

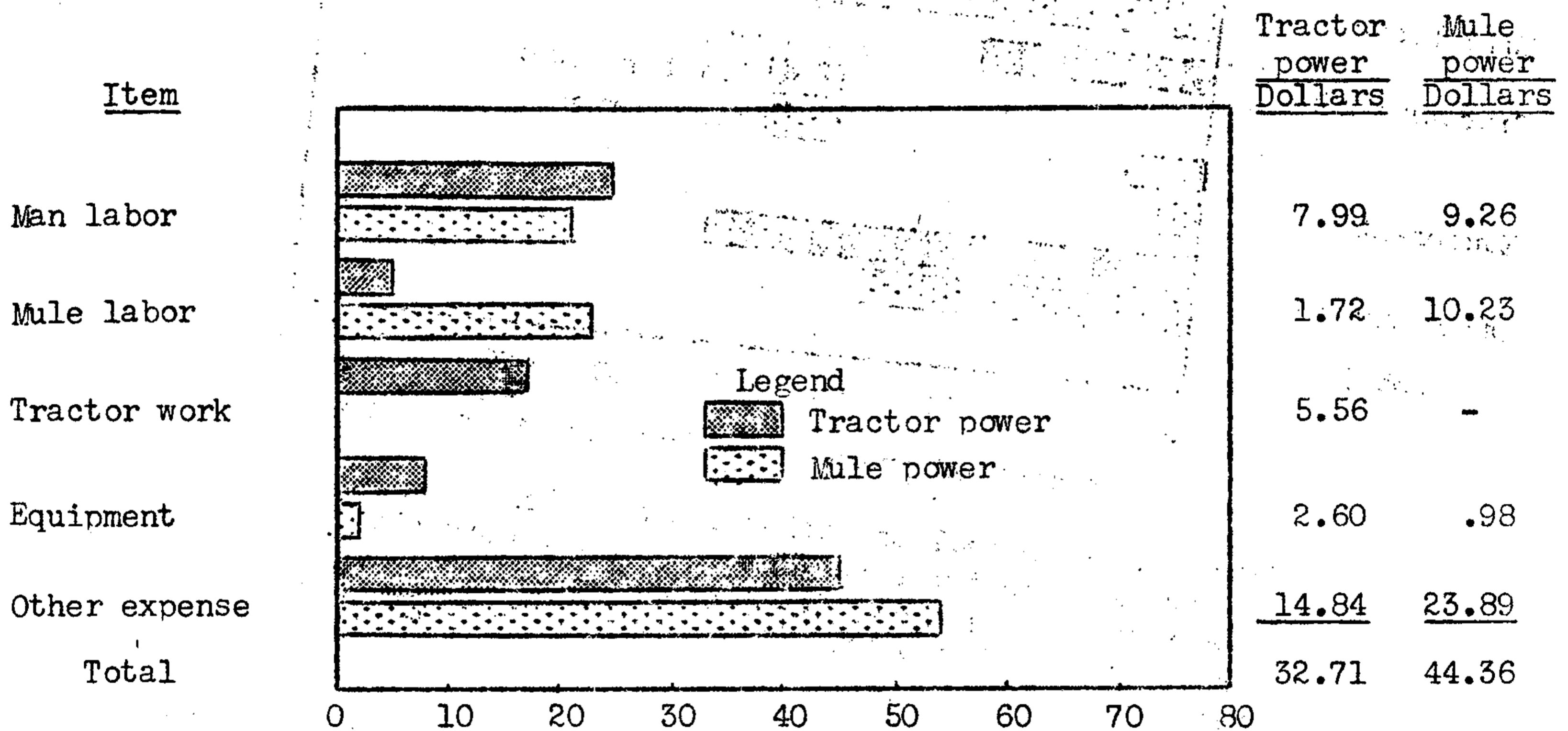
Figure 4. Principal operating expense items as percentages of gross operating expense per acre for cotton with tractor power and mule power. The high cost of mule power relative to the cost of tractor power results in higher operating expenses per acre of cotton.

