

# The progress of Finnish angora wool production and plans for future

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## SUMMARY

*Finnish Angora rabbit wool production started in the early 1980's. The economical difficulties in making a living from farming forced farmers to look to other sources of income than the traditional farming enterprises. The Finnish Angora Association was founded in 1986. The association has 100 members of which only 10% have Angora wool production as a source of livelihood. As Finland has a short history of angora production, quantities are still small, but increasing every year.*

*In Finland, angora products are seen to have a high insulation capacity, a quality which has important value in the market for healthcare products. Finnish angora fibre is blended with lamb or sheep wool, primarily to make spinning easier, but also to improve the washing qualities and to increase versatility. The use of chemicals in processing wool or products has been cut to minimum, because of so-called "green values".*

*Current practice has shown that different kinds of angora products not only have healing properties but act as preventatives. Also, increasing incidence of allergies (for example, to artificial fibres) has increased the demand for natural angora products.*

*Initial difficulties in spinning have almost been overcome and the breeder network is working effectively. High costs of labour make the economic situation difficult for breeders. To build a network of cooperation between breeders will be very important in the future. With the help of such a network, the quantity and quality of angora products produced in Finland will be able to meet the increasing demand.*

## INTRODUCTION

The economical difficulties in making living from farming in Finland forced the farmers to look to other sources of income than traditional farming. Angora rabbit farming was one of those fields. The first animals bred for angora wool production were imported from Sweden in 1983-1984. The cold, damp weather in Finland has been one of the main reasons behind the interest in angora wool production as the luxurious fibre with its high insulation capacity is perfect for the conditions in Finland.

### *Animal stock and feeding*

The producers in Finland generally have about 40-80 animals and there are no large specialist farms. The biggest problem in farming is the lack of a standardised breeding and registration system. It is for this reason that the quality (length, fineness, cleanliness) of angora wool is quite inconsistent.

Most angora rabbits are kept in old animal housing, already existing on the farm. They are mainly fed with products produced by the farm (hay, grain, peas). Protein and vitamins are purchased from outside the farm. There are no feeds produced specifically for angora rabbits. The majority of animals are white albino and the rest (40%) are different shades of coloured. The coloured angora rabbits have more variation in the amount of wool production in a year than the white ones. As there is no organised control of breeding there has been significant cross-breeding of white and coloured angora rabbits. We have also have some German type angora rabbits in Finland but the Finnish type has better resistance against diseases. The average production of fibre from Finnish angora rabbits is 600-900 g/year.

### *Feeding*

Proprietary feeds for angora rabbits do not yet exist. Rabbits are fed with feed for cattle. Rabbit pellets for laboratory rabbits are too expensive to use.

### *Research and development - marketing*

Angora rabbit farming is new in Finland. It started during the 80's and producers must do all the farming operations themselves, including product

design, knitting and also marketing. There is no common, organised system for products or marketing. The whole burden of developing the angora business to a larger scale level of production has to be taken by the producers themselves.

### *Spinning angora in Finland*

As spinning mills did not start spinning angora wool until 1987, angora wool was until then spun by hand at home. There are 12 spinning mills in Finland. Five of these will now spin angora on contract to producers. Yarn is then returned to the producers who market it as it is or will further process it to be sold as finished garments and other products. Angora wool is blended with lamb or sheep wool to make the spinning easier, to improve the washing qualities (machine wash), and to improve versatility. The diameter of the Finnish sheep wool used for blending is 20-25 mm.

In the production of angora wool it is considered important to avoid the use of chemicals. Green values are increasingly important for the modern customer.

### *Quality factors in angora wool*

In Finland, products have been tested in practise by such potential customers as people suffering from rheumatism, diabetes, poor blood circulation and so-called sensitive skin. The feed-back given by test participants showed that the characteristic softness of the products is not determined by the amount of angora wool in it. The degree of twist in the yarn, the fibre diameters of the angora and sheep wools, as well as handling at the mill are also important factors. It is important to match the right kind of yarn to the different products to achieve best possible results. In future, the greatest attention should be put on spinning mill technology and a standard quality control system should be created. In Finland, spinning mills still have difficulties in spinning a standard quality of yarn. This causes troubles for breeders who need a standard quality of yarn to market.

### *Future aspects of angora wool production*

In spite of slow progress in animal breeding, demand for final products has been increasing each year. A network to link breeders is an important step in

increasing the amount of production. For this reason, a development project in Jokioinen has been established by Agropolis Ltd.. Goals of the project are to create:

1. standardised system of angora rabbit breeding and registration
2. special feed for angora rabbits
3. better living conditions for angora rabbits
4. quality program both for the wool and final products
5. education program for the breeders

The major goal of the project is to establish a standardisation system that covers the whole chain of production. In the next two years the amount of the yarn produced wool produced should be ten times bigger than now.