

**AMENDMENT TO COMMITTEE PRINT #4
OFFERED BY MR. TERRY OF NEBRASKA**

At the end of the bill, insert the following new section:

1 **SEC. 13. SUPPLEMENTING CORN AS AN ETHANOL FEED-**
2 **STOCK.**

3 (a) RESEARCH AND DEVELOPMENT PROGRAM.—The
4 Secretary of Energy shall establish a program to make
5 grants of not to exceed \$1,000,000 each to no more than
6 10 universities for a 3-year program of demonstration of
7 supplementing corn as an ethanol feedstock with sweet
8 sorghum.

9 (b) PROGRAM GOALS.—The goals of the program
10 under this section shall be to—

11 (1) enhance agronomic efficiency of the crop on
12 marginal lands by—

13 (A) developing best management practices
14 for maintaining high sorghum yields while using
15 less water and nitrogen than corn;

16 (B) identifying and selecting plants with a
17 high sugar content; and

1 (C) developing cold tolerant sweet sorghum
2 varieties to enable two crops to be grown per
3 season;

4 (2) enhance ethanol processing potential in the
5 crop by—

6 (A) developing a robust technology for cen-
7 tralized and ethanol production facilities that
8 pair high-performing sweet sorghum lines with
9 different yeasts to produce the best process for
10 converting sweet sorghum juice into ethanol;

11 (B) conducting process and chemical anal-
12 yses of sweet sorghum sap fermentation;

13 (C) introducing cellulosic hydrolyzing en-
14 zymes into sweet sorghum to promote biomass
15 conversion; and

16 (D) performing life-cycle analysis of sweet
17 sorghum-ethanol, including energy yield, effi-
18 ciency, and greenhouse gas reduction;

19 (3) establish a sweet sorghum production sys-
20 tem optimized for the region of the university con-
21 ducting the research;

22 (4) improve sweet sorghum lines with higher
23 sugar production and performance with minimal ag-
24 ricultural inputs;

1 (5) optimize sugar fermentation using selected
2 yeast strains;

3 (6) develop sweet sorghum lines with improved
4 cold tolerance and cellulosic degradation; and

5 (7) develop agricultural models for predicting
6 agricultural performance and ethanol yield under
7 various growing conditions.

8 (c) AWARD CRITERIA.—The Secretary shall award
9 grants under this section only to universities that—

10 (1) have access to multiple lines of sweet sor-
11 ghum for research; and

12 (2) are located in a State where sweet sorghum
13 is anticipated to grow well on marginal lands.

14 (d) AUTHORIZATION OF APPROPRIATIONS.—There
15 are authorized to be appropriated to the Secretary for car-
16 rying out this section \$10,000,000.