Peanuts. The operating expense for producing an acre of peanuts was \$11.65 less where tractors were used, figure 5.^{8/} Input factors such as seed, fertilizer, bags, etc., were the same for both methods of production. In arriving at per acre operating expense, the average (1937-1941) yield of 1,263 pounds of nuts per acre for the Northern Coastal Plains was used.

Where mules were the source of power, the expense for picking and baling was figured at the prevailing custom rate of 50 cents per bag and 10 cents per bale and was included as other expense. Where tractors were employed, the equipment charge includes the expense for the picker and the baler. Mule

^{8/} Does not include cost of land and management. For details see Appendix table 12, page 38.

power amounted to 23 per cent of the total operating expense where mules were used as compared with only 5 per cent for mechanized methods. Tractor work and equipment, including the picker and the baler, amounted to 25 per cent of the total operating costs with mechanical power, while the mule equipment charge for mules was only 2 per cent of the total.



Per cent of gross operating expense per acre

Figure 5. Principal operating expense items as percentages of gross operating expense per acre with tractor power and mule power. Peanuts were produced at less cost per acre on mechanized farms where pickers and balers were available on the farm.

Corn. The operating expense per acre for corn was \$5.34 less with tractor power, figure 6.^{9/} Input factors such as seed, fertilizer, etc., were the same for both methods of production.

The cost of man labor per acre was \$2.43 less for mechanical power, while power and equipment costs were \$2.91 less.

^{9/} Does not include cost of land and management. For details see Appendix table 13, page 39.

