

CROP GENETIC DIVERSITY

Why is genetic diversity important? The goal of conservation genetics is to maintain genetic diversity at many levels and to provide tools for population monitoring and assessment that can be used for conservation planning. Every individual is genetically unique by nature. Conservation efforts and related research are rarely directed towards individuals but genetic variation is always measured in individuals and this can only be estimated for collections of individuals in a population/species. It is possible to identify the genetic variation from phenotypic variation either by quantitative traits (traits that vary continuous and are governed by many genes, e.g., plant height) or discrete traits (traits that fall into discrete categories and are governed by one or few major genes (e.g., white, pink, or red petal color in certain flowers) which are referred to as qualitative traits. Genetic variation can also be identified by examining variation at the level of enzymes using the process of protein electrophoresis. Further, genetic variations can also be examined by the order of nucleotides in the DNA sequence.

- 1 Team developers for Zero Hunger and Our mission is to contribute to eradicating hunger
2. We are solving genetic erosion
3. Our solution is creating an App named FARM HOUSE ALERT which will propagate genetic diversity information on crop varieties resulting to prevent crop from going extinct by involving the citizen scientist and the farmer to arrive at zero hunger.
4. Giving farmers the necessary information needed to guide them on the techniques to conserve traditional varieties and vice versa and the target group is Youth in agriculture of about 30 million people. Film and Radio demonstrations are alternative solutions.