Wheat Disease Update
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Reports of wheat diseases have been negligible until about the middle of October. Since then, the Plant Disease and Insect Diagnostic Laboratory has received a couple of samples of wheat that has gone “downhill” since its emergence. Typically such wheat has dried-looking foliage with smaller root systems. Both Roger Gribble (Northwest Area Extension Agronomy Specialist) and Cori Woelk (Kay County Extension Educator) have reported seeing such fields where dead or dying seedlings are occurring both within and across rows in small to large patches. Roger indicated he has observed such symptoms in fields stretching from southern Alfalfa County down to Logan County. Washing and closely examining these seedlings in the lab revealed lesions at tiller bases associated with rotting and a reddish discoloration typically indicative of the root rot fungus *Fusarium* (Fig 1A-C). Isolations are still in progress, but I believe that root rot caused by *Fusarium* is the problem along with possibly another root rott ing fungus (*Bipolaris*) that causes common root rot. The combination of these two root rots was extensive in the fall of 2004. Not much can be done now other than to possibly replant areas if there are no or few seedlings present. To my knowledge, none of the fields in which these symptoms were observed were planted with fungicide-treated seed. Treating wheat seed with a chemical labeled for controlling root rots will help to avoid such situations, but will not provide complete control. Such treatments are typically labeled for “suppression” or “partial control” rather than for “control” of root rots (see, OSU Extension Agents’ Handbook of Insect, Plant Disease, and Weed Control, OCES publication E-832 for specifics).
Fig 1. Wheat seedling showing symptoms of Fusarium root rot (A), *Fusarium* culture on H$_2$O agar (B) and Fusarium spores (C).