Chairman Hutton and Members of the Commerce Committee:

Thank you for this opportunity to provide written testimony in support of HB 2634, The Alternative Crop Research Act.

First, I want to dispel the oft-repeated misstatement about industrial hemp.

It is NOT marijuana.

The 2013 Farm Bill authorizing this legislation recognizes the two plants are genetically distinct. Both come from the genus Cannabis sativa, but similarities end there, just like any other cousins.

Cannabis sativa is made up of many compounds; the two most prominent are CBD (non-psychoactive) and THC (psychoactive). Hemp is high in CBD, and low in THC. Marijuana is the opposite. In fact, only certified seed with a THC content of 0.3% will be available for hemp planting. The THC content of marijuana is 10-100 times stronger. Differences in the two plants is analogous to those of sweet corn and field corn, and poppy seeds used to manufacture opium and to bake in your morning muffin.

Hemp grows to a height of 15 feet or more, is densely planted with a single stalk and few branches or leaves. Marijuana is short and bushy, sparsely planted to encourage branches, leaves and flowers.

If the plants cross-pollinate, the result is striking. The CBD in hemp overwhelms the THC in marijuana, reducing its psychoactive potency. This should allay concerns of the law enforcement community and others that marijuana growers will attempt to take advantage of the opportunities afforded by this legislation to hide their own illegal operations.

Industrial hemp will be a shot-in-the-arm for Kansas agriculture, for the environment, and for job seekers.

It will give farmers a profitable alternative for their crop rotation. Author Doug Fine reports Canadian farmers are showing a net profit of \$250 per acre from industrial hemp, while South Dakota soybean growers are clearing only about \$70 an acre. Imagine what Kansas farmers can produce with this amazing plant.

Industrial hemp is also "green". It requires no pesticide, herbicide, or fungicide. It actually heals and replenishes the soil with nutrients. It requires only half the water of corn, and 1/3 that for cotton. The entire plant is used in production; from the seeds to the root, and 25,000 products can be manufactured.

Processing plants will be required within 100 miles or so from the supply of industrial hemp; offering well-paying manufacturing jobs for hard-working Kansans. The Denver Post reports a new plant in Pueblo, Colorado is already expanding with plans to create 160 jobs by 2018 at a starting salary if \$41,000 a year, plus benefits. Several plants will eventually be required throughout our state.

Industrial hemp is also bi-partisan. A unique coalition of Republicans, Democrats, business owners, farmers, scientists, and environmentalists have joined forces around the country to promote this amazing plant in the two dozen states with either pending legislation or actual production. The U.S. Is importing over \$600 million in hemp products from Canada, and increasing that over 20% per year. Let's bring some of that home to Kansas.

I urge you to support HB 2634.

Thank you.

David Hicks Bonner Springs