

OKLAHOMA

# WHEAT IMPROVEMENT

REPORT

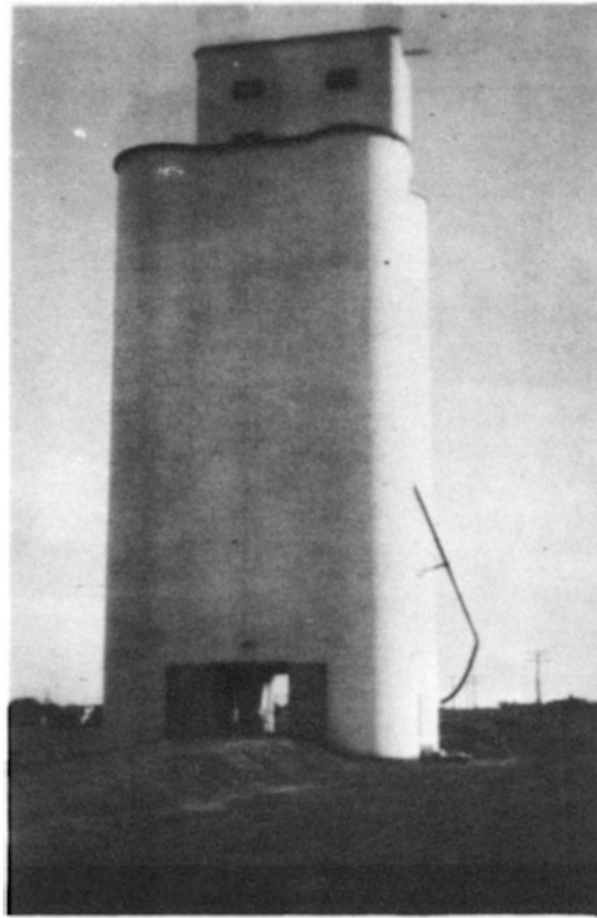


**Cir. 512**

EXTENSION SERVICE  
OKLAHOMA A. and M. COLLEGE

Shawnee Brown, Director

Stillwater, Okla.



**SMALL ELEVATOR:** Concrete grain elevators such as the one shown above are becoming more numerous throughout the entire Hard Red Winter Wheat area. These elevators, with their modern equipment, have made it possible to maintain high quality while the grain is in storage.

Over 20% of those local grain elevator operators responding to a survey indicated that they were attempting to bin the acceptable and unacceptable varieties separate in the single elevator. Fourteen per cent indicate that they were binning the acceptable and undesirable varieties in separate houses.

**OKLAHOMA**

**WHEAT IMPROVEMENT**

**REPORT**

by

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***in Production and Marketing***

**WHEAT IMPROVEMENT PROGRAM**

Some three or four years ago, Oklahoma wheat farmers were producing a large percentage of low quality, undesirable varieties of wheat. Several of the larger wheat producing counties were estimated as having 70 to 80 per cent of those inferior varieties, but today it is a different story. Oklahoma is coming to the front by "leaps and bounds."

