



How the lack of active substances is affecting rice traditional varieties

Examples from Spain

HOW THE LACK OF ACTIVE SUBSTANCES IS AFFECTING TRADITIONAL VARIETIES

- * Rice has been cultivated in Europe for more than a thousand years. In that time, a large number of local varieties have been developed which, through traditional cuisine, have become an inseparable part of European culture.
- * In the last few years, with the inexorable reduction of active ingredients for cultivation, these traditional varieties, which are part of our tradition and cultural richness, are at risk of disappearing



A PRACTICAL EXAMPLE: THE CASE OF BOMBA RICE

- * BOMBA rice is the oldest rice variety still cultivated in Spain. There are written references to this variety for more than 100 years and it has always been inseparably linked to Paella, the most important rice dish in Spain and one of the most important dishes in the world.
- * Bomba rice has a special fame and recognition, as it has very unique characteristics. It is a very old variety with a very low production; however, it has continued to be cultivated due to its particular culinary behaviour, which makes it highly appreciated by the consumer.
 - * Great capacity to absorb flavour while at the same time also characterized by a firm and loose grain
 - * High resistance to overcooking
- * *The name of the dish, which evolved from 'Arroz a la valenciana' to the characteristic name of 'Paella valenciana', was taken from the enormous frying pan where this dish is cooked. This frying pan, in the Valencian language, is called Paella, descended from the Latin word patella. The paella is an enormous frying pan that has no handle, and instead has handles that allow it to be carried. In the past, it was eaten directly from the paella pan with a wooden spoon. On 9 November 2021 it was declared an Asset of Cultural Interest.*



THE CURRENT SITUATION OF THE BOMBA VARIETY

- *Yield reduction of 50% on average due to *Pyricularia Oryzae*.
- *Reduction in surface area of around 50% due to lack of profitability, despite a price increase of more than 200%.
- *Serious risk of disappearance of the variety



WHY IS SUCH AN OLD VARIETY GOING TO DISAPPEAR BECAUSE OF A DISEASE THAT IS NOT NEW?

- * Because of a lack of active substances to fight *Pyricularia Oryzae*.
- * The disease is old but the lack of active substances is new:
 - * Ban of Tricyclazole, Propiconazole and Tebuconazole.
 - * Ban on Prochloraz
 - * Only the strobirulin family is left, and the breeders themselves point out that they generate resistance very quickly and should not be used without alternating with other active substances.
- * But they are the only authorised active ingredient!



IS THIS AN ISOLATED CASE, ONLY THIS VARIETY, ONLY THE FUNGICIDES?

- * No. In the case of the BOMBA variety, the problem is the lack of fungicides, as it is a very sensitive variety to fungi, so it is the first to show resistance to treatments with strobirulins. However, we cannot be sure that many other traditional varieties will also show this problem in the medium term.
- * Herbicides. The limitation in the authorised families of active substances is leading to the appearance of resistant weeds, so that it will soon be very difficult to grow crops using only these active substances.
- * Insecticides. There are already pests for which we do not have any active ingredient.



CONCLUSIONS

- * There is a general decline in the area of cultivation of traditional varieties and their replacement by new varieties with resistance genes to *Pyricularia* or to a specific herbicide, which will already account for more than 50% of the crop next season.
- * Farmers defend new varieties, new breeding techniques and new means of application (drones) as they are now the only tools left to maintain the economic sustainability of our farms, but we are saddened that we have to replace our traditional varieties instead of supplementing them.
- * Without adequate tools all traditional varieties will have to be abandoned and we will lose the genetic biodiversity and cultural heritage of European rice.

Is it reasonable to lose our traditional varieties for this reason?



A man with a beard, wearing a striped shirt and blue shorts, is smiling while riding a large water buffalo. The buffalo is standing in a dry, grassy field under a clear sky. The background shows some trees and a distant horizon.

Thank you for your attention!



www.copa-cogeca.eu