

from a report by Mancuso-Lima, shows this striking difference in composition of the pulp of the first and second crop of prickly pears:

*Comparison of first and second crop fruits.*

|                         | First-crop fruits (Agostani). (100 parts of fruit contain 57.60 parts pulp.) |                            | Second-crop fruits (scoccolati). (100 parts of fruit contain 63.19 parts pulp.) |                            |
|-------------------------|--|----------------------------|---|----------------------------|
|                         | 100 parts of fruit contain—  | 100 parts of pulp contain— | 100 parts of fruit contain—   | 100 parts of pulp contain— |
| Water .....             | 53.540   | 92.951                     | 57.006  | 90.214                     |
| Dry matter.....         | 4.060  | 7.049                      | 6.184   | 9.786                      |
| Fat.....                | .043   | .074                       | Trace.  | Trace.                     |
| Sugar.....              | 2.892  | 5.020                      | 3.540   | 5.602                      |
| Starch and dextrin..... | .098   | .169                       | 1.701   | 2.692                      |
| Total nitrogen.....     | .046   | .080                       | .155  | .245                       |
| Proteid nitrogen.....   | .034   | .058                       | .111  | .175                       |
| Albuminous matter.....  | .211   | .366                       | .693  | 1.097                      |
| Ash.....                | .146   | .253                       | .209  | .331                       |

“This operation of forcing a second crop of prickly pears which are of a superior quality should certainly be tested in this country wherever prickly pears can be grown.

“The following varieties were donated by Professor Borzi, the director of the Botanic Garden at Palermo, and include those most commonly cultivated. In addition to these three varieties there is another of some interest which has no seeds. It is, however, not very fruitful and is very rarely cultivated, for which reason it was not possible to secure plants. Another variety, which has not been named, grows about Adermò on the southwestern slopes of Mt. Ætna. This variety produces a very superior quality of fruit, which may, however, be due to the special character of the volcanic soil in which it grows. This may be the plant obtained from the Botanic Garden of Catania and sent out under the number 3196. All of the improved varieties of prickly pear have spineless pads, and can be used for feeding stock. They may prove of great importance for the arid regions of the Southwest as forage.

“**3437.** *Sanguineo* (*Ficoidinnia sanguinea*). This variety has, as its names indicates, red fruits. It ripens later than two following numbers, sometimes so late that it does not mature well about Palermo. (See No. 3190, Inventory No. 7.) Distributed.

“**3438.** *Alba* (*Ficoidinnia muscaredda*) is one of the commonly cultivated varieties. It ripens early and is of good flavor. Distributed.

“**3439.** *Ordinario* (*Ficoidinnia surfarina?*). This is doubtless the yellow variety which is most commonly cultivated in Sicily. It is considered the best variety of all because it fruits so abundantly, and at the same time bears fruits which are very sweet and of good quality.” (*Swingle.*) Distributed.

**3440. OPUNTIA LABOURETIANA.**

**Prickly pear.**

From Palermo, Sicily. Donated by Professor Borzi, director of the Botanic Garden of Palermo, through Mr. W. T. Swingle, May, 1899.

“This species is also cultivated at Palermo for its edible fruit. There are said to be two varieties of this species—one with white and the other with red fruits. It is not known which was obtained under this number. This is considered by Schumann to be a form of *Opuntia lanceolata* from South America.” (*Swingle.*) Distributed.

**3441. OPUNTIA TUNA.**

**Prickly pear.**

From Palermo, Sicily. Received through Mr. W. T. Swingle, May, 1899.

“*Ficoidinnia tincirussa*, a very spiny sort widely grown in eastern Sicily. The edible fruits are small and of medium quality, but are produced at all seasons of the