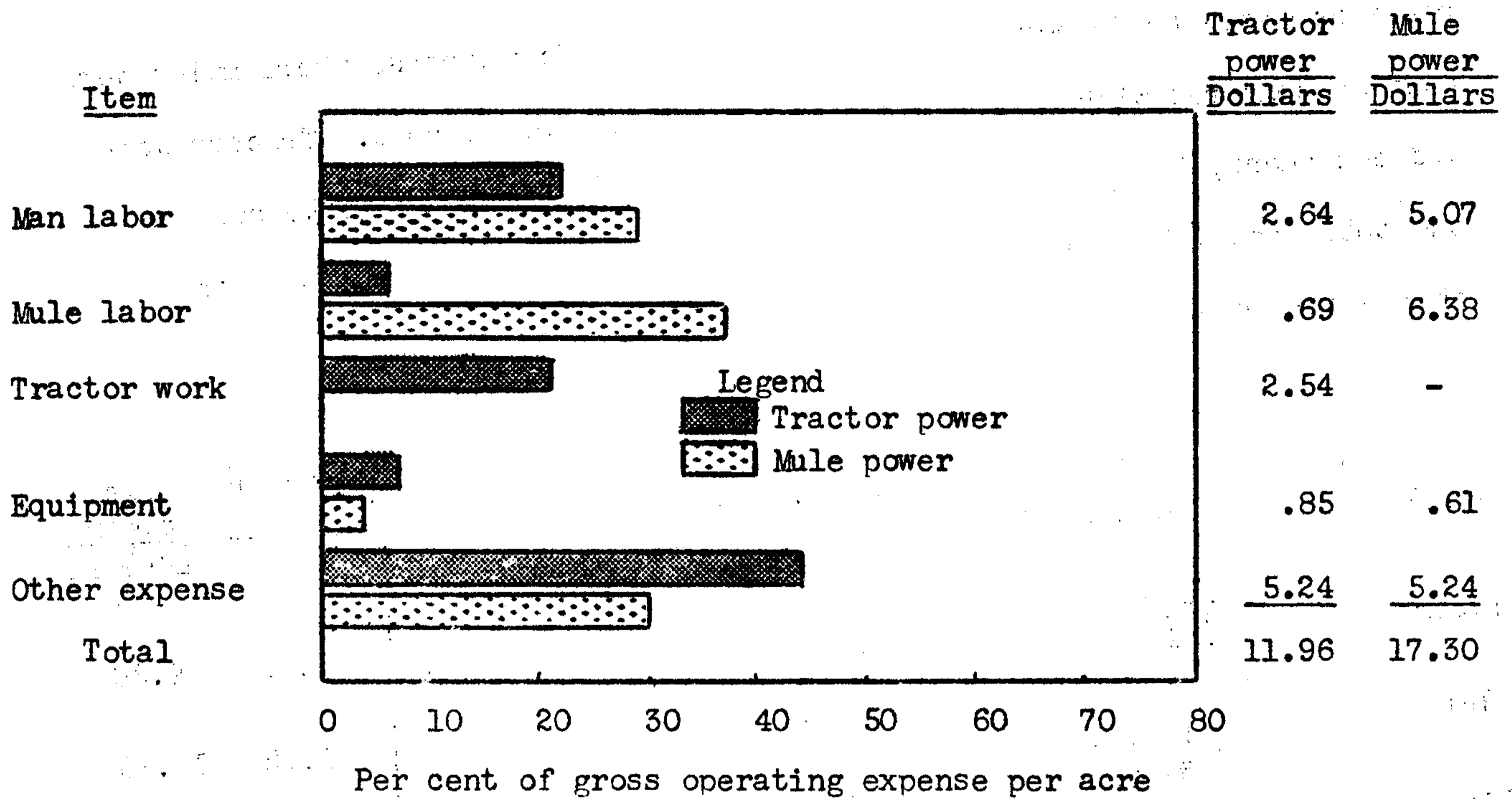


Figure 6. Principal operating expense items as percentages of gross operating expense per acre for corn with tractor power and mule power. The use of tractor power and machinery in the production of corn reduced cost and man labor required per acre.

Soybeans. The production of soybeans with tractors was completely mechanized, whereas some of the production operations for cotton, peanuts, and corn were performed by hand labor. On non-mechanized farms, mules and hand labor were used except for harvesting. The cost of combining soybeans on farms operated with mules was calculated on the basis of prevailing custom rates and was included with other expenses.

The operating expense per acre was \$7.85 less where operations were completely mechanized, figure 7.^{10/} The cost of mule power and equipment, (excluding the combine) on farms operated with mules was \$1.25 more per acre than the cost of tractor power and equipment (including the combine) on farms operated with tractors. The charge for combining is included in other expense where mules were used.

^{10/} Does not include cost of land and management. For details see Appendix table 14, page 39.

