freely when pressed between two fingers. After the soil has been moistened it should be rubbed through a sieve and put in the seed containers without packing.

(e) The addition of water subsequent to placing the seed in test will depend on the evaporation from the substrata in the germination chambers. Since the rate of evaporation will depend upon the relative humidity of the air, it is desirable to keep water in the germination chambers or to provide other means of supplying a relative humidity of approximately 95 percent. Germination tests should be observed at frequent intervals to insure an adequate moisture supply of the substrata at all times.

[20 FR 7931, Oct. 21, 1955]

§ 201.56 Interpretation.

(a) A seed shall be considered to have germinated when it has developed those essential structures which, for the kind of seed under consideration, are indicative of its ability to produce a normal plant under favorable conditions. In general, the following are considered to be essential structures necessary for the continued development of the seedling (although some structures may not be visible in all kinds at the time of seedling evaluation). Seedlings possessing these essential structures are referred to as normal seedlings: Root system (consisting of primary, secondary, seminal, or adventitious roots); hypocotyl; epicotyl; cotyledon(s); terminal bud; primary leaves; and coleoptile and mesocotyl (in the grass family). Abnormal seedlings consist of those with defects to these structures, as described in the abnormal seedling descriptions, and are judged to be incapable of continued growth. The seedling descriptions assume that test conditions were adequate to allow proper assessment of the essential seedling structures.

(b) Sand and/or soil tests may be used as a guide in determining the classification of questionable seedlings and the evaluation of germination tests made on approved artificial media. This is intended to provide a method of checking the reliability of tests made on artificial substrata when there may

be doubt as to the proper evaluation of such tests.

(c) Seedlings infected with fungi or bacteria should be regarded as normal if all essential structures are present. A seedling that has been seriously damaged by bacteria or fungi from any source other than the specific seed should be regarded as normal if it is determined that all essential structures were present before the injury or damage occurred. Germination counts should be made on samples where contamination and decay are present at approximately 2-day intervals between the usual first count and the final count. During the progress of the germination test, seeds which are obviously dead and moldy and which may be a source of contamination of healthy seeds should be removed at each count and the number of such dead seeds should be recorded. When symptoms of certain diseases develop which can be readily recognized and identified, their presence should be noted.

(d) Seed units containing more than one seed or embryo, such as New Zealand spinach seed, Beta seed, double fruits of the carrot family (Umbelliferae), multiple seeds of burnet, and seed units of grasses consisting of multiple florets, shall be tested as a single seed and shall be regarded as having germinated if they produce one or more normal seedlings.

(e) Standard guides for seedling interpretation shall include the following descriptions for specific kinds and groups. The ''General Description'' for each group of crop kinds describes a seedling without defects. While such a seedling is clearly normal, seedlings with some defects may also be classified as normal, provided the defects do not impair the functioning of the structure. The ''Abnormal seedling description'' is to be followed when judging the severity of defects.

[20 FR 7931, Oct. 21, 1955, as amended at 25 FR 8771, Sept. 13, 1960; 59 FR 64500, Dec. 14, 1994]

§ 201.56–1 Goosefoot family, Chenopodiaceae, and Carpetweed family, Aizoaceae.

Kinds of seed: Beet, Swiss chard, fourwing saltbush, spinach, New Zealand spinach, and forage kochia.