered dealer; and
 - (ii) he possesses export or import license as the case may be;
 - (iii) he has obtained prior permission of the Committee or its authorized representative.
 - (iv) he possesses valid quarantine certificate issued by the Quarantine Authority.
- (2) Every exporter or importer shall abide by the terms and conditions of silkworm seed export and import laid down by the Government of India from time to time.
- (3) Every exporter shall export only hybrid silkworm seed, and shall not export silkworm seed of pure races in any form.
- (4) Every exporter shall get the seed permitted for export, inspected by the quarantine authority who shall seal and mark the same as “Inspected and certified” and such seal shall not be altered or mutilated before exporter.
- (5) Every importer of silkworm seed shall submit a report of the performance of the imported seed to the Committee.

CHAPTER – 10

Criteria for constitution of Silk-worm Seed Certification Agency

20. Criteria for Constitution of Silkworm seed certification agency:

- (1) The agency shall have the required building and equipment and meet the requirements and conditions for conducting the testing and certification of seed as laid down by the Committee from time to time.
- (2) The agency shall follow the testing procedure and methods as laid down by the Committee from time to time.
- (3) The agency shall have the required mobility and knowledge of seed production to assess the requirements and conduct inspections for registration of silk-worm seed producers and dealers.
- (4) The agency shall follow the standard sampling and testing procedure for moths as laid down under these regulations.
- (5) The agency shall assess the requirements and conduct inspections for registration of silkworm seed producers and dealers.

CHAPTER – 11

Seed Testing Laboratory

21. Facilities for Central Seed Testing Laboratory:

- (1) The Central Seed Testing Laboratory shall have the following infrastructure and facilities, namely:
 - (i) Laboratory building;
 - (ii) Phase Contrast Microscope;
 - (iii) Cutter Type Mixer with 10000 rpm;
 - (iv) Centrifuge;
 - (v) Cyclomixer;
 - (vi) Refrigerator.

22. Qualifications of Seed Analyst:

- (1) A person to be appointed as seed Analyst shall be a post graduate in Biological Science from a recognized university and shall have a minimum of five years of experience in the field of Sericulture or silkworm seed production:

Provided that preference shall be given to a person who is working in the accredited laboratories and possess the requisite qualification.

23. Qualification of Seed Officer: A person to be appointed as Seed Officer shall possess a Bachelor's Degree in Biological Science from a recognized university and a Post Graduate Diploma in sericulture or five years of experience in the field of sericulture or silkworm seed production.

24. Powers of the Seed Officer: In addition to the powers conferred by section 8H of the Act, the Seed Officer shall exercise the following powers, namely:

- (i) inspect the site, infrastructure facilities, equipment and assess whether the facilities and requirements as specified under the regulations are met by the applicant for registration;
- (ii) inspect the premises of the parent seed producer and ascertain whether the rearer has a valid registration, the Disease free layings are obtained from the designated basic seed farm or grainage, the rearing house and appliances are disinfected, the crop is free from pebrine and crop conforms to the specified standards;
- (iii) take action to destroy the seed crop if found infected with pebrine after informing the farmer about the crop status;
- (iv) inspect and ascertain whether the seed rearer has sold his cocoons to the registered seed producer or dealer or they are rejected for want of demand or for not meeting quality norms and standards;
- (v) inspect the premises of the seed producer and ascertain whether he has a valid registration and all the facilities and requirements;

- (vi) inspect and ascertain whether the procedures of seed production are followed, seed is examined and certified to be free from pebrine disease, reports and documents are maintained up to date, cleanliness and hygiene is maintained and the records are properly maintained;
- (vii) inspect the seed cocoons and records to confirm whether the seed cocoons were purchased only from the registered parent seed rearer;
- (viii) inspect the chawki silkworm crop of registered chawki silkworm rearer and ascertain whether the chawki rearing house and appliances are disinfected, larvae are examined and certified to be free from pebrine disease, reports and documents are maintained up to date and cleanliness and hygiene is maintained and proper records are maintained.

CHAPTER - 12

25. Production, supply, distribution, trade and commerce in silkworm seed:

The Committee may from time to time lay down such conditions and restrictions on the production, supply, distribution, trade and commerce in silkworm seed as may be deemed necessary to promote trade and commerce in silkworm seed of kind or variety.

Form - 1

(See clause (I) of sub-regulation (2) of regulation 10)

Returns to be submitted by the Registered Seed Producer

1	Name of seed producer	
2	Registration No.	
3	Progress for the quarter ending	
4	Seed Production	
	a) No. of lots variety wise	
	b) Quantity of seed cocoons procured variety wise (by number and weight in kg)	
	c) Seed cocoon ratio (male & female parents)	
	d) Quantity of seed produced variety wise i) By number ii) By weight in case of loose eggs	
	e) Average % of pairs	
	f) Average % of Disease free layings	
	g) Average loose egg recovery / kg of seed cocoons	
	h) Incidence of pebrine, if any- furnish lot wise and source wise details & stage of incidence	
	i) % of pairs below norms, lot wise and source wise details	

Declaration

I hereby declare that the above statement is true and correct to the best of my knowledge and information.

