

Agricultural Administration

Oregon State University 430 Strand Agriculture Hall Corvallis, Oregon 97331

P 541-737-2331 **F** 541-737-4574 agsci@oregonstate.edu

Honorable Chairman Paul Holvey House Committee on Rules

Mr. Chairman and members of the Committee:

My name is Shawn Mehlenbacher and I am a professor of hazelnut breeding and genetics in the Department of Horticulture in the College of Agricultural Sciences at Oregon State University. Thank you for the opportunity to comment on House Bill 2882. While it is not Oregon State University's place to advocate for or against a particular bill, I did want the committee to be aware of some possible consequences of this bill as written as it affects our plant breeding programs at Oregon State University.

We have a long tradition at Oregon State University in breeding the newest and best plant varieties in support of several of our plant-based industries in the state. Our active breeding programs include hazelnuts, wheat, barley, potatoes, vegetables, hops, ornamentals, trees, mint and others. Most of the hazelnuts, much of the wheat and many of the other commodities grown in the state are plant varieties developed at Oregon State University. New varieties are constantly being developed for greater yields, for increased resistance to pests and diseases, and for enhanced quality with respect to flavor and nutrition. As just one example, the hazelnut industry in the state was threatened by Eastern Filbert Blight. My colleagues and I at Oregon State University developed disease resistant varieties which are now credited with saving the hazelnut industry in Oregon.

Increasingly, new plant varieties are released with licenses such that the university receives royalties for the use of the new varieties. Licensing has provided us with an important source of revenue to sustain our plant breeding programs. To date, Oregon State University has not released any varieties that were developed using genetic engineering. Nonetheless, some of our breeders see genetic engineering as an important tool to use in plant variety development. As with all technologies, technologies related to genetic engineering are continuing to change and develop rapidly. New 'gene editing' approaches, for example, bring increased precision and efficiency to plant breeding. As we look to the future, it is likely that our breeders will want the option of using genetic engineering techniques to bring new traits into their varieties. Some are already beginning to experiment with these techniques. These traits are likely to include resistance to pests, thereby lowering the amounts of pesticides that are used, as well as increased yields and nutritional qualities. Genetic engineering techniques are used routinely in our basic plant sciences programs to study how plants work.

The bill, as originally written, would likely prevent Oregon State University from licensing plant varieties produced using any genetic engineering techniques. Our Office of Commercialization and Corporate Development and general counsel are concerned that the risk of potential liability for treble damages would almost always far outweigh Oregon State University's interests in obtaining the legal rights to license production of a genetically engineered agricultural commodity. We simply would not take this risk, especially given that we (as the patent holder) cannot control how an individual licensee uses the varieties. We would also most likely not provide genetically engineered germplasm to private seed companies or other universities who are likely to sell seed in Oregon because we could be viewed as a patent holder, even though we are not the ones releasing the variety.

There are uncertainties in the bill that would also make it difficult for Oregon State University to engage in licensing of genetically engineered plants. For example, the word "patent" is not defined in the bill. There are several distinct types of legal protection used for plant varieties, including plant variety protection, plant patents and utility patents and they have distinct legal provisions.

We were made aware of amendments that may place the liability burden on the grower rather than the patent holder. While this is a welcome change - as explained above - OSU plant breeders are "growers" on OSU controlled property or when conducting trials on cooperating stakeholder properties. Consequently, we believe our research efforts would be hampered if no one was willing to grow genetically engineered organisms that OSU developed because of liability concerns.

Under either version, it is not clear how new gene-editing technologies, which can be directed to genes that are native to a species, will be dealt with in this bill.

Finally, while I have focused my comments on plant varieties, we note that the bill is not limited to plants, and we are of course curious about how this might affect other genetically-engineered organisms such as microorganisms used in the making of bread, beer, yogurt, or cheese or bacteria designed to extract energy from waste streams.

Thank you for the opportunity to share some thoughts about House Bill 2882.

Shawn Mehlenbacher Professor, Hazelnut Breeding and Genetics Department of Horticulture College of Agricultural Sciences Oregon State University