

SEEDS (CERTIFICATION AND STANDARDS) REGULATIONS, 1973 (LI 802)

IN exercise of the powers conferred on the Commissioner responsible for Agriculture by section 8 of the Seeds (Certification and Standards) Decree, 1972 (N.R.C.D. 100) these Regulations are made this 16th day of January, 1973.

PART I—NATIONAL SEED COMMITTEE

Regulation 1—National Seed Committee.

(1) There is hereby established a National Seed Committee referred to in these Regulations as "the Committee" which shall consist of the following persons:—

- (a) the Secretary responsible for Agriculture;
- (b) Deputy Director of Agriculture;
- (c) Officer-in-Charge of the Ghana Seed Inspection Unit;
- (d) a representative of the Crop Research Institute;
- (e) a representative of the Seed Industry;
- (f) a representative of the Seed Growers Association; and
- (g) a representative from the Ministry of Agriculture who shall be Member-Secretary.

[Subreg.(1) substituted by LI 1311 reg.(a).]

(2) The members of the Committee shall appoint one of their number as chairman of the Committee.

(3) The Chairman shall preside at all meetings of the Committee except that in his absence a member of the Committee appointed by the members present from among themselves shall preside.

(4) The Committee shall ordinarily meet for the despatch of its business at such times and places as the Chairman may determine, but shall meet at least once in every quarter.

(5) The quorum at every meeting of the Committee shall be five.

(6) The Committee shall regulate its own procedure.

Regulation 2—Functions of Committee.

The functions of the Committee are to—

(a) advise the Ghana Seed Inspection Unit on:—

- (i) working procedure;
- (ii) rules and regulations;
- (iii) field and Seed Standards;
- (iv) seeds varieties eligible for Certification;
- (v) fees and charges for services performed by the Unit;

(b) hear appeals from Seed owners who may be dissatisfied with the results of the testing and grading of their seeds;

(c) provide rules and procedures for appeals under sub-regulation (b) of this regulation;

(d) publish annually a list of recommended varieties of crops grown in Ghana and submitted. [Reg.2 substituted by LI 1311 reg.(b).]

Regulation 3—Annual Publication of Committee.

The Committee shall include in its annual publication of recommended varieties of crops under regulation 2 (d) of these Regulations the following:—

- (a) a statement of the origin of the variety;
- (b) the suggested ecological region of growth of the variety;
- (c) a description of the morphological, physiological, cytological, pathological, entomological, chemical characteristics of the variety and other important characteristics which distinguishes it from other varieties;
- (d) evidence of performance of the variety, including data on yield, insect or disease resistance, appropriate check of the varieties;
- (e) the method of maintaining breeder, foundation or registered seeds;
- (f) the recommended generation of increases and a description of any special requirements or limitations which must be adopted to maintain varietal characteristics.

PART II—SEEDS CERTIFICATION AND STANDARDS

Regulation 4—Certification of Seed.

There shall be for the purposes of certification of seeds the following classes of seed:—

- (a) breeder seed;
- (b) foundation seed;
- (c) registered seed; and
- (d) certified seed.

Regulation 5—Breeder Seed.

(1) Breeder seed is seed directly controlled by the originating, or in certain cases, the sponsoring plant breeder, institution or firm and which supplies the source for the initial and recurring increases of foundation seed.

(2) Breeder seed shall be issued for the production of foundation seed only and shall be identified with a white tag issued by the certifying authority.

Regulation 6—Foundation Seed.

(1) Foundation seed is the progeny of breeder seed and must be so handled as to maintain such specific genetic identity and purity as the certifying authority may prescribe, and shall be identified with a white tag issued by the certifying authority. [Subreg.(1) amended by LI 1311 reg.(c).]

(2) Foundation seed shall be produced only by or under the direct supervision of an agronomist on—

- (a) an experimental station; or
- (b) a farm designated as part of an experimental station with a qualified plant breeder in charge of the seed production; or
- (c) a farm operated on contractual basis with and under the direct supervision of a plant breeder.

Regulation 7—Registered Seed.

(1) Registered seed is the progeny of foundation seed and must be so handled as to maintain such genetic identity and purity as the certifying authority may prescribe.

(2) Registered seed shall be identified with a purple tag issued by the certifying authority.

Regulation 8—Certified Seed.

(1) Certified seed is the progeny of foundation seed or registered seed and must be so handled as to maintain such satisfactory genetic identity and purity as the certifying authority may prescribe.

(2) Certified seed shall be identified with a blue tag issued by the certifying authority. [Subreg.(2) amended by LI 1311 reg.(d).]

(3) Seeds reproduced from certified seed shall not be eligible for certification under these Regulations.