Signature of the registered seed producer

Date :

Place:

Form - 2

**Statement to be submitted by the
Registered Chawki silk-worm rearer**

1	Name of the chawki silkworm rearer	
2	Registration No.	
3	Progress for the quarter ending	Year -
		(June / September / December / March)
4	Chawki rearing details (furnish lot-wise & variety-wise)	
	a) Source and quantity of seed purchased (variety- wise by number)	
	b) Quantity of seed chawki reared variety- wise (by number)	
	c) Quantity of chawki silkworms sold variety-wise	
	d) Incidence of diseases, if any, during chawki stage (batch-wise and source- wise details)	

Declaration

I hereby declare that the above statement is true and correct to the best of my knowledge and information.

Signature of the registered chawki silk-worm rearer

Date:

Place:

Form - 3

(See clause (vii) of regulation -18)

**Returns to be submitted by the
Registered Dealer in silk-worm seed and chawki silk-worm**

1	Name of the dealer	
2	Registration No.	
3	Progress for the quarter ending	Year -
		(June / September / December / March)
4	Chawki rearing details (furnish lot-wise variety-wise)	
	a) Quantity of seed purchased (variety wise by number)	
	b) Quantity of seed Chawki reare variety- wise (by number)	
	c) Quantity of chawki silkworms sold variety-wise	
	d) Incidence of diseases, if any, during chawki stage (batch-wise and source- wise details)	
5	Seed details (batch-wise)	
	a) Quantity of seed purchased variety-wise (by number)	

Declaration

I hereby declare that the above statement is true and correct to the best of my knowledge and information.

Signature of the registered dealer

Date :

Place:

संगरोध केन्द्र का नाम और मुहर

निर्यातकर्ता का नाम :

आयातकर्ता का नाम :

अनुमोदन पत्र संदर्भ सं .

केरेबो संगरोध निरीक्षक/वैज्ञानिक का नाम

(रेबीप्रौप्र, बेंगलूरु / केरेअवप्रसं, बहरमपुर/केतअवप्रसं, रांची/केमूएअवप्रसं, लाहदोईगढ)

डीआईए का हस्ताक्षर

उपाबंध – (ix)

पदनामित निरीक्षण प्राधिकरण द्वारा आयातकर्ता के स्थान पर रेशम कीट डिम्बक के लिए प्रवेशोत्तर संगरोध (पीईक्यु) परीक्षण रिपोर्ट

क्रम सं	बैच संख्या	प्रजाति का नाम	कूर्चन तारीख	परीक्षण की चरण	परीक्षित नमूनों की कुल संख्या	संक्रमित नमूनों की कुल संख्या	संक्रमण की प्रतिशतता

निर्यातकर्ता का नाम :

आयातकर्ता का नाम :

सीमाशुल्क अनुमोदन पत्र सं :

डीआईए की सिफारिशें

डीआईए का नाम और मुहर

डीआईए का हस्ताक्षर

परीक्षण रिपोर्ट की संसूचना

“नमूना संक्रमित होने पर परीक्षण रिपोर्ट को रजिस्ट्रीकरण समिति और सदस्य सचिव, केन्द्रीय रेशम बोर्ड को संसूचित किया जाना चाहिए। ऐसे मामलों में, डीआईए तुरंत कार्रवाई करेंगे और सामग्री नष्ट करने की व्यवस्था करेगा। ”

MINISTRY OF TEXTILES

NOTIFICATION

New Delhi, the 13th December ,2021

G.S.R. 861(E).—In exercise of the powers conferred by section 13A of the Central Silk Board Act, 1948 (LXI of 1948), the Central Silk Board with the previous approval of the Central Government, hereby makes the following regulations further to amend the Central Silk Board Silk-worm Seed Regulations, 2010, namely:-

1. Short title and commencement.--- (1) These regulations may be called the Central Silk Board Silk-worm Seed (Amendment) Regulations, 2021.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Central Silk Board Silk-worm Seed Regulations, 2010 (hereinafter referred to as the said regulations), after regulation 19, the following regulation shall be inserted, namely-

"19A. Export and import of silk-worm seed and quarantine procedures.-The export and import of silk-worm seed and its quarantine procedures shall be as specified in the Schedule annexed to these regulations."

