

Table 3. Stripper Harvest Tests, Fiber Data

| Variety | Length | | | Strength | | | Fineness | | |
|--|------------------|-------|-------|----------------------------|-------|-------|------------|-------|-------|
| | Fibergraph — UHM | | | Pressley — $\frac{1}{8}$ " | | | Micronaire | | |
| | Marana | CRC | Enke | Marana | CRC | Enke | Marana | CRC | Enke |
| Deltapine 45 | 1.08 | 1.07 | 1.05 | 3.04 | 3.25 | 3.38 | 4.57 | 4.99 | 4.90 |
| Deltapine Smooth Leaf | 1.05 | 1.02 | 1.00 | 3.00 | 3.26 | 3.48 | 4.52 | 4.95 | 5.00 |
| Lockett 4789 | 1.07 | 1.08 | 1.04 | 2.97 | 3.29 | 3.19 | 4.56 | 5.12 | 5.15 |
| Arizona 6010 | 1.03 | 1.00 | ..... | 3.10 | 3.35 | ..... | 4.91 | 5.15 | ..... |
| Arkansas 61-30 | 0.98 | 0.95 | ..... | 2.74 | 2.97 | ..... | 5.47 | 5.72 | ..... |
| Lankart 57 | 1.01 | 0.96 | 0.94 | 2.61 | 2.86 | 3.20 | 4.78 | 5.11 | 5.05 |
| Paymaster 101-A | 0.99 | 0.93 | 0.95 | 2.82 | 3.30 | 3.55 | 4.74 | 5.05 | 5.00 |
| Blightmaster | 1.00 | 1.00 | 1.00 | 2.85 | 3.36 | 3.37 | 4.40 | 4.76 | 5.00 |
| Paymaster 111 | 1.07 | 1.01 | 1.06 | 3.23 | 3.56 | 3.85 | 4.78 | 5.00 | 4.30 |
| Northern Star 5 | 0.98 | 0.96 | 0.90 | 2.79 | 2.82 | 3.05 | 4.41 | 4.30 | 5.05 |
| Gregg 35 | 1.00 | 0.96 | 0.88 | 3.16 | 3.48 | 3.68 | 4.13 | 4.51 | 4.40 |
| Northern Star 4-11 | ..... | ..... | 1.03 | ..... | ..... | 3.05 | ..... | ..... | 4.90 |
| Stoneville 213 | ..... | ..... | 1.07 | ..... | ..... | 3.32 | ..... | ..... | 5.05 |
| Stoneville 7-A | ..... | ..... | 1.03 | ..... | ..... | 3.15 | ..... | ..... | 5.05 |
| DeKalb 353 | ..... | ..... | 1.02 | ..... | ..... | 3.13 | ..... | ..... | 4.80 |
| DeKalb 220 | ..... | ..... | 1.04 | ..... | ..... | 3.28 | ..... | ..... | 4.65 |
| Paymaster 54-13 | | | 0.95 | | | 3.05 | | | 4.65 |
| TPSA Deltapine (Texas Planting Seed Association) | | | 1.05 | | | 3.41 | | | 4.85 |

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tests and the Extension test with Fred Enke in Pinal County are presented in Table 3. Yield data from the test with Fred Enke were not kept.

A Way To Go Yet

Some observations made from these tests indicate that stripper cotton has a long way to go before it will be profitable in Arizona. Of all the stripper varieties tested, none yielded as well as varieties currently grown for spindle harvest. In addition, fiber quality of the stripper varieties is generally poorer. However, our current open boll varieties are not suitable for efficient stripper harvest.

Deltapine and Stoneville varieties are characterized by a spreading, much branched type of growth with open, fluffy bolls. Under Arizona

conditions, in order to make a yield satisfactory to Arizona farmers, these varieties grow too rank for a stripper harvester. In order to be suitable for a stripping machine, cotton must be short, fruited close to the stalk, have a minimum of branching and have a boll that does not fluff and string out.

Needs Dry, Dead Plants

One of the biggest problems with Arizona stripper cotton was the failure to get a good desiccation. Cotton must be dead before the machine can strip well and this was accomplished only after frost. A desiccant must be found that will kill and completely dry the plant whenever desired to prevent leaving the cotton in the field till frost. Green stalks and bolls don't strip well, and they stain the lint.

the state chemist prior to distribution or offering for sale. Labeling information which shows that all statements required by law are provided on the product must be presented with an application for registration before an item will be registered, except when only minor corrections may be requested at the time of registering, to be effected as soon as practicable.

Collection of Samples

Official samples of feeds, fertilizers and pesticides are drawn, by inspectors from the office of the state chemist, from stocks being held for sale or from material delivered to the consumer. Most samples of pesticides are taken at air strips from which applications are to be made, while feeds are taken mainly from stocks held by the suppliers, and fertilizer samples come largely from deliveries made at consumers' fields or premises ready for application. These samples are submitted for analysis by the chemists under direction of the state chemist.

