THE WEAVING AND COMPREHENSIVE UTILIZATION OF WILD PLANT FIBERS

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Since the beginning of this year, the weaving enterprises in the various areas throughout the country have put great efforts in the weaving and comprehensive utilization of wild plant fibers and have attained outstanding results, not only having used wild plant fibers to produce a great number of gunny sacks but also weaving a great quantity of wrapping cloths, khaki fabrics, and some clothing piece goods that have been welcomed by the people. While cotton stalk peels and wild plant fibers are being utilized for weaving purposes, there are several byproducts being made, such as fertilizer, glucose and mangrove gum. The utilization of wild plant fibers for the spinning of yarns and the weaving of fabrics has enlarged the source of raw materials. This road is already opened and it is becoming broader and broader.

China's wild plant fiber resources are great. Tests that have been made show that there are more than one hundred species that can be used for weaving. According to preliminary calculations, in Hopeh Province, only three such items -- cotton stalk peels, flax, and rush will yield more than 6,000,000 tan. These wild plant raw materials, after preliminary processing, can be used to weave gunny sacks and to make ropes. Some of these raw materials that are of better gum extraction and of better quality can be spun into yarn and woven into fabrics and still other wild plant fibers can be woven together with wool to make a rather good quality fabric. Consequently, while we are putting great efforts into increasing production of cotton, wool, linen, and silk, we must at the same time utilize all those wild plant fibers that can be used for increasing the production of various kinds and varieties of textile goods to satisfy all types of demands. This has a great effect on the rapid development of China's textile industry. The utilization of wild plant fiber raw materials is not an expediency, but an important phase in textile industry, where the Party's socialist construction general line and the "walking on two legs" policy are being thoroughly carried...
It can be assured that from now on we will utilize more and more wild plant fiber from year to year, products will have more patterns and varieties, and the products will have better and better qualities.

In the utilization of wild plant fibers for the spinning of yarn and weaving of fabrics, the general demand should be: from crude to fine, from low to high, constant betterment and constant development. At the present, special attention must be given to the solution of problems concerning wild plant fiber stalk peeling, gum extraction and quantity production. A study of wild plant fiber characteristics must be made, so that eventually a complete set of technical processes for wild plant fiber yarn can be prepared. In producing various substitute fabrics, a study must be made of the reasonable proportion of wild plant fibers in the blending process in the textile industry, and product quality must be continuously raised. In the production of gunny sacks for civilian use, these must be made entirely from wild plant fibers. In those counties and people's communes that are more resourceful and better qualified technically, they should, in accordance with their own needs and under the condition that they do not compete for raw materials with the textile factories, establish some small gunny sack plants to fully utilize the local wild plant fiber resources and to increase the production of wrapping fabrics. The problem of equipment for the establishment of small gunny sack plants must be solved by the application of a self-help, and the use of native methods or native and foreign methods combined. In some areas, existing equipment is being used, such as the 77 spinning jenny, the triple coarse yarn machine, the iron and wooden loom which can be remodeled for the production of gunny sacks. This is a fast and economical way to establish such a plant and it is worthwhile to expand it.

While wild plant fibers are being utilized as raw materials, the comprehensive utilization of resources must be promoted. The advantages derived from this method are: firstly, it will change from one use to many uses, from small use to big use so that everything will be used to its fullest extent. Everything will be put to its highest productive capacity, so that production cost for fibers will be greatly reduced. In San-tai Hsien, Szechuan Province, the comprehensive utilization of rain-cloak grass leaves has produced fibers, fertilizers, glucose and pulp. These four items of byproducts have increased the original commercial value of the rain-cloak grass leaves from three yuan per hundred chin to 75 yuan per hundred chin, with a net profit of 53 yuan. In Kao-ch'eng Hsien, Hopeh Province, the utilization of cotton stalk peels has produced the above-mentioned products, causing the value of cotton stalk peels to rise from 10 yuan per hundred chin to 62 yuan, with a net profit of 23 yuan. The above-mentioned four products have already been put into production. There are some products that have successfully passed basic tests, but have not
yet been put into production, such as fertilizer powder, pigments and mangrove gum. There are still other products that are extracted from the discarded juice of cotton stalk peels and grass leaves and which are now in their experimental stage, such as chaff aldehydes, muriates of potash, and insecticides. With the production of these products, the problems of high production cost and low productive value when the wild plant fibers were originally used for the single purpose of weaving fabrics, are basically solved and it has greatly raised the possibility of wild plant fibers being universally used by the textile industry. Secondly, comprehensive utilization not only has increased the income of the people's communes and that of their members, but is also directly advantageous to the development of agricultural production. The discarded juice from the gum extraction of wild plant fibers has produced chemical fertilizers which, as laboratory tests have shown, contain nitrogen, phosphorous, and potassium constituents which have better enriching effects than manure and ammonium sulphate. The Fei-ma [Flying Horse] People's Commune, San-t'ai Heien, has made use of this type of fertilizer which, after eight days of application, has changed the third grade cotton seedlings' growth into that of the first grade cotton seedlings. The glucose produced from discarded juice of the gum extraction is also a good feed for hogs. The processing and utilization of wild plant fibers have now changed from their original single purpose of serving industry to also serving agricultural production, and they have been closely coordinated with the principal activities of the rural areas. This has become the most expected and welcome enterprise on the part of the Party Committee and the masses. The active support given by the agricultural department will provide more fiber materials for the textile industries. It is in turn more advantageous to the development of a broader utilization of wild plant fibers in the future. Consequently, under present conditions, the great efforts in comprehensive utilization of wild plant fibers should have a special emphasis. The special emphasis should be on the manufacturing of those products that have a very close relationship with industrial and agricultural production, principally such as fibers, chemical fertilizers, glucose and pulp; then, after these, the manufacturing should proceed gradually from few to many until everything is used to the greatest extent.

The preliminary processing and comprehensive utilization of wild plant fibers should principally be done by the people's communes; however, some Hsian governments may establish some plants to serve as models. In this way, a great amount of energy and money will be saved. The Textile Industry Department should actively help the peoples' communes to understand and be able to make use of the processing and comprehensive utilization techniques. It should assist the communes with manpower and material assistance.

While great efforts are being put into the weaving and comprehensive utilization of wild plant fibers, attention to wild plant fiber gathering, purchasing and processing activities must
not be neglected. All levels in the Textile Industry Department should, under the unified leadership of the Party Committee, rely on the people's communes for subjective cooperation with the other related departments so as to make full use of the favorable opportunity in the period after the summer harvest and the upcoming autumn harvest, when the extensive gathering and purchasing activities of wild plant fibers can be most effectively carried out. In gathering and purchasing wild plant fibers, attention should be paid not only to concentrated and large quantities, but also to scattered and sparse quantities, and especially to the opening of new wild plant fiber resources. In gathering, attention must also be paid to the preservation of the resources. Preservation activities must be strengthened so that there will be a boundless supply of the raw materials, whose utilization can never be exhausted. In those better qualified areas, they should gradually establish wild plant fiber raw material bases. In the field of processing, special attention must be given to present the creation of a peeling machine for the wild plant fibers so as to reduce the amount of manual labor that has been consumed in the present stalk peeling operation. Such a machine will accelerate the rapid development of wild plant fiber processing and utilization activities.