Empowering Producers
Ensuring the future of coffee
Breeding Coffee For Profitability
Emphasis on both F1 hybrid development and locally adapted pure lines for high performance in each country.

PARENT 1
Known desirable traits, i.e.:
- Denser planting
- Good yield
- Tolerance to disease

PARENT 2
Optimum genetic distance from parent 1

F1 HYBRID
Combines best traits of both parents, plus added “hybrid vigor.” Mass multiply through hand pollination or tissue culture cloning.
Arabica genetic diversity
80-90% of the coffee grown on farms today descends from Bourbon/Typica

Majority of genetic diversity

Majority of cultivated coffees in the world
Using advances in agricultural science, it is possible to **dramatically improve** coffee yields, coffee quality, climate resilience, and farmer livelihoods.

For example, **new F1 hybrid varieties** have shown:

- Highly tolerant to diseases and pests
- 22-46% yield increases
- Capable of scoring 90+
- Climate resilient
- More profit per hectare
In 2018, the trial began generating the **first hard data**.

*Clear differences in early vegetative growth among varieties*
International Multilocation Variety Trials

Dr. Montagnon with agronomists in a two year old IMLVT
A first-of-its kind trial to facilitate the global exchange of the world’s top coffee varieties and evaluate their performance.

NOTE: Countries with seed types listed provided seeds and received plantlets. Countries without seeds listed are variety recipients only.
1 plot = 1 variety, 10 trees, 1 experimental unit
Genetics x Environment Interaction
Peru

K7 > Mundo Novo

Zambia

Conclusion: There is a GxE interaction happening here!

Mundo Novo > K7
“It is not enough that coffee farming becomes more profitable. It has to be more profitable than any other possible use for the land.”

Dr. Montagnon, WCR Scientific Director