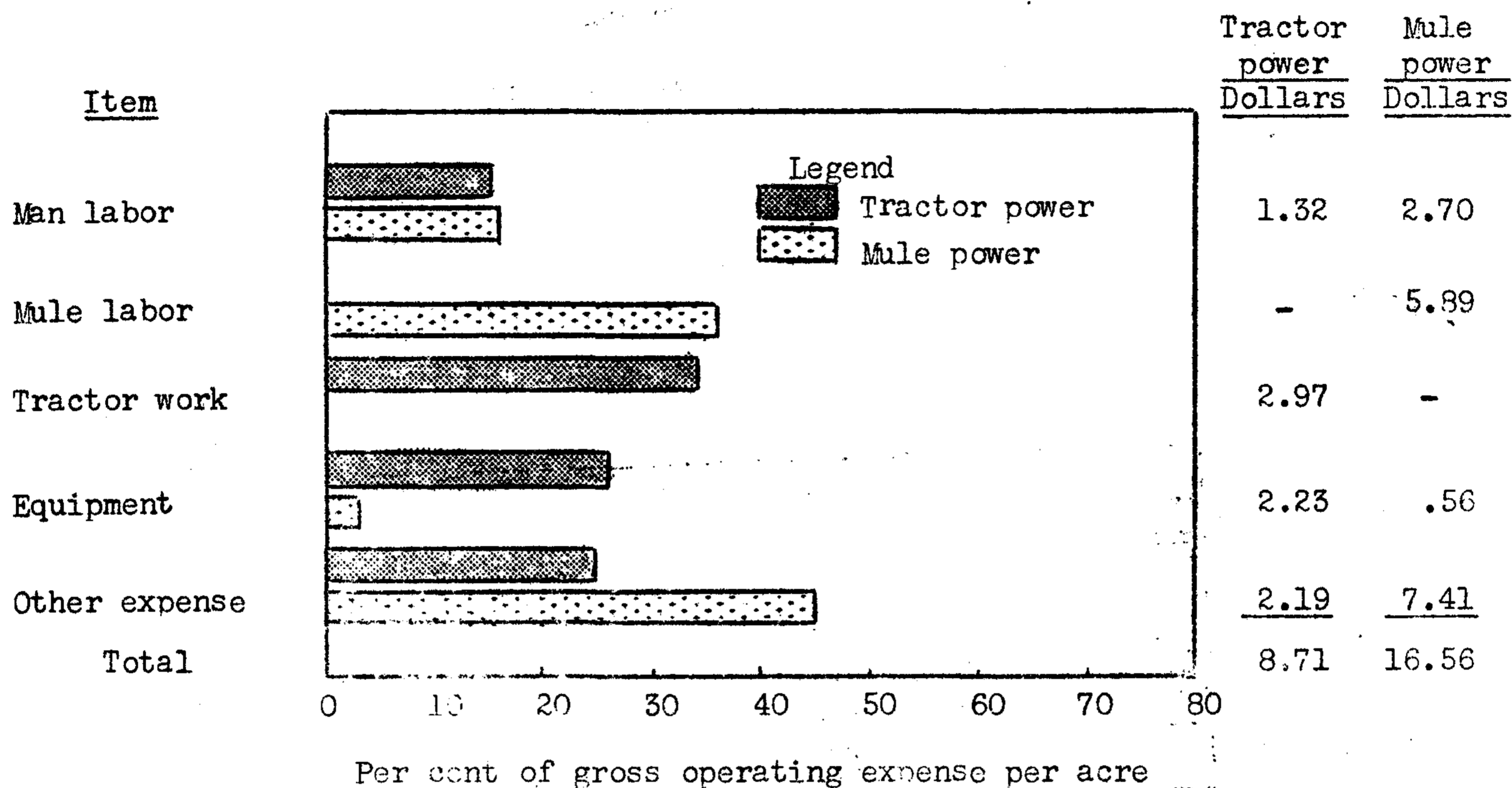


Figure 7. Principal operating expense items as percentages of gross operating expense per acre for soybeans with tractor power and mule power. Cost per acre for producing soybeans was reduced approximately one-half where tractor power and machinery were used.

Small Grain. The production of small grain was completely mechanized on one group of farms, while for the other group only the harvesting operation was mechanized. Combining where mules were used, was hired at prevailing custom rates and included with other expense. The equipment expense includes the combine cost where tractor power was used.

The variations in cost for producing wheat, oats, or barley are minor. In this bulletin, the cost of producing wheat is presented and is considered typical. The operating expense per acre was \$6.56 less with mechanical power than with animal power, figure 8. ^{11/} Tractor and equipment costs, including the harvesting operation, were only \$3.47 per acre with mechanical power while mule power amounted to \$4.74 an acre where mules were the main source of power.

^{11/} Does not include the cost of land and management. For details see Appendix table 15, page 40.

In addition, there was a custom charge for combining on mule operated farms. The charge for combining where animal power was employed is included in other expense.

