

Conservation of cacao intraspecific diversity in *La Convención* province, Peru

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Cacao originated in the upper Amazonian rainforest¹, where people created many varieties^{2,3}.

- Traditionally grown in shaded agroforestry systems⁴.

Conservation of intraspecific diversity is essential. This diversity improves:

- productivity and quality of production⁵;
- capacity to resist biotic and abiotic stress⁶.

Peru holds unmatched cacao diversity⁷, but information about on farm conservation is scarce.

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Farmers **grow a few varieties / subvarieties per plot**. We think this is related to **management differences** (all say it differs for each variety).

When asked **why they grow more than one** variety, **half** say that some **projects have brought hybrids**. None of them explained why they keep several **subvarieties of Chuncho**, even though **7/8 farms do**.

Farmers seem to **conserve Chuncho' diversity**. We assume that it is to **meet market preferences** and because they are proud to **maintain native diversity**, but more data are needed.



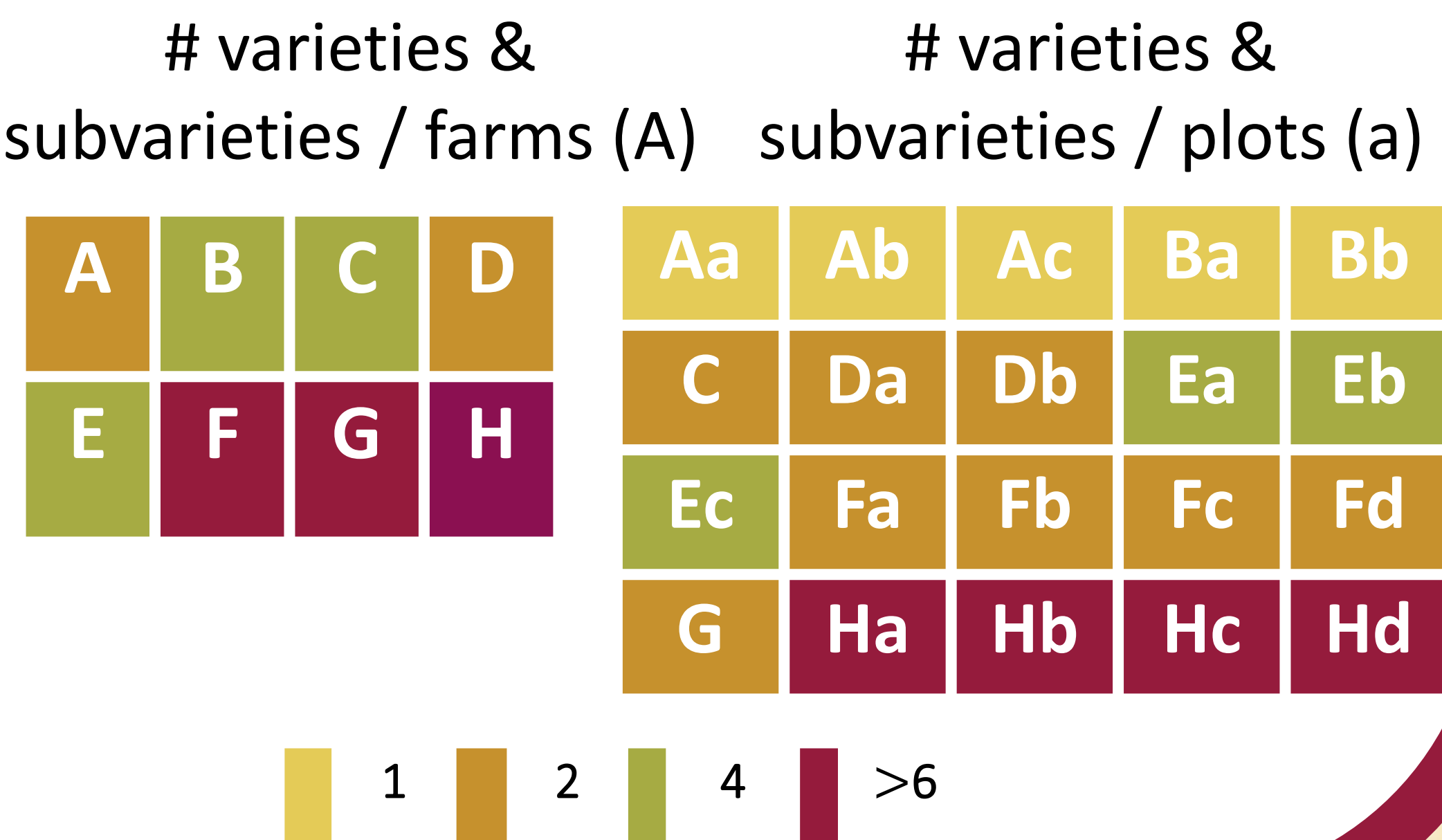
RESULTS

Hybrids found on 5 farms:

- 3** among them distinguishes the specific **hybrid** (ex. ICS96, CCN51, etc.).

Chuncho (native variety of *La Convención*) found on 7 farms:

- All** who possess *Chuncho* distinguish **subvarieties** (ex. pamuko, común, etc.);
- up to **9 subvarieties** on one farm.



WHICH CACAO DIVERSITY IS CONSERVED ON FARMS?

- ✓ Questionnaires with 10 farmers
- ✓ Field visits of 8 polyculture farms

20 plots of cacao shaded systems

- $\bar{x}$ 17 years;
- $\bar{x}$ 3 associated crops or trees;
- ⊘ irrigation;
- 45% of plots with cacao under 5m;
- soil covered with weeds or dry leaves.

Administer more questionnaires and sample leaves to conduct genetic analysis.

Clarify farmers' definitions of variety and subvariety and document their identification process.

Investigate conservation motives further and the influence of economic/development projects on cacao conservation.



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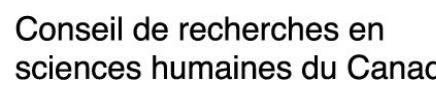
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