

51086 to 51094—Continued.

51088. DAHLIA sp.

"(No. 427.) Small double-flowered lilac. This variety flowers later than the others."

51089. DAHLIA sp.

"(No. 428.) Single white. This looks much like a form of *Dahlia maxonii*. The preceding three varieties all have leaves and stems tinged with purplish, and leaves distinct in form from the present number. In this variety and in No. 429 [S. P. I. No. 51090] the leaves are light green, with the leaflets long pointed."

51090. DAHLIA sp.

"(No. 429.) Double white, like the single white except that the flowers are double."

51091 and 51092. GUILIELMA UTILIS Oerst. Phœnicaceæ. Palm.
(*Bactris utilis* Benth. and Hook.)

51091. "(No. 424. July 6, 1920.) Plants of the *seedless pejibaye*. I have already described the pejibaye in connection with a shipment of seeds made under No. 391a [S. P. I. No. 50679]. The suckers or offshoots sent under the present number, however, are of a choice seedless form growing in the garden of Sr. Alfredo Brade, in San Jose. Sr. Brade has generously presented us with the only two offshoots at present available, in the hope that they will grow in Florida. The *seedless pejibaye* is rare in Costa Rica, and very highly esteemed, as it should be. Its propagation must necessarily be slow, because of the very few offshoots which each palm produces. The only question is, will the progeny of these palms invariably retain the valuable characteristic of seedlessness? It seems possible that seedlessness may be due, in some instances at least, to local peculiarities of climate which affect the pollination of the flowers; and in such instances, the characteristic will not, of course, be heritable. The matter has not yet been sufficiently investigated, however, to permit any conclusions to be reached; and for the present we should make an effort to test all available seedless forms in our tropical dependencies and in southern Florida."

For previous introduction, see S. P. I. No. 44268.

51092. "(No. 431. July 6, 1920.) Plants of *seedless pejibaye*, presented by Doña Amparo de Zeledón, of San Jose. See remarks concerning seedless pejibayes under No. 424 [S. P. I. No. 51091]. The offshoots forwarded under the present number have been obtained for us by Sra de Zeledón from palms known by her to produce seedless fruits. The value of her gift can be appreciated only by those who know how difficult it is to procure offshoots of the seedless pejibaye."

For previous introduction, see S. P. I. No. 44268.

Fruits of this seedless form are shown in Plate VIII.

51093. PASSIFLORA QUADRANGULARIS L. Passifloraceæ. Giant granadilla.

"(No. 430. July 6, 1920.) Cuttings of *granadilla real*. From the garden of Sr. Alfredo Brade, in San Jose. Sr. Brade states that this vine is