

## Building up Sun-flower Raw Improved Base Is Under Circumstances

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### Summary

To build up producing and improved cultivated sun-flower base is one of the organizations of developing agriculture efficiently and it also has a practical and long-term significance. So to build up the improved and producing varieties of sunflower base is under circumstances.

### Key Words

original raw material, raw seeds, improved seeds, contract.

With the strategy of agricultural reform and the scientific service to agriculture, seeds used in farming have become the important materials of agriculture. In order to need the economic development at markets, cultivating pure products, the process of producing excellent efficient seeds, stressing the quality of products and economical effect, the improved varieties of sun-flower seeds are in great demand at markets. Therefore, in order to produce sun-flower seeds, build up raw improved varieties of sun-flower seeds is under circumstances.

Dan Nan Sun-flower Scientific Research Institute is the mere professional institute in Heilongjiang province, and this institute has especial advantages in technical instruction and service, and at

the same time has tremendous material bases and producing conditions. Now the institute has fixed funds of one million of Chinese Renminbi, and has more than 100 hectares of cultivable land. Now it has advanced chemical examination and experimental implements. Its natural geographical conditions are very excellent - one river and three small rivers, so water and soil are very ample. The yearly efficient temperature is  $2400^{\circ}\text{C}$  -  $2500^{\circ}\text{C}$  which suits the growth of sun-flowers. There are more than 7000 pieces of scientific documents and materials. Now three new sun-flower seeds have been cultivated successfully, and the institute has won three rewards in scientific research given by the Government of Heilongjiang Province. - especially the food-used "Kan Nan Nol Seed", which is welcomed by the users. The new cultivated seeds which are chosen up to one million hectares in the three provinces of Northeast of China and Inner Mongolia, are popularized wider and wider. Just within Kan Nan County more than 20000 hectares of sun-flowers are grown, which takes up to 10% of productive land. Now in this institute there are 7 new improved seeds which are being developed, and there two new seeds which are accepted in Heilongjiang Province. So this lays a solid foundation for the development of sun-flower seed research.

The base which will be built up is for the purpose of present and long-term efficiency. Under the principles of grasping

important raw seeds, we are going to supply improved seeds to the production and gradually realize the plan of producing improved varieties of sun-flower seeds. To cultivate improved seeds, there must be fixed long-term plan and reasonable arrangement, for the purpose of the necessary accessory of raw and improved seed cultivation. In each of the links of the raw and improved seeds cultivating process and technical instruction must be given and supplied. At the same time contract must be signed with the cultivating farmers, setting up reputation cards in order to ensure the quality of seeds used, and selling department and consulting service must be set up in the sun-flower producing areas for the purpose of one organic whole in producing, processing and selling. The original raw seeds in the institute must be cultivated with the method of bag-holding separately, and each year the institute supplies rather enough raw improved seeds to the producing areas. The raw improved seed producing areas must centre the abilities under excellent conditions, high levels and suitable weather to produce and supply excellent improved seeds. The improved cultivating areas must set up seed producing areas to produce improved seeds in a large scale, forming professional producing scope. So in this way the quality is either assured and also it ensures collectively buying and technical instruction.

Since the raw and improved sun-flower seed cultivating base was set up in 1994, the cultivation is being improved gradually, and 30000 kilograms of seeds were cultivated in 1994, 50000 kilograms in 1995. The popularizing areas reached 80000 hectares within two years, and each hectare increases 2000 grams, 40 yuan being earned each hectare. So within two years, 32000 yua could be earned, achieving excellent economic result.

Practice proves: to build up raw improved cultivating base is one of the highly efficient parts. Speeding up the construction of sun-flower Producing base has a practical and long-term significance in improving and producing sun-flowers, which is the key of developing sun-flower production, and is the important measures of scientific production and is also the comprehensive carrier in production and anagement. Therefore, to build up the raw improved cultivating varieties is under great circumstances.

years	area(10.000) mu	total out-put (10.000kg)	per unitarea yield kg/mu
1949		5.05	56.1
fifties		215.15	56.37
sixties		17.5	15.92
seventies		243.2	68.295
eighties		1971.25	70.078
grand total		2,533.15	70.728

II. Beneficial comparison between crops

crop	Gross income	cost	net income	netincome ratio(%)
Sunflower	63	16.5	47.3	150
corn	53	21.5	31.5	100