

Thème 2 – Enjeux planétaires contemporains
2-B – La plante domestiquée

A Mould¹ That Changed The Course Of History

Use the documents to justify the title.

Document 1:

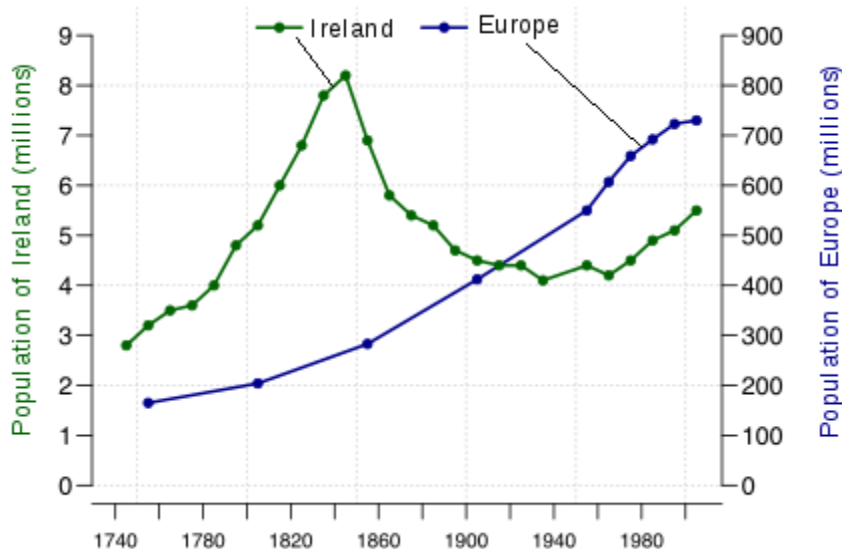
Recently, *Nature* published an article about the genome sequence and analysis of *Phytophthora infestans*, the fungus that caused the potato blight² in the nineteenth century and changed the course of history. *Phytophthora infestans* is the reason why today about 11% of the population of the United States is of Irish origin.

5 People who migrated to the USA in the 19th century did so for the same reason that pushes many people to migrate today from African countries to Europe: to improve their living conditions, sometimes simply to survive. Hunger to the point of starvation was the main cause that pushed many Irish to go to the United States. That hunger even has a name of its own: The Great Famine in English and An Gorta Mór in Irish Gaelic. The cause was potato blight, a pest that is still difficult to control today, although there are several
10 ways to try to prevent it.

Potatoes, originally from the Andean regions of South America, were introduced into Ireland in the mid-16th century by Sir Walter Raleigh. In the 17th century the crop spread throughout the island, supplementing the Irish diet that had consisted mainly of cereals and dairy products. By the early 18th century, potatoes had become the staple food of the poor during the winter, and their culture became more
15 and more widespread.

The Great Famine covers the period between 1845 and 1852. The potato blight also spread to other countries, but nowhere in Europe did it have such disastrous consequences as in Ireland. In fact, the diet of a portion of the Irish people depended on potatoes and the blight devastated Ireland's potato crop. During those years, Ireland lost a large part of its population because of starvation, diseases resulting from
20 malnutrition and emigration. That was how the great wave of Irish emigration to North America began. Without the plague caused by *Phytophthora infestans*, the history of the USA would have been different. And the history of Ireland might also have been different. The Great Famine, and the way the Irish people felt they were treated by the British during this crisis, may have been one of the causes that sparked Irish nationalism and made it possible for most of the island to become an independent country.

By Mercè Piqueras, November 18, 2009, <http://schaechter.asmblog.org> (“The purpose of this blog is to share our appreciation for the width and depth of the microbial activities on this planet”).



1. Mould = fungus: *moisissure* ;
2. Blight : *mildiou de la pomme de terre* (plant disease).

Document 2: Population of Ireland and Europe
From <http://www.learnnc.org>