

## Director's Digest



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### Palm Oil vs. Tallow.

At the recent NRA Cruise Convention, Seigfried Mielke, Publisher of OIL WORLD, discussed the world fats and oil situation at some length. In particular, his assessment of tallow demand in world markets as influenced by palm oil production was quite pertinent.

Unfortunately, from the renderers' point of view, tallow and palm oil have some characteristics in common. Foremost of the similarities is that they are both relatively highly saturated fats; containing somewhere around 50% saturated fatty acids. Thus, for many applications, the two products are competitive.

In Mr. Mielke's discussion the rapid increase in palm oil production was emphasized. From this discussion, it almost seemed as though the renderers were third in line behind the blue whale and the California condor for extinction.

Unquestionably, increases in palm oil production will continue to present serious

challenges to U. S. tallow. Palm oil is one of the major sources, if not the major source, of foreign exchange for Malaysia, replacing rubber. Other countries, such as Indonesia, also expect to benefit from production and export of palm oil. It would seem that competitive forces, influenced by direct government interest in the case of palm oil, might exert intolerable pressure on tallow exports. Certainly, given the current plentiful supply of fats and oils in world markets, palm oil, as we all recognize, presents a formidable challenge.

In addition, as Mr. Mielke pointed out, the pollinating weevil introduced into Malaysia from the Cameroons in Africa has substantially increased oil yields of producing trees. More palm oil from a given number of trees will further increase competitive pressures.

As gloomy as the outlook might appear to be, there are a number of factors which need to be considered in comparing tallow to palm oil.

In terms of the supply situation, no one really knows whether, after being stimulated by the pollinating weevil, trees will need rest for a period of time. Further effects of hyper-production on nutrient needs of the oil palms are not fully understood. So it is premature to assume large increases in efficiency of production.

On the purely political side, there are a few dark clouds to be seen. Harvesting palm fruit is labor intensive. Much of the labor is presently provided, so we are told, by Indian laborers, who formerly worked the rubber plantations. Large increases in palm plantings will require that the labor force be augmented. Malaysia is a predominantly Moslem society. The present Indian laborers are Hindus. Thus, religious differences might interfere with enlarging the labor force by intermingling native Moslem Malaysians and Hindu Indians or by importing more Hindus into a hostile, predominantly Moslem, society.

Assuming these factors will not interfere with large-scale increases in palm oil production, are there factors which will permit tallow to continue to compete in world markets? Yes, there are! In terms of consumer food products, tallow has an advantage in flavor and color. For soaps and other cleansers, color is a plus for tallow.

Admittedly, palm oil readily fractionates into a hard fraction and a bland oil, suitable for margarine and frying oils, respectively. However, particularly with regard to

the latter product, frying oil derived from palm oil is subject to development of off flavors with time, so shelf stability is a problem.

Despite the success that palm oil has had in penetrating world markets, the situation for tallow is far from hopeless. Malaysia, however, is supporting an extensive technical effort in major market areas. An association cannot hope to match this effort. Nevertheless, there is expertise in the industry to undertake programs designed to protect or expand the markets. The desirability of carrying out technical programs involving developmental or demonstrational projects in the more important markets seems obvious. Such programs in conjunction with established market development activities would do much to relieve competitive pressures on tallow, which are rapidly developing.

with a lower level of added fat, which would contribute to the nutrient content of the total feed, in addition to the added fat. Such products would also be useful for other applications, such as turkey feeds, which might call for lower levels of fat.

In addition, we are considering a project proposal from Kansas State University to study the usefulness of extruders or a small, batch puffer to process grains to use as fat carriers. Although processing costs for grain extrusion are relatively high (\$2-2.50 per cwt.) and the small grain puffer under consideration is labor intensive (approximately 200 lbs. of product per manhour), one of these processes might have application in making a high-capacity, nutritional carrier for fat.