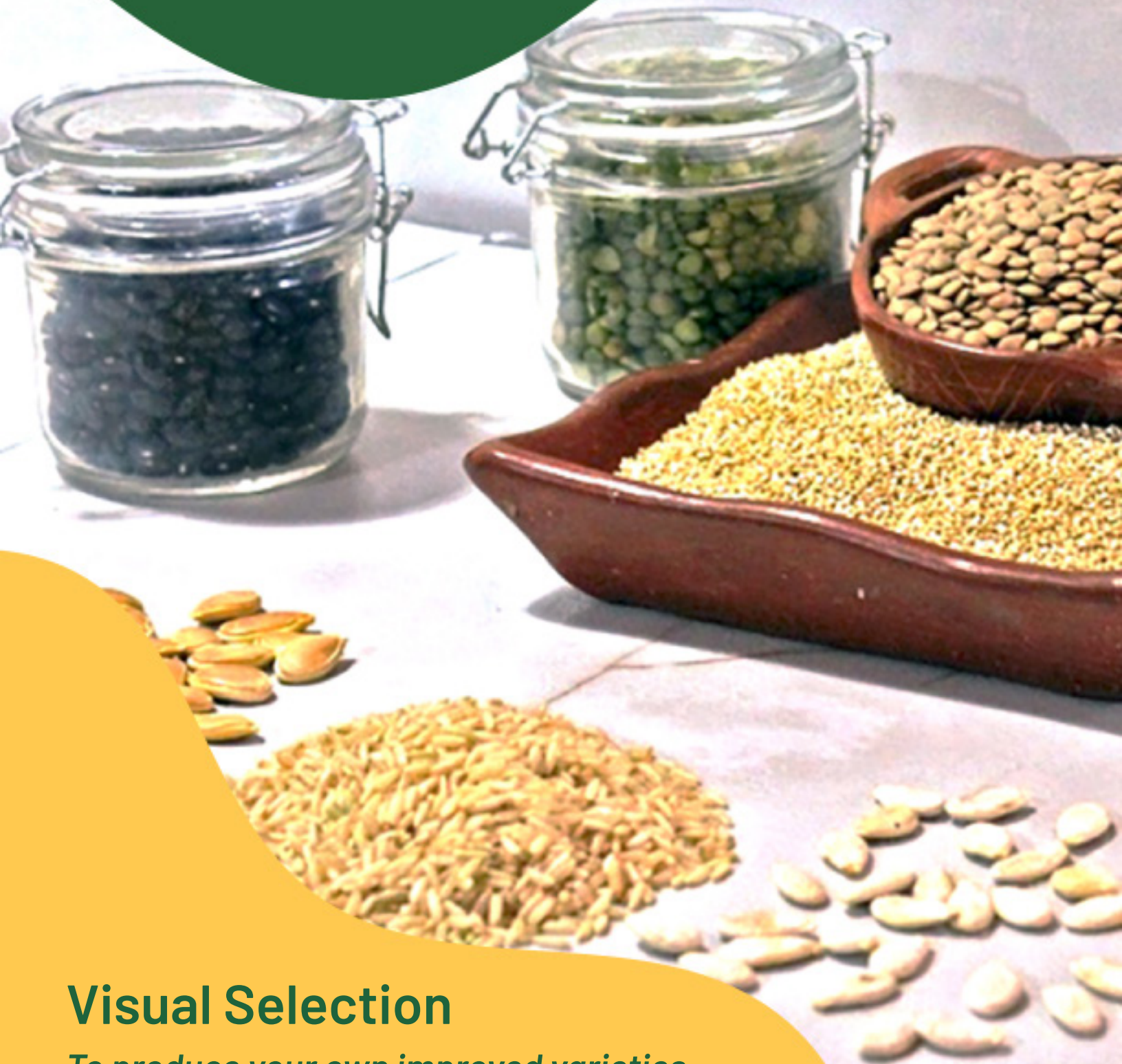




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**COSTA RICA
REGENERATIVA**



Visual Selection

To produce your own improved varieties

All the crops grown on farms today are the result of processes that began thousands of years ago with the selection and domestication of wild plants.

It was the indigenous producers who, harvest after harvest, selected the plants that they considered the best to adapt to their local climate.

They were interested in characteristics such as resistance to pests and diseases; flavors and textures; among others.

Seeds that have been adapted to the local environment guarantee better production and become more reliable each year.

We will use corn as an example to study how to make visual selection of seed plants.



For most crops, seeds can be collected from a single plant (if necessary); But, in the case of corn, no less than 200 plants will have to be selected for seed production.

The first step will be to decide what features we would prefer. Among the most common criteria for selecting seed plants are:

- Those that grow and develop more quickly.
- Those that ripen early and in some cases, all at the same time.
- Those that have strong stems.
- Those that bloom at the same time. (In some cases)
- Those that are resistant to pest insects.
- Those that are resistant to major diseases.
- Those that are drought resistant.
- Any other characteristics the family is interested in (such as color, flavor, and size).



The process requires continuous observation, so frequent walks through the plantation will have to be taken in order to observe the development of the plants.

Selection starts from germination. Rapid germination is always an important characteristic to consider. If it is a large maize planting, the 200 or 400 plants that germinate first will be marked with stakes. With other crops, only a few plants will be marked.

As the crop develops, the stakes will be removed from the plants that DO NOT meet the desired criteria or characteristics. (they develop more slowly, get sick, etc). The plants that remain marked with stakes will be the ones selected. Those are the seed plants. The seed will be harvested from them when ready. From the rest, the grain will be harvested.



At harvest time it is always best to start with the marked plants. Dry and shell the ears separately from the rest. Provide proper care to the seeds and then store them.
Photo by Celine Sea: <https://www.pexels.com/photo/corn-on-display-14171758/>



We invite you to watch the video "selection and conservation of native corn" to expand on this topic: <https://www.youtube.com/watch?v=RISCKvZbWUY>