(4) Notwithstanding sub-regulation (3) of this regulation where the supply of registered seed is not adequate due to adverse environmental conditions or expansion of national agricultural targets the certifying authority may, for the purposes of maintaining adequate seed supply, approve the certification of seeds reproduced from certified seeds; provided that the genetic purity of the certified seed is not altered.

Regulation 9—Certification of Crop Varieties.

(1) No crop varieties shall be eligible for certification unless such crop varieties are approved by the Committee.

(2) Where certification is not granted in respect of a batch of seed all subsequent seed increases from that batch of seed shall not be eligible for certification under these Regulations.

(3) Except with the prior approval of the certifying authority only one variety of the same crop species may be grown for purposes of seed production on a farm.

Regulation 10—Approval for Production of Foundation, Registered or Certified Seed.

(1) No grower shall undertake the production of foundation, registered or certified seeds unless he applies in writing to the certifying authority for approval.

(2) The certifying authority shall on payment of the prescribed fee by the grower issue a permit to that grower to whom it has granted approval to undertake the production of foundation, registered or certified seeds.

(3) Subject to sub-regulation (2) of this regulation a grower shall be eligible for a permit if he has adequate farm equipment for the required acres of land to undertake the planting, cultivation, harvesting and processing of the crops.

(4) Every grower shall isolate a seed farm from other farms and crops in accordance with the minimum seed standards prescribed in the Schedule to these Regulations.

Regulation 11—Certification Fee.

Every grower shall pay for the certification of seeds a fee of ₦5.00 per crop per annum.

Regulation 12—Land for Seed Production.

(1) Certificated seed shall be produced on a land which has not been used for the production of any other variety of the same crop or any crop of the same variety in respect of which no certification has been granted under these Regulations for such length of time as is specified in relation to that variety in the Schedule to these Regulations.

(2) Such land must be free from volunteer plants of the same crop and from all weeds whose seeds are impracticable to separate from the crop seeds.

Regulation 13—Field and Bin Inspection.

(1) A field inspector may at the request of a grower inspect every field intended for the production of foundation, registered or certified seeds at least once during the growing season and prior to harvesting.

(2) A field inspector shall examine every field thoroughly to determine whether or not the particular crop meets the field requirements prescribed in relation to that crop in the Schedule to these Regulations.

(3) A field inspector shall submit to the certifying authority a detailed report on every field inspected by him.

Regulation 14—Seed Treatment.

Every grower shall treat all seeds planted for the purposes of seed production against pests and other plant diseases.

Regulation 15—Isolation of Field.

Every grower shall by a definite boundary separate any field used for the production of seeds for certification under these Regulations from any other field; except that in the case of cross-pollinated crops the field shall be separated in accordance with the isolation requirements in relation to field standards prescribed in the Schedule to these Regulations in relation to those crops.

Regulation 16—Roguing of Fields.

Every grower shall, before any field is inspected for purposes of certification rogue such field and remove therefrom any off-type plants and weeds; except that in the case of cross-pollinated crops off-type plants and weeds shall be removed before flowering of the plants or weeds.

Regulation 17—Diseases.

Subject to the approval of the Committee the certifying authority shall for the purposes of certification of seeds prescribe the tolerances of plant diseases.

Regulation 18—Sampling.

- (1) A representative sample of each batch of seed shall be taken for analysis by the analyst.
- (2) The analyst shall state in the analysis in respect of the sample of each batch of seed that the seed conforms to the seeds standards prescribed in the Schedule to these Regulations in relation to that seed.
- (3) Equal portions shall be taken from evenly distributed parts of the quantity of seeds to be sampled in accordance with the standards prescribed in the Schedule to these Regulations in relation to that seed.
- (4) Where the seeds are in bulk they shall be sampled at least seven or eight times in uniformly distributed parts.
- (5) Where the quantity of seeds is ten bags or less each bag shall be sampled.
- (6) Where the quantity of seeds is more than ten bags stratified samples of the seed shall be taken and twenty per centum of the batch of seed shall be sampled.
- (7) A probe or trier shall be used in sampling seeds in bulk or in bags.

Regulation 19—Tagging.

- (1) No foundation, registered or certified seeds shall be sold by a grower unless such seed is tagged and sealed with the seal of the certifying authority.
- (2) The tagging and sealing of such seeds shall be done by a person authorised by the certifying authority so to do.
- (3) There shall be shown on each tag the following analysis data:—
 - (a) name of crop;
 - (b) variety of crop;
 - (c) code number of the grower;
 - (d) purity analysis;
 - (e) percentage of germination;
 - (f) date of certification;
 - (g) batch number;
 - (h) treatment of seed (i.e. conspicuous label marked "POISON" and the name of chemical used, if any);

- (i) date of expiry;
- (j) certificate number of Inspector.