**FACTORS RESPONSIBLE FOR CHANGE**

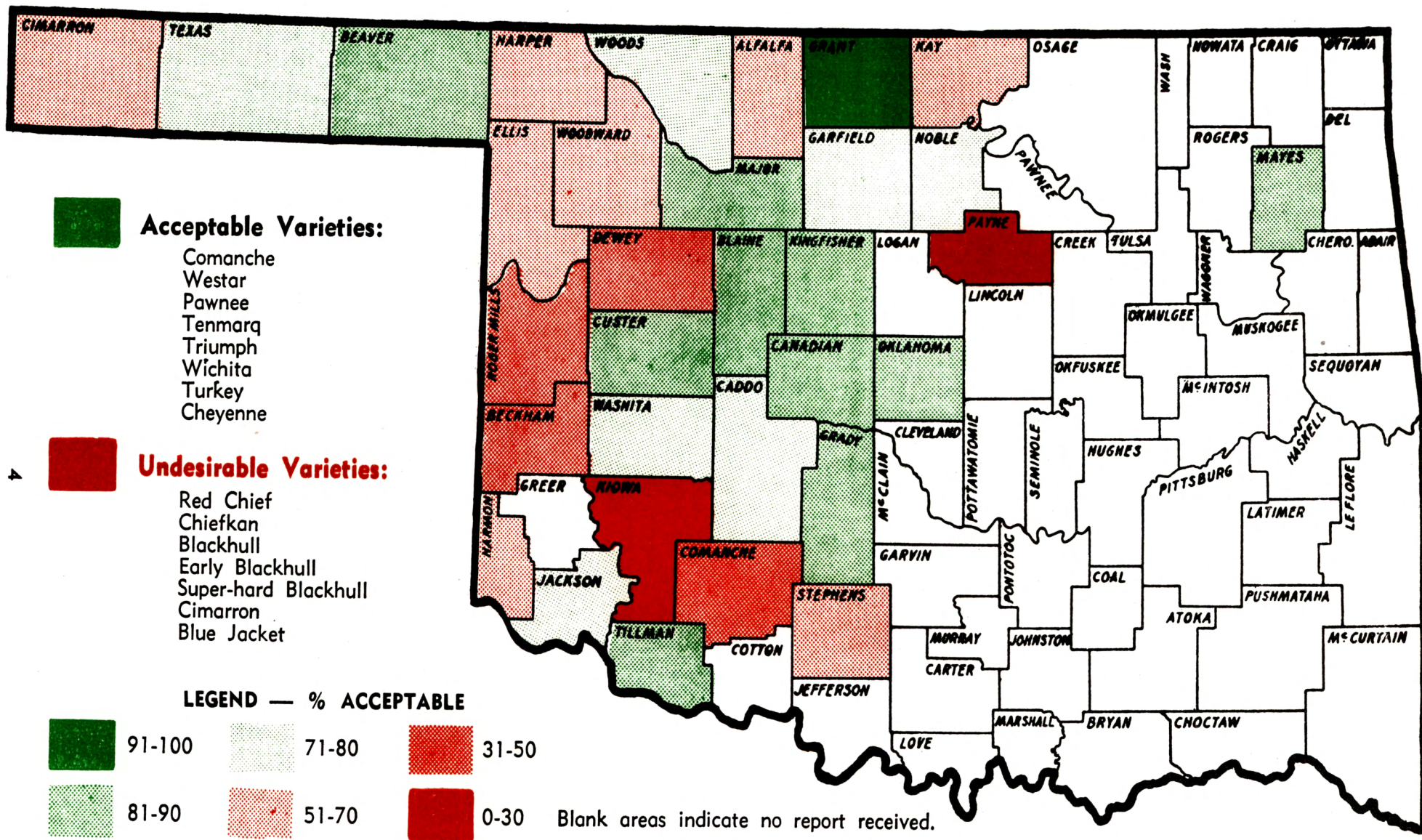
First of all, the Agriculture Experiment Stations, through their program of plant breeding and testing, developed new varieties superior in both quality and yield per acre to those that were being produced. Today, we have at least five good quality varieties being produced in Oklahoma. They are: Comanche, Westar, Triumph, Wichita, and Pawnee.

The Extension Service of Oklahoma A. and M. College, having promoted a wheat improvement program for several years, applied special emphasis to the program in 1948. Working cooperatively with other wheat improvement organizations, the grain industry and the farmers of Oklahoma, the Extension Service proceeded with the following objectives in mind:

1. To carry out an extensive educational program on the production of high quality milling and baking wheat.
2. To bring about better marketing for the high quality milling and baking varieties of wheat.
3. To create more 4-H Club interest in wheat improvement projects.