3. In the said regulations, after Form 3, the following Schedule shall be inserted, namely:-

“Schedule”

(see regulation 19A)

EXPORT AND IMPORT OF SILKWORM SEED AND QUARANTINE PROCEDURES

Introduction:

Quarantine is a measure to ensure that the plants and animals and their products which move across international boundaries are free of pest and diseases, so as to prevent introduction and spread of pests and diseases in the region. It aims to protect agriculture / sericulture from avoidable damage by hazardous organisms, which may have been inadvertently introduced into a particular country. Quarantine measures are strictly followed while importing and exporting plants, fruits, seeds, animals, insects, microbe culture, etc., from one country or region to another. No progressive country allows the unrestricted import of biological materials or their unrestricted movement from one area to another within its own territory. Hence, the import of any biological material is regulated due to the risk of introduction of pests and diseases. Under sanitary or phytosanitary measures of WTO and GATT, 1994, it has been repeatedly emphasized to protect human or animal life or animal health within the territory and countries during import and export.

(I) Quarantine procedures for Export of silkworm eggs:-

The liberalisation policy of the Government for privatizing the egg production industry has paved the way for establishing seed production centres by many private persons and agencies. Some well organized private sector industries are already exporting the silk-worm eggs and there is no binding under quarantine at present with regard to export of these silk-worm eggs for disease freeness. Such type of unrestricted export or import of silk-worm eggs may lead to occurrence and spread of disease in the country of import. It affects the export and reputation of the country. Hence, all the export and import of silk-worm eggs have to be strictly regulated to ensure that there is no compromise on quarantine procedures.

(A) General conditions and essential requirements for export

- (I) Exporter shall be a person registered with the Registration Committee. The exporter shall apply in the prescribed form in **Annexure-(i)**, for the export permit, to the Member Secretary, Central Silk Board, Bangalore along with the stipulated fee and obtain the Export Permit in **Annexure-(ii)**.
- (II) The exporter shall submit an undertaking in **Annexure-(iii)** along with the application.
- (III) The exporter shall obtain necessary quarantine certificate in **Annexure-(iv)** for each consignment on charge basis.
- (IV) Quarantine inspection for export shall be carried out and certificate issued only by the technically qualified and duly authorised officers working in institutions established or accredited by the committee subject to fulfillment of the conditions laid hereunder:
- (V) No consignment shall be exported without the quarantine certificate by the authorised person and the export permit issued by the competent authority.
- (VI) All the silk-worm seeds meant for export shall be prepared as loose grains of 50 layings, of uniform weight as per the standard prescribed in boxes.
- (VII) Only authorised hybrids are permitted for export.
- (VIII) The exporter shall deliver the entire consignment at the specified quarantine centre, at his own expenses as per the conditions laid down.
- (IX) The exporter shall arrange and present the products for the purpose of inspection and drawing samples to the authorised person in accordance with the specified sampling schedule.

- (X) The exporter shall extend labour and material support required for handling the boxes.
- (XI) The Quarantine Officer shall seal the consignment after inspection and such seal shall bear the markings as “inspected and certified”.
- (XII) After inspection, the exporter shall clear the consignment on the same day from the premises of the inspection laboratory.
- (XIII) After certification, the exporter shall not in any manner alter the contents of the consignment and shall not distort or damage the quarantine seal.
- (XIV) The Quarantine Centre shall bear no responsibility to any infestation and infection that may occur after the consignment has been inspected and duly certified.
- (XV) No suit, prosecution or other legal proceedings shall lie against any person, for anything done in good faith or intended to be done under quarantine law or procedure.

(B) Quarantine testing laboratory

The fully equipped testing laboratory shall be arranged at the Quarantine Station to facilitate effective implementation of quarantine regulations. The quarantine testing shall be done scientifically adopting centrifugal method of detecting the pebrine disease in the exportable sample eggs. The equipment for testing are:

(a) Equipment

Sl.No	Equipment
(1)	(2)
1.	Precision incubator with RH facilities
2.	Pestle and Mortar / Tissue homogeniser
3.	Mixer with jars
4.	Eppendorf Centrifuge (1.5 / 2 ml) & tubes
5.	Centrifuge (15 / 100 ml tube capacity) & tubes
6.	Binocular Phase contrast Microscopes
7.	Cyclomixer
8.	Plastic Beakers
9.	Funnels 10 cm diameter
10.	Thin glass rod
11.	Microslides
12.	Coverslips
13.	Measuring cylinder
14.	Dropper / drop bottles
15.	Plastic Bucket
16.	Plastic Basins
17.	Testing Table
18.	Testing stools
19.	Lighting arrangement for testing
20.	Muslin cloth
21.	Sterilized cotton
22.	Clinical Sterilizer
23.	Sprayer for disinfection, disinfection mask

24.	Hand gloves, apron, magnifying glass, forceps, scissors, sampling scoop
25.	Micropipettes
26.	Chawki rearing facilities attached with small mulberry garden.

