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World Food Crops

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Plant Traits

The plant traits that have been critical to feeding the modern world are many.

Flexibility of growing conditions has been very important. For example, plants that are less sensitive to day length allow plants to be grown in more than one location easily. Beyond this plants that flexibly scale from small farming operations to larger ones have been helpful in bringing subsistence farmers out of poverty.

Plants hardiness and variation have been very important as well. For example, plants that all come from the same strain can cause a sort of food drought when they are all susceptible to one genetic problem. The corn breeding in the mid 1900s that lead to a rust epidemic is a good example of the problem that can be found when plant genetics aren’t varied enough.

Finally, yield enhancing traits like the improvements made by Norman Borlaug wherein rice and wheat could be grown at higher densities due to shorter, stiffer straw. These plants with a higher yield worked because they also allowed a higher input. These traits are important because using more and more land isn’t always an option.