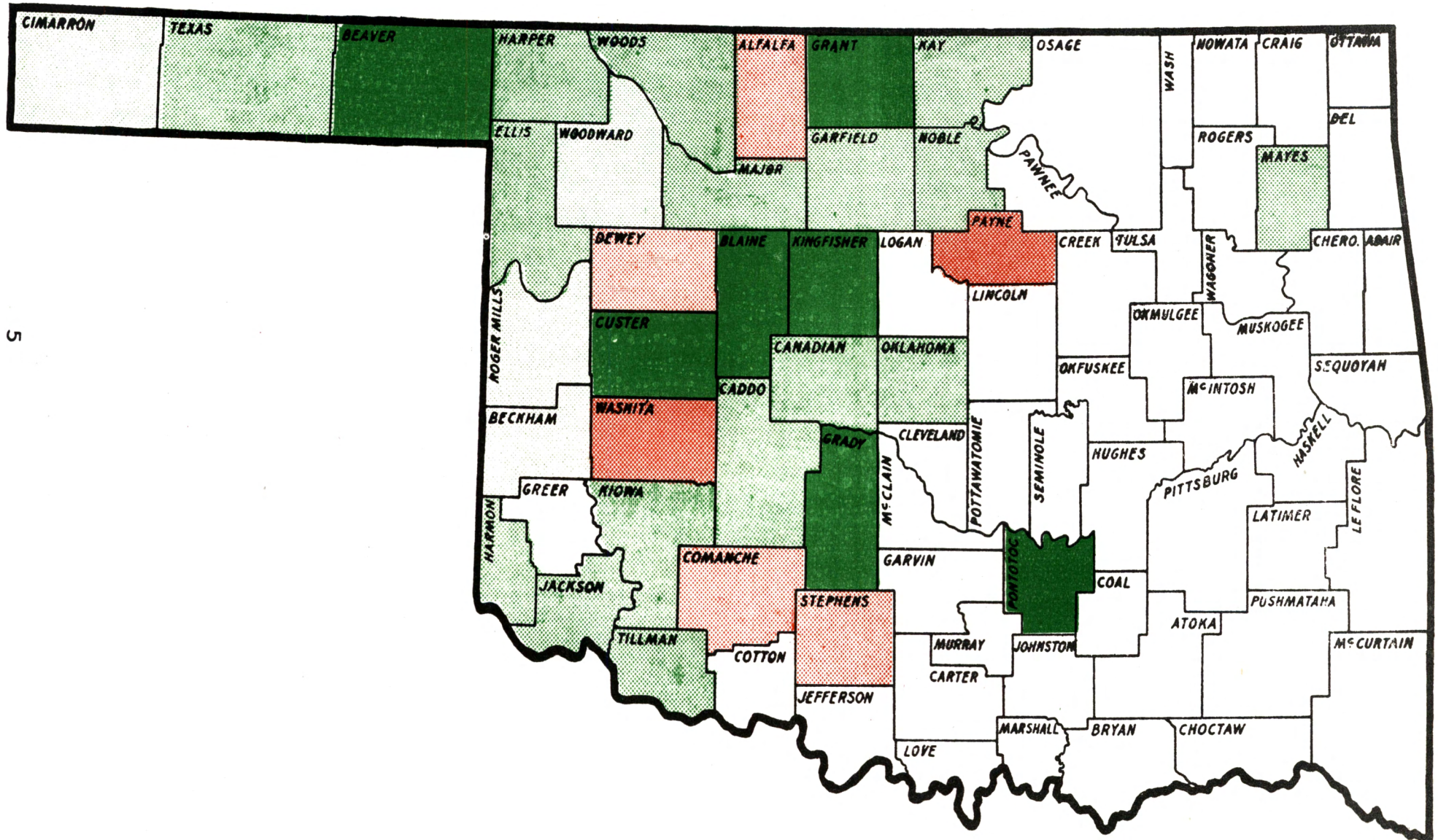
The milling and baking industry of Oklahoma, realizing that the success of their business depended upon the quality of their product, started a campaign of wheat improvement through an extensive educational program. They also used variety discrimination in purchasing wheat for milling and baking purposes. Several local mills paid a few cents premium for those varieties in greatest demand. This reflected back to the terminal and local elevators.

Realizing that less wheat would be used for military purposes, and a less amount would be exported to foreign countries, the local and terminal elevators began doing something about the low quality milling and baking



**1948 WHEAT VARIETY SURVEY — % Acceptable Varieties Handled in 1948**

# 1949 WHEAT VARIETY SURVEY — % Acceptable Varieties Expected to Handle in 1949



varieties of wheat they were handling each year. Terminal elevators used methods similar to those of the mills. They used the method of variety discrimination by storing the acceptable varieties, and inferior varieties, in separate bins.

A few of the terminal elevators paid premiums to the country elevators for wheat high in the acceptable milling and baking varieties. Immediately, the farmers began to realize the necessity of growing improved varieties of wheat in Oklahoma.

### **SURVEY REVEALS PROGRESS**

A survey by the Extension Service of Oklahoma A. and M. College in May, 1949 reveals that a great deal of progress has been made in the last two years.

A questionnaire was sent to more than 400 individual grain handlers in Oklahoma, which included the following questions:

1. Approximately what per cent of the wheat handled at your elevators was of the approved varieties for the 1948 season?
2. What per cent do you expect to handle in 1949?
3. Did your elevator carry on a program to encourage planting the desirable milling and baking varieties?
4. What methods are you using to keep the desirable and undesirable wheat varieties separated?

In summarizing, it was found that the elevators and mills of Oklahoma estimated that 68.5 per cent of the wheat they handled in 1948 was of the approved milling and baking varieties. This compared with 81.5 per cent they expected to handle in 1949, which shows an expected improvement of 13 per cent in a period of one year.

Results of the survey showed that 67 per cent of those responding were promoting wheat improvement in some manner. Thirty-five per cent reported that they were using variety discrimination in 1948. Thirty-nine per cent stated they were using this method in 1949.