(b) Chemicals

Sl.No	Name of the chemical
(1)	(2)
1.	Potassium Carbonate
2.	Bleaching Powder
3.	General disinfectant
4.	Pure Distilled Water

(C) Quarantine testing procedure for silk-worm eggs**(a) Individual egg testing**

- (I) select eggs with depression or abnormal colour, shape and size
- (II) crush selected eggs after suspending them in 0.25% K_2CO_3 solution for 10 seconds on a clean glass slide by pressing a 12 mm cover glass over them.
- (III) examine using a phase contrast microscope at 600 x magnification in bright light.
- (IV) examine a minimum of 5 microscopic fields.

(b) *En masse* egg testing

collect the silk-worm eggs for testing as per sampling plan as provided below:

Sampling Plan

No. of Egg Boxes	Boxes to be sampled	Total Quantity of eggs to be tested (g)
(1)	(2)	(3)
1-5	All	1
6-10	5	1
11-50	10	2
51-100	20	4
101-200	30	6
201-300	40	8
301-400	50	10
401-500	60	12
501-600	70	14
601-700	80	16
701-800	90	18
801-900	100	20
901-1000	110	22
1001-2000	120	24
2001-3000	145	29
3001-4000	195	39
4001- 5000	225	45
5001- 7000	250	50
7001- 10000	310	62
10001- 20000	425	85

- (I) crush the eggs collected as per the sampling plan using mortar and pestle with 0.5% K_2CO_3 solution, at the rate of 4 parts K_2CO_3 per one part of eggs.
- (II) allow the homogenate to settle for 3 minutes.
- (III) filter the homogenate through a thin layer of absorbent cotton/muslin cloth
- (IV) centrifuge for 3 min at 3000 rpm.
- (V) add a few drops of water/ 0.5% K_2CO_3 solution and stir on a cyclomixer to disperse the sediment.
- (VI) examine under a bright field or phase contrast microscope at 600 x.
- (VII) take 2 smears/sample and observe at least 5 microscopic fields/smear.

(c) Hatching test of eggs

A few eggs (50 to 100 eggs) from the egg samples drawn are to be kept for incubation by following the standard incubation methods. After hatching, percentage of hatching, unfertilized eggs and unhatched eggs (dead eggs) are to be recorded.

(d) Inspection of chawki larvae

Chawki larvae from the sample eggs brushed from the tested consignment are to be inspected during 3rd instar as per the standard inspection method.

- (I) homogenize sample larvae with 0.6% K_2CO_3 solution in a mortar and pestle.
- (II) pour the homogenate into a beaker and allow for settling for 3 min.
- (III) filter the homogenate through a thin layer of absorbent cotton/muslin cloth.
- (IV) dissolve the sediment in a few drops of 0.6% K_2CO_3 solution.
- (V) examine the smear under a microscope as indicated above.

(e) Disinfection and cleaning

After quarantine testing of the sample eggs is over, the room floor is swabbed with general disinfectant. All the equipment used for testing have to be disinfected properly. The glassware used for testing should also be sterilized and general hygiene to be maintained.

(D) Issue of Quarantine Certificate

Quarantine Certificate is the certificate to ensure that the eggs which are intended for export are free from pebrine disease or any other disease or pests. If the sample eggs tested are free from pebrine disease, the Quarantine Certificate shall be issued by the DIA [*Silkworm Seed Technology Laboratory (SSTL) for southern zone & Maharashtra & Odisha & Central Sericultutal Research & Training Institute (CSRTI), Berhampore for the remaining States in the case of Mulberry silkworm*]. The DIA for Tasar silk-worm shall be Central Tasar Research & Training Institute (CTR TI), Ranchi and that for Eri and Muga silkworm shall be Central Eri and Muga Research & Training Institute (CMERTI), Lahdoigarh. The Scientists of Silk-worm Pathology Laboratories of the respective Institutes are authorized as quarantine inspecting officers, who conduct the quarantine inspection at their Laboratory.

(E) Training of inspecting officials

The inspecting officials of the quarantine station shall be trained in the latest examination technology and correct identification of pebrine spores at different developmental stages of silk-worm viz., egg, larva, pupa and moth. The training shall be imparted by Silk-worm Seed Technology Laboratory, Central Silk Board, Bangalore. The refresher training course shall also be conducted to update knowledge to the officers / officials, whenever it is felt necessary.