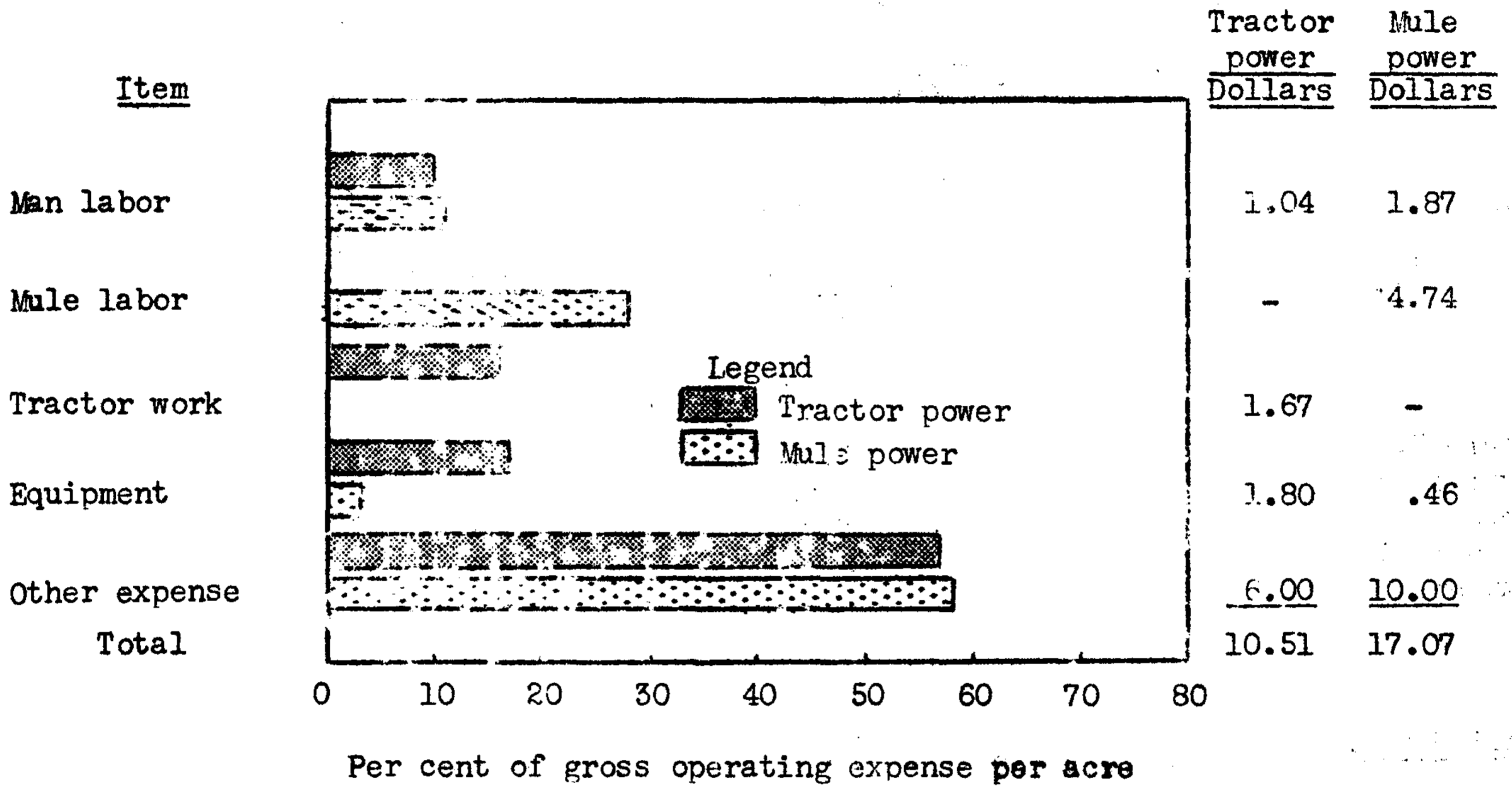


Figure 8. Principal operating expense items as percentages of gross operating expense per acre for small grain with tractor power and mule power. The high costs of mule power and combine custom rates relative to the costs of tractor power and equipment result in higher operating expense per acre for small grain where mule power was used.