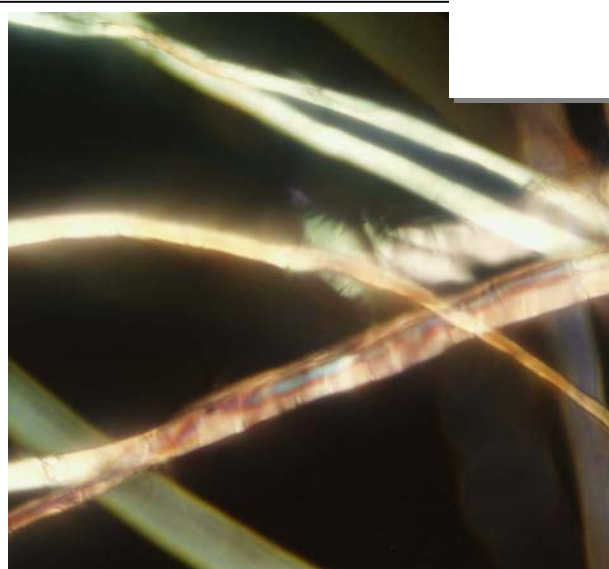


Mitzumata

Chemical Formula *Edgeworthia papyrifera* or *Edgeworthia chrysantha*



Microscopic appearance at x500 mag



Microscopic appearance at x500 mag

Dates of Use

Ancient times to the present day.

Summary of Manufacture

Plant family *Thymelaeaceae*, genus *Edgeworthia*

Harvested fiber length is around 3mm.

The branches from the shrub are harvested for paper manufacture in late spring or early summer. Preparation involves the removal of leaves from the branches, which are then steamed and, as like most methods the fibers are then stripped apart. Outer bark is then removed from that of the inner by scraping and peeling it away; after which it is then soaked and cooked. Fibers intended for mitsumata paper production is then usually boiled for a couple of hours in a solution of soda ash and beaten to further separate the fibers.

Brief History of Usage

Introduced in the Yedo period (1603-1867) in Japan it believed to have originated in China.. It has also had a long history of use in Nepal and has probably been around for a much longer time than is documented. Today it is harvested and produced in much the same way as it has for centuries and is exported from these countries to the West.

Surface Morphology/ Microscopic Description

Known for its fine-grained, lustrous, soft and pliant fibers.

Glossy thin and smooth paper with distinct chain and laid lines.

The sheet is flexible and lightweight.

Fibers are shorter than kozo fibers and thin and regular in width.

Fibers have fewer markings or nodes than kozo with frequent fine cross striations. The latter sometimes group to form a V shaped pattern.

Some rectangular parenchyma cells often seen.

The walls of the lumen are pronounced and thick.

Cell ends are blunt and roundish.

Aging Characteristics

Original paper colour is usually off-white.

The paper has a natural resistance to insects.

With no additives and with traditional manufacture the paper is acid-free.

Technical Examination Techniques/ Chemical Staining Tests

Fibers turn light green/ yellow with the Herzberg stain.