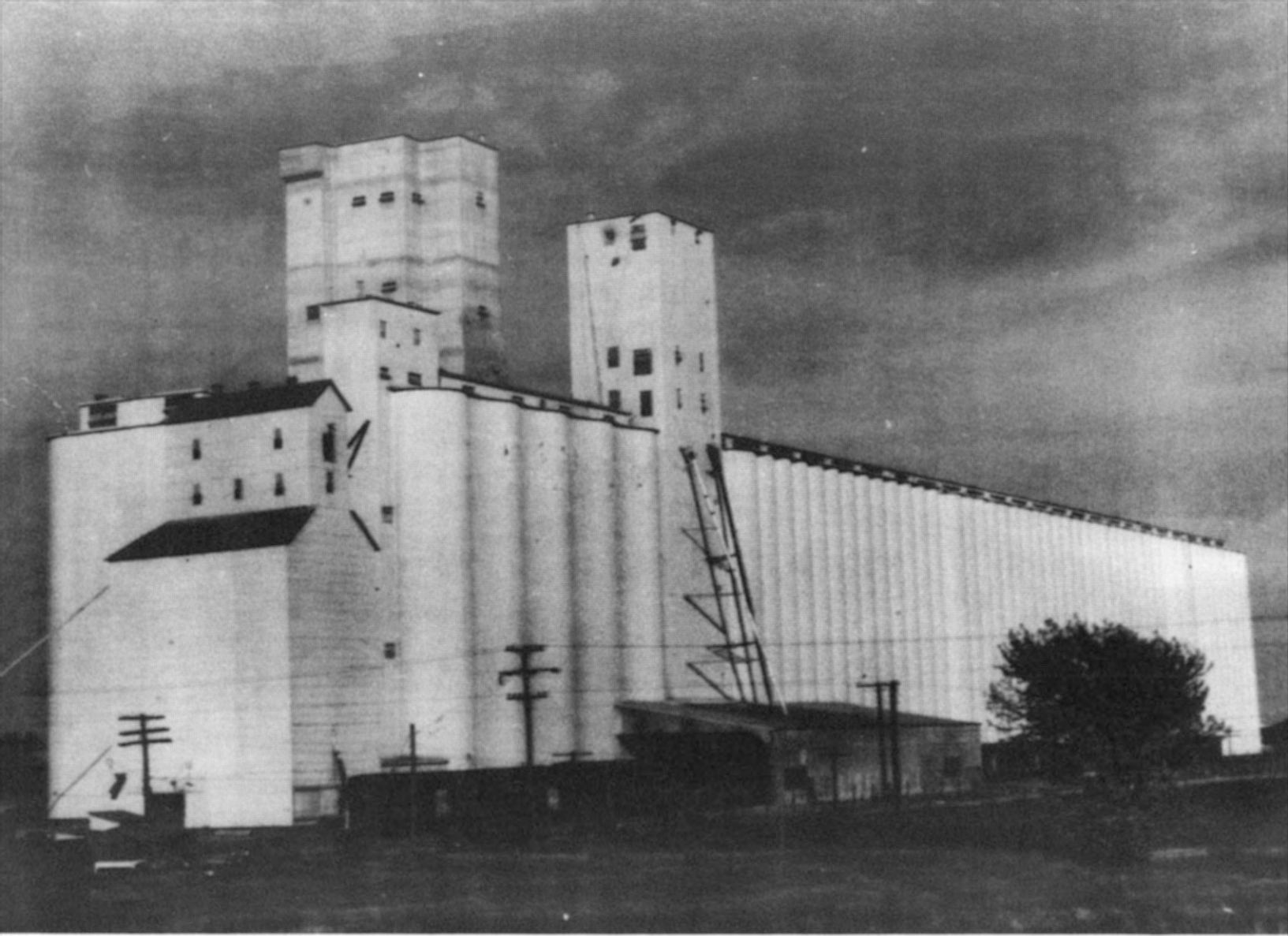
Listed below are the three principal methods used in variety discrimination and the per cent of elevators using each:

<b>Method</b>	<b>1948</b>	<b>1949</b>
A. Binning separately in the same elevator.	19%	23%
B. Binning in separate elevators.	8%	14%
C. Accepting undesirable varieties at a later time.	9%	10%

Several indicated promotional work consisting of sponsoring 4-H Club wheat improvement projects, and others handled high quality seed wheat of the approved varieties for distribution to the farmers at a reasonable price per bushel.

A number indicated that while they had no organized program on wheat improvement, they discussed personally with the farmers in their communities the importance of producing the acceptable varieties of wheat.

The colored maps indicate, by counties, the per cent of desirable varieties handled in 1948 and the per cent expected to be handled in 1949. The average for each county was determined by compiling the figures furnished by the local grain elevators within each county.



**TERMINAL HOUSES:** The terminal elevators of Oklahoma were among the pioneers in binning wheat on a large scale according to the variety analysis. This has made it possible for them to guarantee to the milling trade, not only a certain test weight and protein content, but a given per cent of acceptable varieties.

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