Regulation 20—Acceptance of New Crop or Plant Varieties.

- (1) New crop or plant varieties shall be tested for yield, survival, disease reaction and other important characteristics in comparison with standard commercial varieties of such crop or plant, using experimental techniques that ensure valid measures of differences and their significance.
- (2) Each performance test shall consist of not less than three replicates of each selection and all entries shall be selected at random from each crop or plant varieties.
- (3) Each performance test shall include for comparison not less than three competitive crop or plant varieties or selections thereof.
- (4) The result of such performance test shall be reviewed each year by the Committee.
- (5) A report on such performance test shall be lodged with the certifying authority at the end of every year.
- (6) No new crop or plant variety of any seed shall be approved for certification under these Regulations unless it is superior in quality to existing commercial varieties of that crop or plant in one or more characteristics important for that type of crop or plant and is at least satisfactory in other major requirements.

Regulation 21—Interpretation.

In these Regulations—

"batch of seed" means a quantity of seed, each portion of which is within reasonable limits uniform with respect to quality, purity, germination, variety and type;

"certifying authority" means the Ghana Seed Inspection Unit of the Ministry of Agriculture; [Definition amended LI 1311 reg.(e).]

"certificated seed" means any seed in respect of which certification is granted under these Regulations;

"Committee" means the National Seed Committee;

"grower" means a person authorised to produce certificated seed;

"inertia matter" includes straws stems, awns, leaf, chaff and dirt;

"tolerance" means an accepted level of infection, contamination or damage;

"volunteer" means the plant produced by seed left in the field during a previous cropping.

SCHEDULE

CROP STANDARDS

PART I

RULES FOR CERTIFYING OPEN-POLLINATED CORN

1. Classes of seed.—The three classes of seed recognized for the purposes of seed certification are foundation, registered and certified seeds. Only sound ears free from transmissible non-controllable diseases shall be selected for the production of these classes of corn. Foundation seed shall be planted by a grower.

2. Field Inspection.—At least one field inspection shall be made by the certifying authority or his representative at a time when varietal purity can best be determined. This shall be soon after the milk stage when the leaves are still green.

3. Field Standards

(i) Isolation —The field must be completely isolated from other corn fields. In forest areas the distance shall be not less than 150 yards and in grassland areas between 300 and 400 yards.

(ii) Sanitation —The field must be clean and free from a ratoon crop.

(iii) Purity of Crop.—There should not be more than 5 per cent of ears of admixture.

(iv) Planting Characteristics.—Plants must be vigorous and free of excessive lodging and diseases. Height of plant and height of ears on plants must be reasonably uniform according to the variety. Ears should have a good tight long husk covering.

(v) Growing Period.—Fields must be reasonably clean of weeds during the growing period.

4. Seed Standards

(i) A representative sample of not more than 10 lb. of the seed as produced for sale shall be obtained by the certifying authority. If the grower has more than one batch of seed a referee sample shall be obtained for each batch.

(ii) Varietal Purity.—The seed must be at least 95 per cent pure as to variety.

(iii) Pure Seed.—The seed must be at least 95 per cent mechanically pure.

(iv) Germination.—The germination shall not be less than 90 per cent.

(v) General Appearance.—The seed shall be bright in appearance. When shelled the seed shall be reasonably uniform in size and colour.

PART II

RULES FOR CERTIFYING RICE

1. Classes of Rice Seed

- (i) Foundation Seed (blue tag)—First year's production from breeder seed.
- (ii) Registered Seed (purple tag)—First year's production from foundation seed.
- (iii) Certified Seed (yellow tag)—First year's production from registered seed.

2. Restrictions on number of varieties.—Only one variety can be grown per field, unless otherwise specifically approved by the certifying authority.

3. Land Requirements.—Fields offered for certification must not have grown rice for the previous two years unless (a) the rice grown on the land previously was of the same variety as that being offered for certification; (b) the rice grown on the land previously was field inspected and approved for variety purity.

4. Field Inspection.—Each field entered for certification shall be inspected at the best stage of growth to determine varietal mixture.

5. Field Standards

- (i) Isolation.—Fields for certification shall be at least 20 feet from fields of different variety or of similar purity.
- (ii) Specific Field Requirements.

MAXIMUM PERMITTED IN EACH CLASS

Factor	Foundation	Registered	Certified
Other varieties.	None
Red Rice	None

None None 1 plant per 16 1/2 ft. sq.
None None 1 plant per 5,000 sq. ft. (20 sq. rd.)

Disease affecting quality of seed or transmissible through planting stock
. None None None

*Objectionable and/or noxious weeds None None None

*Objectionable or noxious weeds as designated by the certifying authority.

