

Interspecies Resistance to Genetically Engineered Crops in Luso-Hispanic Agricultures

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Luso-Hispanic countries comprise the world's largest terrains under GE-crops. They are invaluable sites for understanding how GE-crop technologies can create unanticipated contexts for species evolution and novel forms of biological resistance, as well as political counter-movements, which together can transform the GE-technologies themselves. My collaborative project with Sainath Suryanarayanan adopts a new framework of inquiry asking how human alliances with plants, animals, and lands (*interspecies alliances*) act as mediators of particular sociocultural developments and discourses, including resistance to certain forms of industrial agriculture associated in particular with GE-monocrops. Inquiring how socio-ecological systems evolve when radically novel elements such as genetically modified organisms are introduced, we propose that the elision between human and nonhuman forms of resistance may reveal deeper patterns in the dynamics. To this extent, we develop the concept of *interspecies resistance*, which we understand as a network of intertwined resistances, where human actions and simultaneous transformations in nonhuman realms are causally connected over spatiotemporal scales. In particular, we trace the parallelisms and synergies between the development of resistance organized by human communities and the “biological” resistance of organisms to GE-crop ecosystems.

In many areas, local cultures act as if summoned by the nonhumans that they feel deeply connected to such as, for example, maize in Central and Southern Mexico and stingless *Melipona* bees in Yucatán. In the process, these people not only resist the advent of GE-monocrops that threaten local maize and bee species, but they also remember, relearn, and redesign their own agri-cultures. The network of discourses and practices that emerges in this context is often inspired by indigenous knowledges that posit agency to nonhumans, but also incorporate cutting edge sciences and technologies and collaborations with academics, international foundations, and activists, as well as conceptual frameworks of today's environmental and alter-globalization movements. We think through these transformations, conceptualizing them as *interspecies re-existence* in tune with Walter Mignolo's thought, who describes *re-existence* as “decolonizing practices” and which we consider as real alternatives to the industrial model of GE-agriculture in the locations where we work.

While our book focuses on diverse areas of the Hispanic world (including Argentina, Paraguay, Peru, and Ecuador), at the RCC we examine human entanglements with **stingless *Melipona* bees**—which according to Mayan beekeeping communities are threatened by proximate GE-soy monocultures—and **human-maize alliance**. Maize is believed to be the essence of Mexican identity by indigenous peoples as well as allied citizen groups, including importantly Mexican artists and scientists who worry that their country will lose cultural and food sovereignty if GE-corn takes over the fields and that the biodiversity of maize will be irrevocably lost if teosinte cross-pollinates with GE-maize.