(F) Duties and functions of quarantine officers

(a) Designated Inspecting Authority (DIA)

It is the responsibility of the Designated Inspecting Authority to conduct quarantine screening. There will be four DIAs, the Head, SSTL, Bangalore, Karnataka and the Director, CSRTI, Berhampore, West Bengal, the Director, CTR TI, Ranchi, Jharkhand, and the Director, CMERTI, Lahdoigarh, Assam. The Scientists working in Silkworm Pathology Laboratory, in the respective Institutes shall function as Authorised Quarantine Inspecting Officers, who can conduct the test and take decisions as per the conditions laid down in the quarantine procedures. Authorised officers shall be well-versed with the procedure associated with silk-worm disease diagnosis. The authorized officer shall conduct the microscopic test in the laboratory or exporters' at place where the facility has been provided by the

exporter. If pebrine is noticed during scrutiny, DIA or the officer authorised by him is empowered to destroy the batch immediately and inform the concerned by marking copies of the test report and action taken. No exporter shall export the consignment without obtaining the quarantine certificate from DIA.

(b) Authority to recommend for export or import of seed

The Member Secretary, Central Silk Board is the sole authority to recommend for export or import of seed. The Member Secretary shall see and examine cases individually to safeguard the interest of the sericulture industry in granting or declining the request for import or export of silk-worm seed. This is based on policy decision, as well as safeguarding the quality of seed and reputation of the company or organisation.

(II) Quarantine procedures for Import of silk-worm seed:-

(A) Need for introducing quarantine regulations while import

The exchange of germplasm and other genetic materials and also bringing of live materials such as eggs, larvae and cocoons from abroad by the scientists or technologists during their visit for breeding purpose or other scientific pursuits have become a common practice. With rapid expansion of sericulture across the country, there is a great increase in the requirement of silkworm seed. The Government policy of encouraging privatisation in sericulture industry, has paved the way to the establishment of many farms and seed production centres by private entrepreneurs. Reputed foreign silk-worm seed firms are already in collaboration with domestic private companies and high yielding silk-worm seeds are exported to India.

In the free trade regime, quality of silk, yield potential and farm income can be enhanced and bivoltine sericulture in India can be further promoted by importing high quality silk-worm hybrid eggs with high yield potential which are suitable for Indian agro-climatic condition. At present, strict quarantine procedures are not followed at the time of import of silk-worm eggs. Any such continued laxity in application of quarantine measures may contribute to the danger of introduction and spread of silk-worm diseases. Hence, the quarantine regulations shall be imposed for the import of any type of silk-worm eggs or live cocoons to avoid the risk of inviting diseases.

In order to protect the agricultural and forest species of the country, the plants and animal wealth (cultivated plants and domesticated animal wealth) in particular, the Government of India has regulated the imports of plants and plant products by enforcing an Act known as “Destructing Insects and Pests Act, 1914”, and established the Directorate of Plant Protection, Quarantine and Storage to implement the various regulations under the said Act. The quarantine measures are rigidly implemented at all entry points such as International airports, seaports and land frontiers to regulate the import of plant materials. Such a quarantine system is non-existent with regard to sericulture products. In the absence of strict quarantine system, some pests invade new areas and establish there in due course of time. One such example in the field of sericulture is spread of uzifly (*Exorista bombycis*), a well known parasite of silk-worm *Bombyx mori* L. from West Bengal to Karnataka through unscrupulous and unauthorised trade of seed cocoons in 1980. Since then, the parasite has established itself causing unprecedented damage to cocoon crop. There were also several other instances of continuous occurrence of pebrine disease in the hybrid silk-worm eggs imported from foreign countries to the Union territory viz., Jammu and Kashmir for commercial exploitation, threatening the very existence of sericulture.

(B) Quarantine regulations on importing silk-worm seed

Quarantine measures shall help to regulate the import of silk-worm eggs from other countries and also to intercept the entry of silk-worm diseases, so that while importing seeds, there is absolutely no compromise on quarantine procedures. The general conditions are:

- (a) Importer shall be a person registered with the Registration Committee.
- (b) He shall obtain the import permit from the Member Secretary, Central Silk Board by applying in the stipulated format [Annexure-(v)] along with the requisite fee for import of seed.
- (c) He shall submit an undertaking for post-entry quarantine (PEQ) inspection in the proforma as per Annexure-(vi)
- (d) No silk-worm seed shall be imported without a valid Import Permit [Annexure -(vii)] and quarantine certificate issued by the country of origin.
- (e) A sample of all the lots or batches of the seed imported to the country shall be sent to the nearest Central Seed Testing Laboratory (CSTL) for conducting tests for ascertaining disease freeness as per the procedures laid down for issue of quarantine test report [Annexure-(viii)].

