

IV. GATHERING CAPSULE BY CAPSULE, OR IN CLUSTERS.

TABLE VI.

Number.	Designation of Seeds.	GERMINATOR.				Artificial Soil.	
		Test : Dec. 1, '08.		Test : Apr. 22, '09.		p. c.	p. c.
		p. c.	p. c.	p. c.	p. c.		
676.....	Cuba—Capsule by capsule	35	58	78	87	71	72
677.. ..	Cuba—In clusters	73	83	87	91	60	52

The results of the germinator test are far from conclusive. They vary in one direction or another.

Under these conditions, when a small quantity of seed is grown, it will be better to harvest the seeds capsule by capsule, as, by this method, the grower is assured of obtaining only well formed and perfectly ripe seeds. When seeds are grown on a large scale, they may be gathered in clusters, care being taken, however, to clean the parent plants before harvesting, so as to remove as many as possible of the misshapen or unripe capsules. These are easily discovered on the plant before harvesting; but it is difficult to recognize them after some time, when the ripe and unripe capsules are sufficiently dry for shelling and have assumed a nearly uniform brown colour.

CONCLUSIONS.

The final test of artificial germination, further borne out by the results obtained on the beds (Part II of this Bulletin), fully corroborates the conclusions of our preliminary test. It will be sufficient therefore to repeat the recommendations given in Bulletin No. A—6:—

(a) All the leaves should be left on the seed plants, with the exception of the bottom leaves, which should disappear at priming, and of the top leaves which should be removed when the secondary shoots are cut off from the floral clusters.

(b) In order to avoid cross-fertilization and to secure pure seed, the floral clusters should be covered with a paper bag, which may be removed a few weeks later, when a sufficient number of capsules have been formed.

(c) The harvest should be done early, and all misshapen or late capsules should be cut off and thrown away.

(d) Harvesting may begin as soon as the capsules are of a brown colour, when part of the sepals are still green.

(e) The seed may be gathered by either one of the two methods, capsule by capsule or in clusters, provided the above directions are followed.

(f) The seed plants should always be sound and vigorous, perfect representatives of the type to be preserved or propagated, and selected as early as possible.

Ottawa, November, 1909.