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(Extraordinary)**

**Government of India
Ministry of Textiles**

New Delhi, 16th March, 2010

Notification

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;

(e) “**Form**” means forms annexed to these regulations;

(f) “**seed producer**” means a person engaged in the production of silkworm seed and registered under section 8E of the Act;

(g) “**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 seed cocoon 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 one month.

- (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.

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) 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 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 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 refrigerate the seed cocoons;
 - (n) 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 K₂CO₃ (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±2°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°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.
- (5) 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°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 one month.

(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.

(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 K₂CO₃ 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 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 requirement 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	Year .- (June / September / December / March)
4	<u>Seed Production</u>	
	a) No. of lots variety-wise	
	b) Quantity of seed cocoons procured variety-wise (by number & 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 (kg)	
	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

(See clause (vii) of regulation 16)

Statement to be submitted by the Registered Chawki silkworm 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 silkworm rearer

Date -

Place -

Form - 3
(See clause (vii) of regulation -18)
Returns to be submitted by the
Registered Dealer in silkworm seed and chawki silkworm

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 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)
5	Seed details (batch-wise)	
	a)	Quantity of seed purchased variety-wise (by number)
	b)	Quantity of seed sold 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 .-

(F.No.25011/6/2007-Silk)

Sd/xxxx

(Bhupendra Singh)

Joint Secretary to the Govt. of India

The General Manager,
Government of India Press,
Mayapuri, Ring Road,
New Delhi (with Hindi version).