- (f) All importers of seed shall submit a report of the performance of the imported seed in India [**Annexure- (ix)**] to the Registration Committee.
- (g) Such imported seed (eggs) shall not be put to commercial use till it is certified by the testing unit as safe and free from any pests and diseases.
- (h) The importing agency shall provide the original certificate issued by the designated authority of exporting country at the time of getting the post import quarantine.
- (i) The importer shall obtain necessary quarantine test report in **Annexure- (viii)** for each consignment.
- (j) In case the consignment on arrival shows the presence of pebrine disease, the entire consignment shall be rejected and destroyed.
- (k) The imported consignment of eggs shall be stored or incubated properly by the **importer** until the quarantine clearance is given.
- (l) The imported eggs shall not be distributed to the farmers, but shall be chawki reared by the importer to facilitate PEQ inspection, as per the conditions laid by the competent authority.
- (m) The importer shall inform in advance the Designated Inspecting Authority having jurisdiction, about the time and date of brushing of such material.
- (n) The DIA shall permit the distribution of worms to the farmers by the importer, if they are found free from pebrine disease.
- (o) If the worms in the PEQ inspection are found to be affected by pebrine disease, the DIA shall order the destruction and the importer shall destroy the worms of the affected lot.

(C) Quarantine testing centre

The Director / Officer In-charge of Silk-worm Seed Technology Laboratory, CSB, Bangalore or any other Institution will be the Designated Inspecting Authority (DIA) for the eggs imported by the Companies located in Southern States of India, viz., Karnataka, Tamil Nadu, Andhra Pradesh and Kerala, in addition to the States of Maharashtra and Odisha. The Director / Officer In-charge of CSRTI, Berhampore, will be the Designated Inspecting Authority (DIA) for the remaining States. The DIA for Tasar silk-worm shall be Central Tasar Research & Training Institute (CTRTI), Ranchi and that for Eri and Muga silkworm shall be Central Eri and Muga Research & Training Institute (CMERTI), Lahdoigarh. The Scientists of Silk-worm Pathology Laboratories of the respective Institutes are authorised as quarantine inspecting officers, who conduct the post entry quarantine inspection at the place of importer during chawki rearing.

(D) Procedure of quarantine inspection at port of entry and importing agency

Sampling and testing procedure of silk-worm egg to be adopted by the quarantine authority at the port of entry are same as those described for export of silk-worm eggs.

(E) Post entry quarantine facilities by importer

The importer shall make arrangement for pebrine testing facilities at his place to conduct post-entry quarantine during chawki rearing. The required equipment and chemicals shall be procured and facilities created at his own cost.

(F) Testing procedure of young silkworm larvae at the place of importer (PEQ inspection)

Weak, undersized and unsettled larvae are collected once in each instar. About 0.5, 1.0 and 2 g of larvae during 1st, 2nd and 3rd instar, respectively shall be drawn for investigation. The larvae shall be thoroughly crushed by adding 0.6% K₂CO₃ solution followed by standard centrifugal method of examination for the diagnosis of pebrine.

(G) Training for inspecting officials

The inspecting officials of the Quarantine Station and Designated Inspecting Authorities shall be scientifically trained in latest examination technology and correct identification of pebrine spores at egg and young larval stage. The training shall be imparted by Silkworm Seed Technology Laboratory, Central Silk Board, Bangalore. The refresher training courses shall also be conducted to provide the knowledge of latest technology to officials whenever felt necessary.

(H) Duties and functions of quarantine station

The Head, SSTL, Bangalore and the Director, CSRTI, Berhampore, shall function as DIAs who shall be assisted by the scientists of Silk-worm Pathology Laboratory of the respective stations. The scientists shall apprise the DIA about the larval test results during the *first three* stages of rearing. The DIA shall take necessary action to destroy the lots if pebrine is reported. In case the lots or batches are found disease free, the DIA shall issue the clearance certificate to the importer for continuation of the rearing.

[F.No25011/4/2019-Silk]

SANJAY SHARAN, Jt. Secy.

Note: the Central Silk Board Silk-worm Seed Regulations,2010 were published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub –section (i),vide notification number G.S.R. 194(E),dated the 16th March,2010 and last amended vide notification number G.S.R. 75 dated the 31st March,2015.

Annexure: (i)**APPLICATION FOR PERMIT TO EXPORT SILK-WORM SEEDS**

From

M/s. _____

To

The Member Secretary

Central Silk Board

Ministry of Textiles, Govt. of India

CSB Complex, BTM Layout, Madivala

BANGALORE – 560 068.

Sir,

Please find my application seeking the permit authorising the export of silk-worm seed:

(IN BLOCK LETTERS)

1	Name and address of Exporter	
2	Name of variety (hybrid to exported)	
3	Quantity of eggs to be exported	
4	Name and address of importing agency / company	
5	Approximate date / month of air lifting of consignment	
6	Name of Airport	
7	Number and date of last import license for export of commercial seed	
8	Name and postal address of designated inspection authority (DIA) under whose supervision the eggs shall be exported	

DECLARATION:

I declare that the information furnished is correct to the best of my knowledge and belief. I undertake to produce the consignment for quarantine inspection to any designated inspection authority as specified in the permit.

