Dryland Grain Sorghum Water Use, Light Interception, and Growth Responses to Planting Geometry.  
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Crop yields are primarily water-limited under dryland production systems in semiarid regions. This study was conducted to determine whether the growing season water balance could be manipulated through planting geometry. The effects of row spacing, row direction, and plant population on the water use, light interception, and growth or grain sorghum [Sorghum bicolor (L.) Moench] were investigated at Bushland, TX, on a Pullman clay loam (fine, mixed, thermic Torrertic Paleustoll). In 1983, which had a dry growing season, narrow-row spacing and higher population increased seasonal evapotranspiration (ET) by 7 and 9%, respectively, and shifted the partitioning of ET to the vegetative period. Medium population crops yielded 6.2 and 2.3 Mg/ha of dry matter and grain, respectively. High population resulted in high dry matter (6.1 Mg/ha) and low grain yield (1.6 Mg/ha), whereas low population resulted in low dry matter (5.4 Mg/ha) and high grain yield (2.3 Mg/ha). Row direction did not affect water use or yield. In 1984, dry matter production for a given amount of ET and light interception was higher in the narrow-row crops. Evapotranspiration was less for a given amount of light interception in the narrow-row crops and in the north-south row crops. Narrow row planting geometry appears to increase the partitioning of ET to the transpiration component and may improve the efficiency of dryland cropping systems.

Toward national estimates of alcohol use disorders among drivers: results from the National Roadside Survey Pilot Program. Furr-Holden CD, Voas RB, Lacey J, Kelley-Baker T, Romano E, Smart M.

OBJECTIVE: To determine whether drivers contacted at the roadside can be screened for alcohol use disorders (AUDs). Secondarily, to produce preliminary estimates of AUDs among drivers and estimate the relationship between AUD status and BAC measured at the roadside.  
METHODS: A two-phase survey program was undertaken. In phase 1, 206 motorists were interviewed at the roadside using a 15-item AUD Survey derived from a condensed version of the AUDADIS and the AUDIT-C. One hundred sixty-seven of these motorists were invited, for a $25 incentive, to call the research team within 48 h of the roadside assessment to repeat the questionnaire and complete a more detailed AUD assessment. Phase 2 involved a 6-state pilot test of the AUD Survey as an add-on to the 2005 National Roadside Survey Pilot Program. The setting for both phases of the survey program was US roadways on weekends between 10 p.m. and 3 a.m.  
RESULTS: Ninety-seven percent of all eligible drivers completed the AUD questionnaire. The correlation between roadside and telephone interview results was 0.3 for alcohol abuse, 0.6 for alcohol dependence and heavy drinking, and 0.7 for binge drinking. Alcohol abuse and dependence diagnoses had 0.6 and 0.7 correlations with diagnoses derived from the full AUDADIS and the AUDIT-C had a 0.8 correlation with the full AUDIT. There was also a statistically significant and positive relationship between having a positive BAC at the roadside and meeting criteria for heavy drinking.  
CONCLUSIONS: AUD status can be effectively measured at the roadside. The poor reliability for alcohol abuse is related to underreporting of drinking and driving during roadside assessments, compared to telephone follow-up. Other measures of hazardous alcohol use should be used in the roadside context to measure alcohol abuse.
The risk perception attitude (RPA) framework posits that efficacy beliefs moderate the relationship between risk perception and health outcomes. To extend the purview of the theory, this central hypothesis was tested in the context of HIV/AIDS-prevention behaviors. Data (N = 890) were collected from 8 districts in Malawi in southern Africa as part of a baseline research effort to obtain benchmark measures on key behavior-change indicators. Results pertaining to 2 behaviors, use of condoms and remaining monogamous, are reported in this study. Relationships between risk perception and behavioral intentions were not significant, but those between efficacy beliefs and behavioral intentions were. Furthermore, efficacy beliefs were found to moderate the relationship between risk perception and intentions to remain monogamous, but not between risk perceptions and intentions to use condoms. The model was able to explain approximately 40% of the variance in intentions to use condoms, and 19% of the variance in intentions to remain monogamous. Implications for health campaigns, particularly the need to strengthen efficacy beliefs and the need to be careful in enhancing risk perceptions without simultaneously strengthening efficacy beliefs, are also discussed.