WHAT IS A POPULATION?
All plants in a population are genetically distinct while all of those in a pure line variety are (almost) identical. This means that populations are better able to adapt to unpredictable environments.

CREATING A POPULATION
A Composite Cross Population (CCP) is created by inter-crossing (by hand) selected parent varieties in all combinations. The resulting F1 hybrid plants produce segregating F2 populations which are bulked together and grown in the field. Segregation and natural selection over a number of generations then leads to populations comprising very large numbers of homozygous but genetically distinct lines.

POPULATIONS ARE RESILIENT IN POOR CONDITIONS
This year (2012-13) many autumn sown wheat crops failed due to a range of factors including the poor weather conditions, forcing late drilling, and high levels of Fusarium infection in the seed crop. The trials here demonstrate that, unlike the YQ Population, the pure-line variety Alchemy failed when drilled only nine days later (25th October) than the plots in which both crops established well (drilled 16th October). The photos below from June 2013 demonstrate, dramatically, the advantages of the greater genetic diversity in populations.