following is a translation of science news briefs in Heilungkiang Jih-pao, Harbin, 5 August 1960, page 3.]

Success in Making Complete Sets of Tools for Plant Production

In its mass drive for scientific research activities, A-cheng-Hsien has succeeded in making a complete set of tools for protecting plants. The tools are used for protecting autumn farm crops, preventing, destroying, catching and spraying pests. At present, the county has manufactured and popularized 9,310 plant protective tools in 22 different types.

Overall Renovation of Paddy Rice Farm Tools

The Hsien-foo Administrative Area of the Hsing-huo people's commune in the suburbs of Chia-mu-ssu Municipal- ity has initiated a mass drive for scientific research activities centering around grain production and the "Eight-letter Agricultural Code" in an effort to completely renovate tools for paddy rice farming.

With respect to tools for spring farming, summer hoeing, and fall harvesting, it has successfully invented a row seeder which, operated by one man, is capable of seeding three and a half hectares of land per day. It has realized semi-mechanization for cultivating and weeding paddy fields with the invention of an animal-drawn tool which can be used for weeding, cultivating, and thinning seedlings. With one man to operate it and an ox to draw it, the tool is capable of weeding four and a half hectares of field, 31 times faster than pulling by hand. Meanwhile, a rice harvester has been designed and placed in trial production after a successful test. In the field of rice and wheat shellers, a shelling combine has been
invented for five different uses with a daily shelling capacity of 160,000 catties of grain, four and a half times more efficient than the imported sheller.

Study Fertilizer Elements, Motivate Fertilizer Accumulation

In an effort to solve fertilizer shortage, the fertilizer research section of the Ching-lung Administrative Area, Wei-lung people's commune in Pa-yen-Hsien has tested various types of fertilizer and found out that hog manure contains more nitrogen, ashes more potassium, and that pig mud is four times more effective than manure. It has not only made out a table for the correct application of fertilizer but has also stimulated the communes enthusiasm to gather pig mud. Within three days, they collected more than 400,000 catties of pit mud and produced over one million catties of native chemical fertilizer.

Replanting Winter Hemp

The scientific research office of the Pao-an Administrative Area of the Lung-feng people's commune has stepped up replanting of hemp in the winter to increase fiber crop production. Previously, it first succeeded by experimentally planting winter hemp in a small area in 1958 and followed with large-area planting in 1959 with excellent results. Winter hemp is generally planted between the latter part of July and early August following the fall harvest of wheat and flax. It is ready for harvest in mid-November. Winter hemp has a thinner skin than spring hemp and is firmer and more lustrous in texture; it can be twisted into larger cords and, after processing, becomes raw material for tweed textiles. Winter hemp does not require drying. (By Kang Shih-kuei and Wei Li-chen)

Proper Close Planting, Cultivate Fine Seeds

On the basis of last year's experiences in close-planting and high-yield farming of various crops, the Scientific Research Office of the Hsin-hsing people's commune in Hua-ch'uan-Hsien carried out proper close planting in all wet paddy fields and planted in small clusters instead of large clusters in all dry fields this year. It also cultivated more than 430 improved high-yielding species, totalling more than 3,000 catties.

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