We continue to gain a better understanding of the impacts of climate change, which are sometimes subtle and unexpected. Two articles in *Science* report significant new research.

The first report comes from two researchers at the University of Illinois. Corn, like other plants, needs to pull CO2 from the air for photosynthesis. But the same tiny pores in leaves that allow the CO2 to come in also allow water to evaporate and get out. In warmer weather, evaporation is faster, so plants need more water to produce the same plant growth. This is partly balanced out because the added CO2 in the atmosphere means that the pores can be narrower and still bring in the same amount of CO2. Narrower pors means less evaporation. But it turns out that this effect is outweighed by the faster evaporation rate. So the plants get more water stressed even if rainfall stays the same.

In the meantime, the second report shows that corn's susceptibility to drought has increased over the past two decades because of the higher-yield corn varieties now in use. This will make corn yields more responsive to the effects of climate change, which are expected to include more frequent droughts in the Midwest (as well as more frequent floods between them).

Many of the economic models of climate change assume that low to moderate climate change will either increase crop yields or have little effect. This research suggests, however, the models may be too optimistic about this, thus underestimating the economic effects of climate change.

[Apologies who received a truncated version of this post by email due to premature posting.]