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**Valorization of Products and By-Products Resulting from
Sericulture and Moriculture**

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Abstract: In addition to natural silk, sericulture activity also generates numerous by-products with high economic value, used in a wide range of fields: medicine, biotechnology, cosmetics, and agriculture. Their efficient management contributes to optimizing production and increasing the sustainability of the silk industry. Silk proteins, fibroin and sericin, have a significant impact in the medical and cosmetic fields, offering innovative solutions for tissue regeneration, skin care and the development of advanced biomaterials.

- **Sericulture productions** associated with the set of economic results obtained from activities related to sericulture. These products are used both in the textile industry and in various industrial, medical and pharmaceutical sectors due to the high value and multiple applications of silk and derived products.

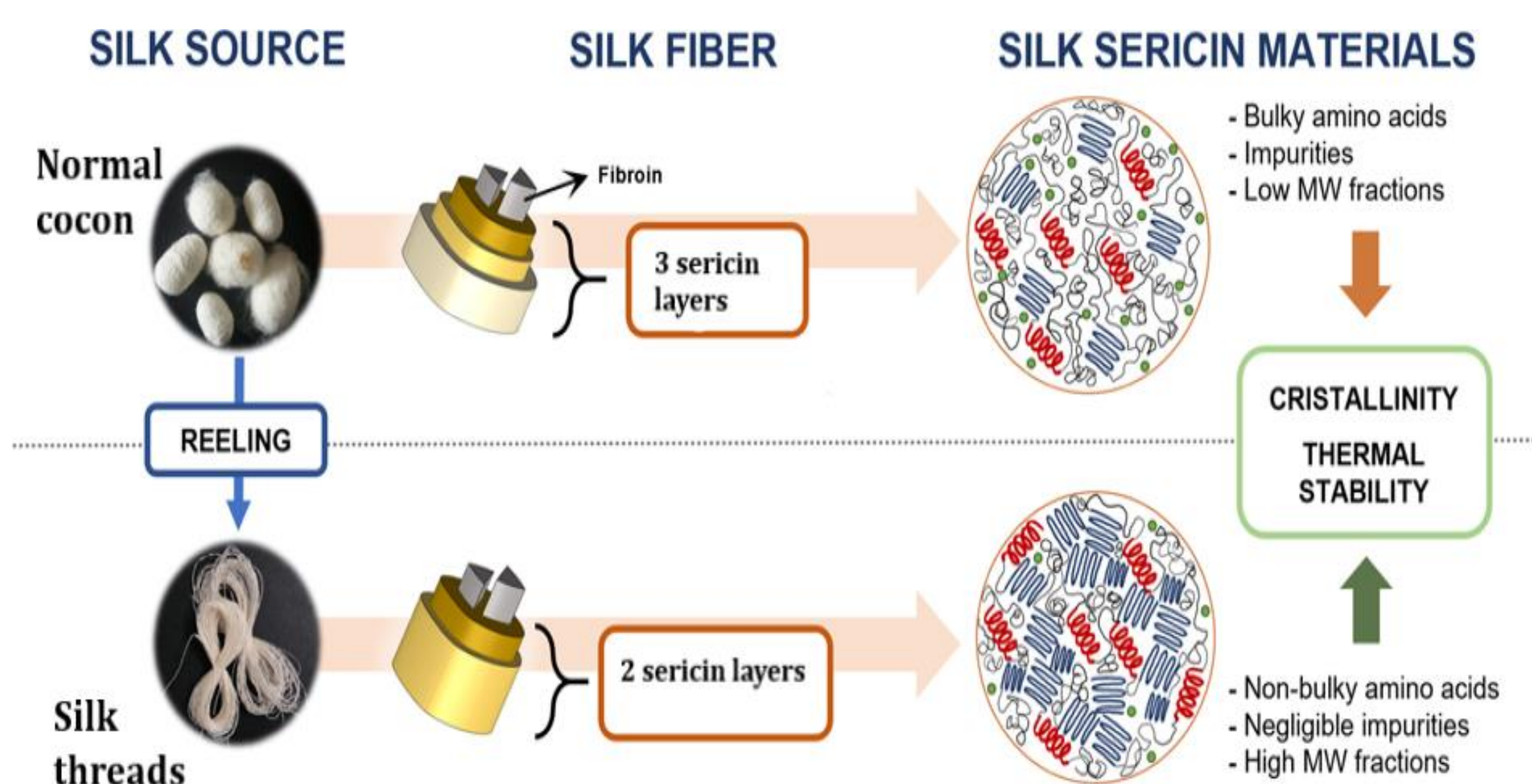


Figure 1. The main productions of silkworms (Jaramillo-Quiceno, 2021)

- **The pupae** is formed in a cocoon made mainly of the two fundamental silk proteins (fibroin and sericin).
- The contribution to sustainable agriculture is made by the use of **sericulture residues**.

• **Conclusions**

The valorization of products resulting from sericulture and moriculture contributes to the development of the economy and the revival of a valuable tradition with biotechnological and commercial potential.

• **Moriculture productions**

Mulberry (*Morus spp.*) used as exclusive food for silkworms (*Bombyx mori*), but also offers other valuable products, such as wood, fruits and seeds, with a wide range of uses in the food, pharmaceutical, cosmetic and construction materials industries.

Tabel 1

Moriculture products (Vijayan, K et al 2011)

Product	Description	Use
Mulberry leaves	The main nutritional resource	Exclusive silkworm food; antidiabetic teas, supplements.
Fruits (white, red, black mulberries)	Edible fruits, rich in vitamins and antioxidants	Fresh consumption, jams, juices, wine, vinegar, drying for powders or teas
Mulberry wood	Hard, dense wood	Furniture, crafts, barrels, fire
Bark	The external part of the trunk and branches	Used in traditional medicine and in the production of fibers for craft paper
Roots	Rarely used	Medicinal extracts