Enforcement costs are paid from fees collected in accordance with provisions in the three laws. While there is no fee provided for the registration of commercial feeds, there is collected an inspection fee of eight cents per ton of feed distributed. On commercial fertilizer and agricultural minerals a fee of \$5 for each product is required for registration, plus an inspection fee of 12c per ton on all distributed. In the case of pesticides no inspection fee is provided for, but registration fee amounts to \$25 for the first two items and \$7.50 for each additional item registered by a registrant. Ninety per-cent of these fees are applied to enforcement and 10 percent is required to be transmitted to the state general fund.

Under the commercial feed law nearly 1900 separate feed items represented by 280 companies were registered in 1964. The feeds included a rather substantial number of pet foods. During the past five years the tonnage of feeds distributed, as reported to the state chemist by distributors, has shown a steady increase from about 309,000 tons in 1960 to about 463,000 tons in 1963, but showing a drop to 450,000 tons in 1964, still ahead of years prior to 1963. Approximately 5 percent of all feeds distributed each year consists of pet foods, both canned and dry.

CONSUMER PROTECTION*Enforced by State Chemist*

By FLOYD ROBERTS

Arizona statutes provide that a state chemist shall be appointed by the dean of the college of agriculture of The University of Arizona to enforce the Arizona Commercial Feed Law, the Arizona Fertilizer Materials Act, and the Arizona Pesticide Act.

These laws are designed to provide protection to consumers of the respective commodities affected by re-

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quiring certain specific information on the label and reasonable assurance of their being as represented. This is accomplished through registration and periodic sampling and analyzing of these commodities.

Most products subject to these laws are required to be registered with

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Many Are Garden Items

About an even 1,000 commercial fertilizer and agricultural mineral items were registered in 1964 under the labels of 168 firms. Many of these products were of the specialty type sold through lawn and garden supply outlets. Tonnage of all commercial fertilizer and agricultural minerals distributed has shown a slight, but steady, increase from 200,655 tons in 1960 to 237,417 tons in 1964.

Products of 478 firms numbering slightly under 4,000 were registered as pesticides in 1964. Since the Arizona Pesticide Act does not provide for reporting tonnage, no figures are available on the amount of pesticide distributed at any time. The number of items registered during each of the previous five years has fluctuated somewhat. This has been reflected by a fluctuation in total registration fees between \$30,800 and \$36,750.

The pesticides registered included insecticides, fungicides, algaecides, nematocides, germicides, rodenticides, herbicides, desiccants, defoliants, animal and bird repellants and, according to law, other substances to control pests which may infest or be detrimental to vegetation, man, animals or households, or be present in any environment whatever, except viruses, fungi or bacteria on or in living man or other animals. Many of these items are found offered for sale on the shelves of groceries, nurseries, druggists, etc. for home and garden use.

Reading the Fine Print

In enforcing these consumer laws, labels are closely examined to determine that required guaranteed analyses and statements concerning the composition are provided, and that no false or misleading statements are given. They are also checked for proper warning or caution statements and directions for use, when necessary.

This applies, especially, to pesticides and to commercial feeds containing drugs. Requirements of the United States Food and Drug Administration are applied to the latter. Commercial fertilizers and agricultural minerals to which a pesticide has been added must be registered under both the pesticide and fertilizer laws, and must comply with requirements of both laws. The number of such mixtures registered is slowly increasing.

While some products are not required to be registered nor subject to labeling requirements, a section of the fertilizer law which prohibits false and misleading statements is applied. For example, distributors of certain peats have been required to strike from the labeling on bags the word "Moss" from the product name "Peat Moss" when, in reality, the product did not qualify as a moss type of peat. In some cases the type was found to be that of "muck."

No Loose Wording!

A recent regulation was promulgated, directed toward the distribution of wood or bark materials labeled to show prominently such wording as "Nitrogen Added," but the total nitrogen is substantially less than 1%. Under the regulation, suppliers are required to qualify this statement by showing a guarantee of the minimum amount of nitrogen or refrain from indicating its presence. Such action as this is taken in the interest of the consumer, lest someone may gain a false impression of a product. At the same time legitimate producers are protected against unfair competition.

Much of the feeds and fertilizers are distributed today in bulk, however, proper labeling is still required under these laws. Labeling is effected by means of a written or printed statement to accompany the delivery, and to be furnished to the consumer.

Consumer Should Be Alert

Consumers should be aware of this,

and insist on receiving a written or printed statement with each delivery. The furnishing of a regularly registered tag with each delivery, when available, is considered as meeting this requirement. This part of the laws poses difficulty in enforcement. The consumer can do much to influence compliance by insisting on the proper labeling to which he is entitled in bulk deliveries.

The state chemist is not authorized to accept samples of any materials from individuals desiring chemical analyses. Such requests are usually referred to commercial laboratories. However, if there is a question concerning legality of a product from the composition standpoint, or otherwise, of any product under jurisdiction of these laws, the office makes every reasonable effort to have an official sample drawn. Official action is then taken when indicated. In fact, the office encourages requests for sampling when there is any doubt about compliance as this occasionally provides the only means for locating certain products in the channel of trade.

In the normal course of enforcement copies of laboratory reports are submitted to consumers whose materials are sampled by the inspectors, as well as to the manufacturer or registrant of the material. At the close of each year annual reports covering all samples analyzed during the year are published and are available upon request. These reports cover separately commercial feeds, fertilizer materials, and pesticides.