## **FLAX EXPANSION**

to meet Ecusta's needs as the young company grew from four machines to eight, and on to nine. Dependence on European flax as a raw material was never even considered.

Yet, the early days of Ecusta were a time of major efforts toward development of flax strains suitable for agricultural conditions of farmlands closer to North Carolina. Agronomists with state and federal agencies worked in parallel with Ecusta efforts to produce a strain that would take to the Southeast's soil, water and climatic conditions. Had this been successful it not only would have introduced a new linseed oil business, it would have sharply reduced the cost of shipping flax cross country to Pisgah Forest.

The farm efforts came and went. The twin greenhouses used for flax experiments turned to growing flowers that decorated offices and brought cheer to the sick. Ecusta had entered a period in which experimentation no longer looked toward changes in the basic product: but in how to adjust the pulping and papermaking steps to the various differences between lots, a pilot plant handsheet procedure that still plays a role in quality control and how to modify the pulping operation to prevent the spillage of cooking liquor to the river. The latter, longterm research that was plaqued by the peculiar nature of the longfibred flax, led to Ecusta's successful first step in pollution abatement.

Meanwhile, the source of flax was not of much concern, except to the small number of persons directly involved with its procurement. The shipping personnel who moved bales in and out of storage. the workers in all phases from the digesters through bleaching and refining and papermaking, quality control throughout, and through inspection and finishing and onto the shipping personnel who loaded the boxcars and trucks with pallets of cigarette paper, as well as those persons selling the products and managing the operations, took it pretty much for granted that the warehouses would be kept full; all that was needed to keep things going for years ahead.



Frank J. McGibboney, Ecusta's director of production, examines flax as it appears when withdrawn from the field, with seeds and roots intact. Use of the seed is comparatively recent in mankind's long history of cultivating flax. Linens. among the oldest fabrics known to man, are mentioned frequently in the Bible. Linen-wrapped mummies 4,000 years old have been found in Egypt. Flax cigarette paper has been made over the years in many parts of the world from linen rag, yet it was new technology that allowed the pulping of the flax plant without previous chemical processing (retting), and thus made possible the manufacture of flax paper at Pisgah Forest.

Today, that picture is almost totally reversed. In order to solidify its position with flax as a basic raw material, Ecusta has expanded facilities to include procurement and processing operations in the upper midwest, adding a new dimension to the Ecusta operation; Ecusta has inaugurated a worldwide flax buying program that required setting up a new processing operation at Pisgah Forest to chop the retted fibre; and, once again, Ecusta is supporting the efforts of agronomists who hope to develop strains of flax happy with the southeastern environment. The response to changes in the flax situation was orderly, brought on by two principal factors: a shrinking supply and increased needs.

Due to changes with the California flax situation, Ecusta's domestic source of flax became concentrated in the Dakotas, Minnesota and southern Canada, where for years Ecusta had been supplied with flax bought and processed by the field organization of Archer-Daniels-Midland. This reduced not only the acreage available for Ecusta's needs, but those of the principal cigarette paper competitor, the Peter J. Schweitzer division of Kimberly-Clark. It was in response to this competitive situation that Ecusta bought the flax procurement portion of ADM's field organization, adding a network of flax crop specialists and support personnel to Ecusta's



Flax laden trucks groan under the weight of their loads at the new processing plant where tonnage is determined by truck scales. Brought

from flax stacks in the fields, the bales soon will be unloaded for processing and shipment to Pisgah Forest.