

Four Corners

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Two meetings to discuss lupino culture, the actual and potential applications of the plant and the seed, have been held in Chile.

Lupino belongs to the legume family and can flourish in cooler climate conditions than soybean. For this reason, from the agronomic and economic point of view, lupino is considered a good cultivar, especially in the south of Chile.

In some aspects, lupino seed can be considered close to soybean. For instance, the chemical composition of the seed of some varieties has been analyzed at 30-45% of protein and 8-18% of oil.

The fatty acid composition of the oil is close to soybean oil. In the Food Chemistry laboratory of the University of Chile, we have analyzed some varieties at the following percentages: palmitic acid, 9.6%; stearic acid, 1.5%; oleic acid, 16.5%; linoleic acid, 57.8%; linolenic acid, 9.6%; eicosaenoic acid, 2.0%; and docosanoic acid, 2.5%. Other varieties have shown an inverse relationship between linoleic-oleic acid content with about 50% oleic acid and 25% linolenic acid.

Lupino is an old culture not only in Africa and Europe, but also in America, having been used by altiplanic inhabitants as a food after a treatment to separate bitter substances.

Lupino seed contains a few alkaloids, five of which have been described in the literature: anagirine, citisine, lupanine, lupinine, spartein. For this reason, "sweet lupino varieties" have been developed through genetic improvement.

Now in Chile we have *Lupinus luteus*, *L. angustifolius* and *L. albus*, imported from Europe and Australia, and *L. mutabilis* from our continent.

"Sweet lupino varieties" can be used as green forage and as a way to improve soil structure. The mature seed can be used to obtain lupino meal.

This product can be incorporated in rations for animal feeding in amounts about 20%; the main objective is to replace imported soybean meal in our country. Also, it is possible to first extract edible oil from the varieties with high oil content, and then to use the lupino meal.

Experiments to incorporate lupino meal in some foods for human consumption as bread, cakes, cookies, noodles, etc., have been done. ●

New soy magazine planned

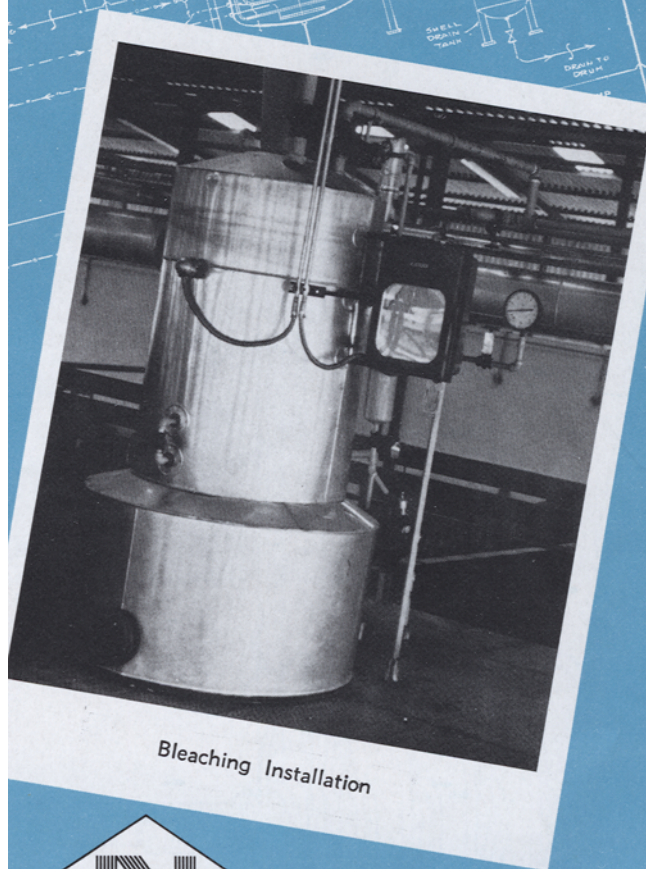
The Soycrafters Association of North America has announced plans to publish "Soycraft," described as a quarterly "international trade journal for the soyfoods industry."

The non-profit association formed last year consists of individuals, groups and businesses involved in the production and use of "fine natural foods made from soybeans." Subject matter for the new publication is expected to range from soybean breeding to marketing of soy foods. For further information write Soycraft, 305 Wells St., Greenfield, MA 01301. ●

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