Place

Date

Signature of the Exporter or his

Authorised agent

NOTE

The exporter or his authorised agent shall produce this permit for inspection by the Officer Incharge of the Quarantine Station or an Officer authorised by him at the time of producing the consignment for quarantine certificate. He shall intimate immediately to the issuing authority regarding change of address, if any.

Annexure: (ii)

CENTRAL SILK BOARD
MINISTRY OF TEXTILES, GOVT. OF INDIA
BTM LAYOUT, MADIVALA, BANGALORE – 560 068
PERMIT FOR EXPORT OF SILK-WORM SEED FOR
COMMERCIAL REARING

Permit No:**Valid up to:**

1. Permission is hereby granted to _____
 _____ (Name and address of
 exporter or his authorised agent) to export by air / sea / land the silk-worm seeds herein specified produced in
 _____ from (Name and
 address of the consigner) through air / sea, port / land custom station, _____
 _____ as per the following details:

1	Name of port / station	
2	Name of variety	
3	Quantity of eggs (Number or weight)	
4	Name and address of the consignee	
5	Country and locality to where the seeds are exported	
6	Foreign port of arrival	
7	Name and date of registration of firm	

2. The consignment of seeds should be free from diseases, accompanied by Disease Free Certificate issued by the quarantine authority.

3. This permit is not transferable.

Place :

Date :

Signature of the Competent Authority

(SEAL)

Annexure-(iii)

PROFORMA FOR FURNISHING THE UNDERTAKING
BY THE EXPORTER

From

M/s. _____

To

The Member Secretary

Central Silk Board

Ministry of Textiles, Govt. of India

CSB Complex, BTM Layout, Madivala

BANGALORE – 560 068.

Sir,

Sub: Undertaking for export of commercial silk-worm eggs.

On behalf of M/s., I
 hereby give the following undertaking for the export of commercial silk-worm seeds.

1. An application will be made sufficiently in advance to you for issue of "Export Permit" for export of silk-worm seed from this organization and no export will be effected without the receipt of "Export Permit" as per the conditions stipulated by Central Silk Board.
2. The shipment of the consignment will be covered by quarantine certificate with additional declaration specified in the export permit.
3. The exportable consignment will be presented to the Officer Incharge, Silk-worm Seed Quarantine Station for quarantine screening / inspection.
4. I / We hereby undertake to produce before the inspection team records / registers relating to egg production and mother moth examination measures undertaken for scrutiny.
5. I / We agree to undertake the hygiene and mother moth examination procedures for the consignment as suggested by the Central Silk Board.
6. I / We hereby convey our "No Objection" to the destruction of any lot by the inspection officer if found infected and agree that the recommendations of the inspection team shall be final and no appeal in this regard would be made to any authority.
7. In the case of contravention of any of the conditions laid down above, my application for export of silk-worm seed in future need not be entertained.

Place :

Date :

Signature of the Applicant

Annexure: (iv)

CENTRAL SILK BOARD
(Ministry of Textiles, Govt. of India)

No.

Date:

QUARANTINE CERTIFICATE

To

The Officer Incharge

Quarantine Organisation of _____

DESCRIPTION OF THE CONSIGNMENT

1	Name and address of Exporter	
2	Declared name and address of consignee	
3	Name and description of packages	
4	Declared means of conveyance	
5	Declared port of Entry / custom station	
6	Name of produce & quantity declared	
7	Commercial & Generic names of the eggs	

This is to certify that the silk-worm eggs described above have been inspected and found free from *pebrine disease or any other disease or pests* and that they are considered to conform with the current Sanitary regulations of the importing country.

Additional declaration:

		Authorized Signatory
Place: Date:	(Seal of the organisation issuing the Certificate)	

Note: No financial liability with respect to this certificate shall attach to

(Name of the silkworm seed quarantine organisation)

Annexure: (v)

APPLICATION FOR PERMIT TO IMPORT SILK-WORM SEEDS

From

M/s. _____

To

The Member Secretary

Central Silk Board

CSB Complex, BTM Layout, Madivala

BANGALORE – 560 068.

Sir,

Please find my application seeking the permit authorizing the import of silk-worm seed:

(IN BLOCK LETTERS)

1	Name and address of importer	
2	Variety (hybrid / pure to be imported)	
3	Quantity of eggs to be imported	
4	Name and address of agency / company exporting	
5	Name and address of the consigner	
6	Country in which seeds are produced	
7	Foreign port of shipment	
8	Approximate date of arrival of consignment in India	
9	Name of airport / seaport / land customs stations in India	
10	Name and date of registration of firm, rearing licence and recommendation for import from /State Director of Sericulture / Central Silk Board (Photo copy to be attached).	
11	Number and date of last import licence for commercial import of seed (Photocopy to be attached).	
12	Exact locality and its postal address where imported eggs will be reared.	
13	Name and postal address of Designated Inspection Authority (DIA) under whose supervision the eggs imported shall be reared.	

