

7. System of wholesale purchase and sale of raw silk by co-operative societies as in Japan.
8. Improvement of waste silk.
9. Extraction of oil from chrysalides for the manufacture of soap.

News and Notes.

A London despatch to Washington says that a syndicate of capitalists of the Western States has leased 600,000 square miles of Siberian land from the Russian Government.

The All-India Cow Conference for 1920 was held at Nagpur, Central Provinces during the National Week.

Seed-wheat from the famous Plant-breeding Station, Slavof, Sweden, is being introduced into the Scotch market. One or two small parcels sown in 1919 yielded crops of 60 to 65 bushels an acre. Its merits are great hardiness, high yield and resistance to yellow rust. The variety—Iron wheat—is sold at 120 to 135 shillings per 504 lbs.

At the last July Council meeting of the Royal Agricultural Society of England it was resolved to close the Woburn Farm and experiments which entail a loss of £ 1200 a year and yield results in which only 0·3 per cent of the members take any interest.

Returns relative to the financial position for 1919 of the Scottish Small-holders Organization Ltd., are unsatisfactory and according to the Scottish Farmer, November 13th, show that it is an institution kept alive by the subsidies from the Board of Agriculture.

From a White Paper published it is understood that from 150 farms visited the total yield of milk during the period, October 1,

1919 to April 30, 1920 in England and Wales was 1,22,990 gallons and in Scotland 572,196 gallons. In the former case the average yield of milk per cow per day was 1.476 gallons and in the latter 1.574. In England the average weight of ration purchased and home-grown per day was 62.95 lbs., in Scotland 89.15.

According to Mrs. Hobbs who was the lecturer at the opening meeting for session 1920—21 of the Glasgow and West of Scotland Agricultural Discussion Society, milk is hardly used at all in country districts in the United States of America.

Professor Wallace, observes the Scottish Farmer, said in his opening lecture on Colonial and Indian Agriculture delivered on 14-10-20 that the "great secret of the Gartun system of Panti-breeding was due to the introduction of multiple crossing, involving in most cases the blend of wild and weedy but robust and vigorous species and also the regeneration resulting from the use of pollen from different plants within the same species. By these means the tendency to degeneration liable to occur among self-fertilised and the intensely in-bred crop plants was overcome and increased vigour and crop producing power was obtained."

Mr. E. S. Beavan in a paper read to the Farmers' club, London, comes to the conclusion that inherited characteristics alone are useful in breeding. The predominant factor of productivity in cereals is the seed farming energy of the individual plants composing the crop. The ratio of grain to straw is the measure of the factor. This is closely correlated with yield of grain per acre. A consistently higher ratio can be obtained in cross bred races than is present in either of the two parent races.

Madras Farms:—(1) Attur.

This village is situated on the Chingleput—Arkonam line of the South Indian Railway.

At the instance of Mr. (Now Sir) A. Chatterton, Professor of Engineering on special duty, who was investigating the availability of ground water in the sandy bed of the Palar on the eastern bank of which Attur stands, a small area was acquired for pumping experiments, a well was sunk and a pump, fitted up.

The site was however handed over, for an experimental station, to the Agricultural Department in October 1905. The old well proved unsatisfactory. Another was sunk and the whole installation, transferred to the control of the Deputy Director of Agriculture in September 1906.

The soil is poor light sand and part of the site had been lying waste from time immemorial.

The rainfall averages about 46 inches distributed as under:—

April to May	2.0 inches.
June to September	18.4 „
October to December	25.0 „
January to March	0.9 „

The climate is milder than in the inland districts. Hot weather rains are received but are precarious. West winds blow a great part of the year and at times with violence. September is the most important month for sowing when twenty-five per cent of the dry land and thirty-three per cent of the wet lands are sown.

The object with which work was started here was “the thorough trial of perennial and exotic cottons under irrigation, the growth of fodder crops and experiments in fruit cultivation.”

The area taken was 69.13 acres of which 64 acres was brought under cultivation and the estate was divided into two blocks by the main road from Chingleput to Conjeevaram.

Soon after possession was given, the land was cleared and cottons, sown in 1905—06 but were however late. The varieties tried were the exotic, Sindh-acclimatized Egyptian cotton, Caravonica, Sea Island and American cottons:—(1) Russel, (2) Truit, (3) Mattis, (4) Christopher, (5) Chiese, (6) Whittle, (7) W. A. Cook, (8) Boyd's Prolific, (9) Koley's Prolific, (10) Harendon, (11) Cameron, (12) Dearing, (13) Mathew's Long Staple, (14) Texas Burr, (15) Braddy, (16) King's Improved, (17) Smith's Improved, (18) Dickens and the indigenous Jadapathi and Famidipathi varieties and Seemapathi.

Egyptian gave 130 lbs. kappas an acre.

Caravonica which was both sown and transplanted grew luxuriantly but did not fruit before the rains in 1906. Sea Island was fair with 210 lbs. kappas an acre on a plot of 66 cents. Some American varieties did well and they averaged 510 lbs. an acre.

At the end of the season all cottons were pruned. In the second season they started well, became sickly in December following, but recovered later.

A few sorghum varieties were tried for two seasons and Talaivirichan gave the highest straw with 2467 lbs. an acre. Rayachoti cumbu grew well but was caught in the rains in December and the yield was poor.

Cowpeas, horsegram, blackgram, and greengram were sown and the crops ploughed in, sunhemp failed from insect pests and lucerne from Bangalore was disappointing.

A further trial with cottons did not come up to expectation, it soon became evident that the Farm was quite unsuited for the purpose for which it was intended owing to the extreme poverty of the soil and its porosity. It was accordingly closed in 1908.