

# DIRECTIONS FOR HERBICIDE AND INSECTICIDE COST PER ACRE SPREADSHEET FOR PASTURES AND HAYFIELDS

J.P. Banta<sup>1</sup> and V. Corriher-Olson<sup>2</sup>

**This document is simply a PDF publication of the directions to allow for printing and viewing them in a separate window from the Excel spreadsheet. If you have not downloaded the Excel spreadsheet, go to <https://agrilifelearn.tamu.edu>, and in the search bar, type in "Herbicide and Insecticide Cost per Acre Spreadsheet for Pastures and Hay fields" to locate and then download it.**

## GENERAL:

These spreadsheets are designed to provide tools to aid in determining application rates and costs for herbicides, insecticides, and adjuvants (surfactants) commonly used in the management of pastures and hayfields. It is divided into six sheets which are listed below with directions for each. **Cells with blue font can be changed.** All other cells are locked.

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M AgriLife Extension Service is implied. Product names are included solely to aid users in locating and identifying herbicides. Only a partial listing of available products is included. No discrimination is intended by the omission of a product. This

<sup>1</sup> Associate Professor and Extension Beef Cattle Specialist

<sup>2</sup> Professor and Extension Forage Specialist  
 Texas A&M AgriLife Extension Service

spreadsheet is intended to serve only as a guide for determining herbicide cost per acre and is not an indicator of product effectiveness or appropriate use. Always read and follow label directions.

Most herbicide and insecticide labels can be found on the Crop Data Management Systems (CDMS) website, <https://www.cdms.net/>. Navigate to the product databases section to conduct a search for the product label.

## Sheet 1, Directions

This sheet contains the same information as this PDF publication on how to use the various spreadsheets.

## Sheet 2, Herbicide Cost Per Acre

This spreadsheet is designed to aid in estimating herbicide cost per acre at various label rates. In addition, it calculates pounds of active ingredients applied per acre at the corresponding application rate.

**Sheet 2, Column A:** This column contains the product name. Products highlighted in the same color have a common active ingredient. Products are generally arranged alphabetically by active ingredient, and products often used to target grassy weeds can be found toward the bottom of the list.

**Sheet 2, Column B:** This column contains the percent of active ingredient(s) for each herbicide.

**Sheet 2, Column C:** This column contains the amount (e.g., lbs/unit) of active ingredient equivalents for each herbicide. Pounds of active ingredient equivalents should be used when comparing the amount of herbicide in various products.

**Sheet 2, Column D:** This column contains the group number that represents the site of action of the active ingredient based on a system developed by the Weed Science Society of America.

**Sheet 2, Column E:** This column contains the name for the mode of action the herbicide uses to control the weed.

**Sheet 2, Column F:** This column indicates the volumetric unit on which prices are entered for each product. Prices for liquid products are entered per gallon, and prices for dry products are entered in ounces.

**Sheet 2, Column G:** This is the only column in which data should be entered, and as a reminder, it is the only column with blue text. [Enter the appropriate unit price for each product.](#) Sometimes, prices will be quoted to you as price per gallon or price per ounce, and you can enter that value directly in column G. At other times, the price may be quoted per container, and you will need to calculate the price for the appropriate pricing unit (for example: if a 2.5-gallon jug of herbicide costs \$86, then the price per gallon would be \$34.40 [i.e., \$86/2.5 gallons = \$34.40 per gallon], so you would enter \$34.40 in column G).

**Sheet 2, Column H:** This column lists several of the labeled application rates for each herbicide.

**Sheet 2, Column I:** This column shows the herbicide cost per acre for the corresponding application rate.

**Sheet 2, Columns J and K:** These columns show one of the active ingredients in the product and the pounds of active ingredient applied per acre at the application rates listed in column H.

**Sheet 2, Columns L and M:** These columns show one of the active ingredients in the product and the pounds of active ingredient applied per acre at the application rates listed in column H.

## Sheet 3, Insecticide Cost Per Acre

This spreadsheet is designed to aid in estimating insecticide cost per acre at various label rates. In addition, it calculates pounds of active ingredients applied per acre at the corresponding application rate.

**Sheet 3, Column A:** This column contains the product name.

**Sheet 3, Column B:** This column contains the percent of active ingredient(s) for each insecticide.

**Sheet 3, Column C:** This column contains the amount (e.g., lbs/gal) of active ingredient equivalent(s) for each insecticide. Pounds of active ingredient equivalent should be used when comparing the amount of insecticide in various products.

**Sheet 3, Column D:** This column contains the mode of action classification group number for each active ingredient.

**Sheet 3, Column E:** This column contains the chemical family of each active ingredient.

**Sheet 3, Columns F and G:** These columns indicate if the product is labeled for grasshoppers or armyworms. Check labels to determine use for specific growth stages and application rates.

**Sheet 3, Column H:** This column indicates the volumetric unit on which prices are entered for each product.

**Sheet 3, Column I:** This is the only column in which data should be entered, and as a reminder, it is the only column with blue text. [Enter the appropriate unit price for each product.](#)

**Sheet 3, Column J:** This column lists several of the labeled application rates for each insecticide.

**Sheet 3, Column K:** This column shows the insecticide cost per acre for the corresponding application rate.

**Sheet 3, Columns L and M:** These columns show one of the active ingredients in the product and the pounds of active ingredient applied per acre at the application rates listed in column J.

**Sheet 3, Columns N and O:** These columns show one of the active ingredients in the product and

the pounds of active ingredient applied per acre at the application rates listed in column J.

### Sheet 4, Adjuvant (Surfactant)

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This spreadsheet is designed to aid in calculating the cost of using various spray adjuvants (primarily surfactants) depending on the application rate per 100 gallons of water and spray water volume. Since there are so many products available, this spreadsheet does not list specific products but instead allows the user to custom-enter the products they are interested in. Always read and follow label directions. [Cells with blue font can be changed.](#) All other cells are locked.

**Sheet 4, Column A:** [Enter the name or description of the product of interest.](#)

**Sheet 4, Column B:** [Enter the spray volume that will be applied per acre.](#) The spray volume is just how much liquid (water, herbicides, insecticides, etc.) comes out of the sprayer.

**Sheet 4, Column C:** [Enter the price per gallon for each product of interest.](#) Sometimes, prices will be quoted to you as price per gallon. At other times, the price may be quoted per container, and you will need to calculate the price per gallon (for example: if a 2.5-gallon jug of surfactant costs \$42.50, then the price per gallon would be \$17.00 [i.e.,  $\$42.50/2.5 \text{ gallons} = \$17.00 \text{ per gallon}$ ], so you would enter \$17.00 in column C).

**Sheet 4, Column D:** According to the product label, [enter the application rate per 100 gallons of water.](#) Rates may vary by product, so this column allows the user to enter specific rates in pints per 100 gallons of water for each product.

**Sheet 4, Column E:** This column shows the adjuvant cost per 100 gallons of water for the corresponding application rate in column D.

**Sheet 4, Column F:** This column shows the adjuvant cost in \$/acre for the spray volume in column B and the corresponding application rate in column D.

**Sheet 4, Column G:** This column provides a place for the user to list any information of interest or notes about the product. It is recommended that the label rate(s) be included here as a reminder of the appropriate values to list in column D. [Information can be entered in all cells in this column.](#)

### Sheet 5, Acres Covered per Hour

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This spreadsheet just serves as a resource to determine acres covered per hour at various spray widths and spraying speeds.

### Sheet 6, Publications

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This sheet contains a copy of some factsheets that may be helpful when using herbicides and insecticides. Use the zoom feature in the lower right-hand corner of the Excel window to increase or decrease the desired viewing size.