DECLARATION

I declare that the information furnished is correct to the best of my knowledge and belief. I undertake to produce the consignment for quarantine inspection to any designated inspection authority as specified in the permit.

Place

Date

Signature of the applicant or his
authorised agent

NOTE

1. The importer or his authorized agent shall produce the import permit for inspection by the Officer Incharge of the Quarantine Station or an Officer authorised by him at the time of arrival of consignment at the port of entry.
2. The importer shall intimate immediately to the permit issuing authority of any change of address.

Annexure: (vi)

**PROFORMA FOR FURNISHING THE UNDERTAKING
BY THE IMPORTER FOR POST ENTRY QUARANTINE INSPECTION**

From

M/s. _____

To

The Member Secretary

Central Silk Board

Ministry of Textiles, Govt. of India

CSB Complex, BTM Layout, Madivala

BANGALORE – 560 068.

Sir,

Sub: Undertaking for import of commercial silk-worm eggs.

On behalf of M/s., ...I

..... hereby give the following undertaking for the import, growing and post quarantine inspection of commercial silk-worm seeds.

1. An application will be made sufficiently in advance to you for issue of "Import Permit" for import of silk-worm seed for this organisation and no import will be effected without the receipt of "Import Permit" as per the conditions stipulated by the Central Silk Board.
2. The consignment(s) shall be covered by quarantine certificate with additional declarations specified in the import permit.
3. The imported consignment will be presented to the Officer Incharge, Silk-worm Seed Quarantine Station at the port of entry for quarantine screening and inspection.
4. After release from the customs and Silk-worm Seed Quarantine Station concerned, the consignment will be reared in the area located at _____ Taluk / Tahsil _____ Dist., _____ in the State of _____ (Block letters).
5. The date of brushing of the seeds, hatching percentage, crop protection measures adopted, will be intimated to you within three days from the brushing of works.
6. We propose to distribute the worms in an area located at _____ Taluk / Tahsil _____ Dist., _____ in the State of _____.

7. I / We hereby undertake to provide the required testing facilities to the officers nominated by the Central Silk Board, for post-entry quarantine inspection of the worms raised from the imported material.
8. I / We hereby undertake to produce before the inspection team records and registers relating to the receipt of the seeds, details of brushing, hatchability records, crop protection measures undertaken and distribution pattern, etc., for scrutiny.
9. No part of the consignment shall be given or donated to any individual or organisation without the quarantine clearance of the competent authority.
10. I/We hereby agree to undertake the crop protection measures for the consignment as suggested by the Inspection team.
11. I / We hereby convey our "No Objection" to the destruction of any lot by the inspection team if infected and agree that the recommendations of the inspection team shall be final and no appeal in this regard would be made to any authority.
12. The cost of destruction of the infected silk-worms by the inspection team will be borne by me and no objection will be raised on account of this.
13. In the case of contravention of any of the conditions laid down above, my application for import of silk-worm seed in future need not be entertained.

Place:

Date:

Signature of the Applicant

Name

Annexure: (vii)

CENTRAL SILK BOARD

MINISTRY OF TEXTILES, GOVT. OF INDIA

BTM LAYOUT, MADIVALA, BANGALORE – 560 068

PERMIT FOR IMPORT OF SILK-WORM SEED FOR

COMMERCIAL REARING

Permit No:

Valid up to:

1. Permission is hereby granted to _____
 _____ (Name and address of importer or his authorised agent) to
 import by air / sea / land the silk-worm seeds herein specified produced in _____
 _____ from (Name and address of the consigner) through
 air / sea, port / land custom station, _____ as per the following details:

1	Name of port / station	
2	Name of variety	
3	Quantity of eggs (Number or weight)	
4	Name and address of Consigner	
5	Country and locality where the seeds are produced	
6	Foreign port of shipment	
7	Approximate date of arrival of consignment in India	
8	Name of airport / seaport / land customs stations in India	
9	Name and date of registration of firm	
10	Exact locality and address where imported eggs will be reared.	

Name of the Exporter:

Name of the Importer:

Customs Clearance letter No:

Recommendation of the DIA

Name and Seal of the DIA

Signature of the DIA

Communication of Test Report

“The test report shall be communicated to the Registration Committee and the Member Secretary, Central Silk Board, if the sample is found infected. In such cases, the DIA would act immediately and arrange for the destruction of the material”.