

trees for planting in narrow avenues and streets. They must be planted about 15 feet apart.

(3) *Pithecolobium saman* :—(Rain Tree). A well-known tree quick growing when young and very responsive to moisture. When planted in rows it forms an “effective grand arch of considerable beauty.” Its branches make an angle of about 45° with the axes. The roots extend superficially for a great distance in the soil so that for plants with similar superficial root system the tree is injurious. The pods are said to have considerable nutrition as fodder for cattle. The leaflets droop at about 2 or 3 P. M. and come in contact towards the upper surface exposing only the lower to light. This is covered with fine hairs which keep off the heat of the sun thus protecting the inner tissue. It is also interesting to note that owing to exposure to light the lower moiety of the leaf develops a palisade tissue similar to the one towards the upper surface.

P. S. Jivanna Rao.

(*To be continued.*)

Reviews.

The Indian Science Congress Number 1919.

The 1919 Indian Science Congress Number of the Pusa Agricultural Journal, published as Vol. XIV Part III, is a bulky volume running to nearly 140 pages and is interesting reading. It opens with a very interesting article, by the President of the Agricultural Section, entitled “Economic factors of Agricultural Progress.” For rapid agricultural progress, the Hon’ble Mr. G. F. Keatinge C. I. E., I. C. S., considers, that the farm should be a fixed and permanent unit, to admit of permanent and continuous improvement; and the farmer “a fluid and movable unit,” so that the fittest man may get into the job. In India the conditions are exactly the reverse of the above. The frequent

fragmentation of holdings, by constant divisions and sub-divisions among the inheritors of the property, makes it impossible to carry out any orderly development ; while, the laws of inheritance, the prevalent easy-going tolerance, and the elastic joint-family system, tend to keep persons at the farm, whether they be fit, indifferent or thoroughly incompetent. He is unable to suggest any remedies but avers, that, till this condition of affairs, is considerably altered, we cannot hope to make any rapid progress. The Howards contribute a very interesting article on "Drainage and Crop Production." Various other interesting articles follow which space forbids us to review in the pages of this journal. There are three articles, all illustrated, from the staff of our college.

1. Studies in the Chemistry of Sugar cane by *B. V. Nath*.
2. Effect of Salinity on the Growth and Composition of Sugarcane Varieties by *K. Krishnamurthy Rao* and
3. Some Foreign Insects which we do not want in India by *T. V. Ramakrishna Iyer*.

The Editor in the preface remarks that space does not allow the publication of all the papers read at the agricultural section, and we are reminded of the complaint by a previous governor of Madras, that, in the session of the congress at Madras, in the year 1915, there was a scarcity of papers in the Agricultural section. We hope, that, when next the congress comes to Madras, there will be a need to issue a double number.

T. S. V.

Extracts.

Responsibilities of Botanical Science.

"Some Responsibilities of Botanical Science" is the subject of Prof. B. E. Livingston's address to the Botany Section of the American Association for the Advancement of Science meeting