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The isomerization of kemiri oil to a drying oil

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Abstrak

ABSTRACT
Originally, only oils of vegetable origin, which were at the most subjected to a heat treatment (stand oil manufacture), were used as binder for the paint.
The oils mostly applied are linseed oil and Lung oil, and recently also oiticica oil. These so called drying oils - when spread out in a thin layer - possess the ability to change under the influence of air and light into a hard, more or less water-repelling, and thus into a protective film within a relatively short period.
For the manufacture of paints, varnishes, and laquers, these oils are mixed with other materials which contribute to the formation of the desired properties of the protective layer. The Linum usitatissimum, the source of linseed oil, grows only in areas with a temperate climate and cannot grow in a large. scale in iadonesia.
Attempts to transplant in Indonesia the Aleuritus Fardid and the Aleuritus Montana - the seeds of which supply the tung oil - were already made in 1835 and later on repeated in the years 1930 to 1935.It appeared that the A. Fordie could not flourish in Indonesia, while the A. Montana; better able to withstand the Indonesian rlimatic conditions, gives strongly varying results from place to place.
Frahm and Koolhaas were able to prepare a drying oil with reasonable properties from locally collected seeds of A. Montana. The susceptibility of the plant to various influences however, hindered its development into a big culture seriously.
Other possibilities for the production of drying oils (from the seeds of Aleuritus trisperma oiticica, families of parinarium are probably present, but an investigation to the productiveness of such cultures will be time consuming In connection with the above mentioned general scarcity of drying oils, extensive attempts are carried out in many countries of the world to manufacture drying oils by means of chemical processes.
Except in a single case where the drying properties in the raw material, prior to the chemical process, are scarcely present (castor oil), the starting point is a natural product, which already possesses certain drying properties. Such processes present Indonesia with the possibility of finding a solution for the above mentioned problem of binders.