Elevated CO2 in Atmosphere Elevated CO₂ in Atmosphere Trims Sorghum Moisture Needs

A Kansas State University researcher may have found an upside to the higher carbon dioxide levels commonly associated with climate change. Findings now particularly relevant in light of the widespread drought projected for 2013.

Kansas State agronomy professor Mary Beth Kirkham's experiments show elevated CO₂ levels in the atmosphere mitigating the effects of drought on sorghum and other crops by allowing more efficient use of water. Between 1958 and 2011 the CO₂ concentration in the atmosphere increased from 316 to 390 parts per million.

Because elevated CO₂ closes stomata (pores on the leaves through which water escapes), less water is used and evapotranspiration is decreased. Kirkham's research revealed it now takes 55 milliliters – about one-fourth of a cup – less water to produce a gram of sorghum grain than it did in 1958. To read the entire article released by Kansas State Research and Extension, click <u>here</u>.