PART III

RULES FOR CERTIFYING GROUNDNUTS

1. Classes of groundnut seed.—There are three classes of seed, namely Foundation, Registered and Certified seeds recognised for the purpose of certification.

2. Restrictions on Number of Varieties.—Only one variety can be grown per field.

3. Land Requirements.—A crop of groundnut shall not be eligible for certification if planted on land on which groundnuts were grown the previous two years volunteer or otherwise, unless the preceding groundnut crop was grown from certificated seed of the same variety. A field which includes an area where groundnuts were threshed or where thresher refuse was spread, during the preceding year, shall not be eligible for certification.

4. Field Inspection

(i) A field inspection shall be made each time as the certifying authority may determine.

(ii) On a field inspection the inspector shall investigate the facilities for harvesting and storing the seed to prevent mechanical mixture.

(iii) Certified groundnut seed cannot be stored in the same building with other groundnuts, unless previously bagged, tagged and sealed or unless they are otherwise identified.

5. Field Standards. — The Unit of Certification—The unit of certification shall be a field. A 10-foot strip of ground, devoid of groundnuts, constitutes a field division.

6. Seed Standards

(i) A representative 2 lb. sample of the seed as produced for sale shall be obtained by the seed certifying authority. If the grower has more than one batch of seed, a referee sample shall be obtained for each batch.

(ii) Purity—The percentage of pure seed in foundation seed, registered seed and certified seed should not be less than 98 in each case.

(iii) Inertia matter—Maximum permitted in each class of seed is 2 per cent.

(iv) Weed seeds—Maximum permitted—

Foundation seed 0.05%

Registered seed 0.05%

Certified seed 0.1%

Other Crop Seeds—Allowable

Foundation None

Registered None

Certified 0.02%

Other kinds of rice—Allowable

Foundation None

Registered None

Certified 0.01%

Germination Foundation 90%

Registered 80%

Certified 80%

(v) Moisture content—The moisture content of each class should be more than 14 per cent.

(vi) Isolation—An isolation of 10 feet from other varieties or from groundnuts grown from uncertificated seed of the same variety shall be required.

7. (i) Seed Standards

MAXIMUM ALLOWED IN EACH CLASS

Factor	Foundation	Registered	Certified
Other varieties	None	0.2%	0.5%
Objectionable weeds . .	None	0.2%	0.5%

(ii) A representative 5 lb. sample of the seed as produced for sale shall be obtained by the seed certifying authority. If the grower has more than one batch of seed a referee sample shall be obtained for each batch.

MINIMUM ALLOWED IN EACH CLASS

Factor	Foundation	Registered	Certified
Pure seed per cent	97 97 97
Inertia matter per cent	3 3 3
Weed seed (No. of seeds/lb.)	5 5 5
Objectionable or noxious weed seeds	—	—	—
Germination	85 80 75

PART IV

RULES FOR CERTIFYING GUINEA CORN (SORGHUM -OPEN-POLLINATED)

1. There are three classes of seed recognized for the purposes of certification; these are Foundation, Registered and Certified seeds.
2. Restriction of number of varieties.—If more than one variety is grown, mechanical mixing and crossing must be avoided.
3. Land requirements.—No other cultivated of annual variety sorghum shall have been grown the previous year except a crop of the same variety grown from an equal or higher certificated seed class.
4. Field Inspection

(i) Fields or parts of fields producing foundation and registered seed shall be given two field inspections.

(ii) Fields or parts of fields producing certified seed shall be inspected twice before harvest but after the seed begins to assume colour—

(a) the first field inspection shall be made during bloom preferably full bloom;

(b) the second field inspection shall be made before harvest but after the seed begins to assume mature colour.

5. Field Standards.—Isolation—Fields or parts of fields acceptable for production of foundation, registered or certified seeds must have the minimum isolation distance from fields of any other variety or of fields of the same variety that do not meet the varietal purity requirements for certification as given in the following table:—

Registered 960 feet from other varieties.

Foundation 960 feet from other varieties.

Certified 640 feet from other varieties.

6. Seed Standards. — A representative 2 lb. sample of the seed as produced for sale shall be obtained by the certifying authority. If a grower has more than one batch of seed, a referee sample be obtained for each batch.

Specific Requirements—

	Foundation	Registered	Certified
Other varieties (definite)	—	0.002% one head in 50,000	0.005% one head in 20,000
Other varieties (doubtful)	—	0.01% one head in 10,000	0.1% one head in 10,000

	Foundation	Registered	Certified
Inseparable objectionable weeds	—	—	—
Head smut	—	—	0.01%
Kernel smut	—	—	0.04%

Germination 85% 80% 75%

MAJOR-GEN. D. K. ADDO

Commissioner Responsible for Agriculture

Date of Gazette Notification: 26th January, 1973.