

38525 and 38526. *ANNONA* spp. Annonaceæ.

From Pretoria, Union of South Africa. Presented by Mr. I. B. Pole Evans, chief, Division of Botany, Department of Agriculture. Received June 11, 1914.

38525. *ANNONA SENEGALENSIS* Pers.

Anona.

"Fresh seeds collected by Dr. Medley Wood, of the Natal Herbarium, Durban." (*Pole Evans.*)

"*Annona senegalensis* Pers. is remarkably variable, occurring sometimes as a small shrub less than a meter high, and sometimes as a large tree. The flowers are 6 petaled, with the inner petals narrow, connivent, their tips meeting above the center of the gynœcium. The seeds are small, oblong, hard, smooth, and glossy, with relatively large caruncles at the base, somewhat like those of *A. cornifolia* and *A. nutans* of southern Brazil and Paraguay. It is possible that the species *A. senegalensis* as now understood may be found to be composed of several species." (*Safford, Classification of Annona.*)

38526. *ANNONA CHERIMOLA* Miller.

Cherimoya.

"Seeds of the cultivated variety grown by Mr. Trollope, Wonderboom, Pretoria, Pretoria district. Although of fair size, it is not abnormal by any means, as fruits up to 21 pounds in weight are not altogether uncommon. The variety in question is unnamed and was grown from seed of a specimen brought to Durban from India, which country may be set down as the home of the fruit. The custard-apple has a very wide range in South Africa; it is grown successfully in the warmer districts of the Transvaal, Natal, and Cape Provinces, and may be found from Louis Trichardt in the north to the district of George on the south coast. Propagation is simple, as the tree grows readily from seed, but (as in the case of most other fruits) it can not be depended upon to reproduce itself true from seed; recourse therefore is had to grafting, and this is accomplished usually by much the same method as the Western Province farmer employs in grafting his grapevines; the scions are inserted in the stocks and the whole covered over with soil. It appears to be immaterial whether the grafting is done below, on a level with the surface, or above the ground, as long as the scion is covered and kept fairly moist for the first week or two. From what may be gathered from Indian writers on the subject, it would appear that the custard-apple tree has a decided weakness for growing out of cracks and crannies in rocks, old walls, and other similar situations. Possibly in the wild state this may be the case, and so, assuming the correctness of this statement, one is prepared to read that 'a deep stony soil is generally suitable, but alluvial produces good specimens.' From what the writer has seen in South Africa, both the best-grown trees and the finest fruit are produced in the deep free loams, such as may be found along the Magaliesberg Mountains in the Transvaal and in any other parts both of the Cape and Natal. It is necessary, however, for the tree to succeed that a frostless situation be selected in which to plant it; that plenty of room be allowed for the spread of its roots and branches; and that it receive such attention with the pruning shears and cultivator as is meted out to any other fruit tree when planted in orchard form. When single trees are grown in a garden it may be possible to afford them plenty of liquid cow manure, and to this particular dressing they seem to respond more readily than to any other.