

The European subsistence crisis
of 1845-1850:
A comparative perspective

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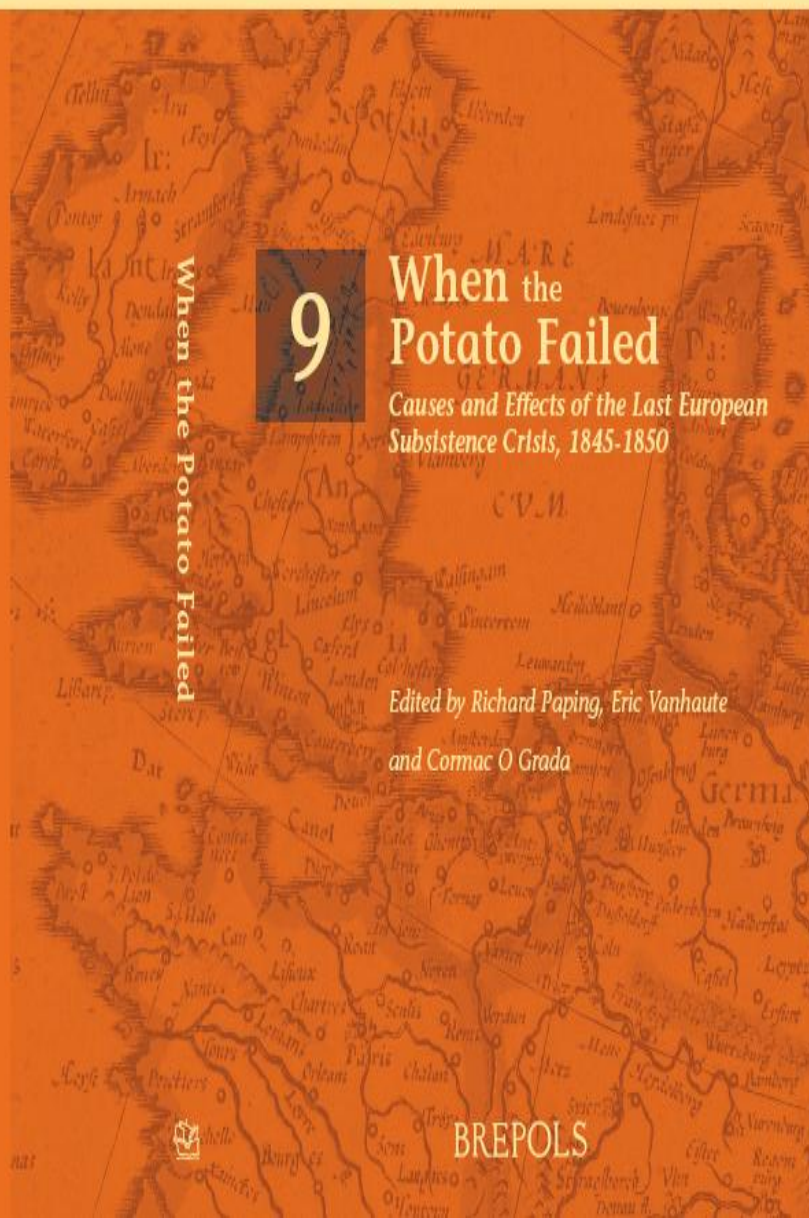
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CORN is a research network founded in 1995.

It is composed out of different research units that primarily want to study long term development of the rural society from the Middle Ages to the 20th century. It focuses on the North Sea area from a comparative and interdisciplinary point of view.

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The European subsistence crisis of 1845-1850

- Introduction
- Size of the harvest failure
- Demographic consequences
- International view
- National view
- Regional differences
- Crucial factors

Europe 1840's

0 100 200 300 400 500 Kilometers



Table 1.3 Potato production and consumption and the fall in yields in 1845 and 1846 compared to 'normal' years

	Pre-blight % arable ground Potatoes	Pre-blight daily potato consumption per capita (kilo)	1845 decline in potato yields	1846 decline in potato yields	1846 decline in rye / wheat yields
Belgium	14%	0.5/0.6	-87%	-43%	-50% / -10%
Denmark	3%	0.2/0.3	App. -50%		App. -20%
Sweden	5%	0.5/0.6	App. -20/25%		App. -10%
France	App. 6%	0.5	-20%	-19%	-20% / -25%
Württemberg	3%-8%	n.a.	-55%	-51%	-15% / -24%
Prussia	11%	1.0/1.1	n.a.	-47%	-43%
Netherlands	11%	0.7	-71%	-56%	-47% / -6%
Spain	2%	low	n.a.	n.a.	n.a.
Highlands of Scotland	n.a.	high	n.a.	App. -80%	n.a.
Ireland	App. 32%	2.1	App. -30%	App. -88%	App. -33% (oats)

Source: Figures mainly estimated from the different chapters in Ó Gráda, Paping and Vanhaute (eds) forthcoming. Special thanks to Hans-Heinrich Bass, Carl-Johan Gadd and Peter Solar; Tortella, 2000: 60 (Spain 1857); Von Reden (1853/54: 87-95); Hellstenius (1871: 106); Gadd (1983: 248); *Emigrationsutredningen* (1913: 91); *Statistisch* (1850: 232); Ó Gráda (1999: 24).

PHYTOPHTHORA INFESTANS

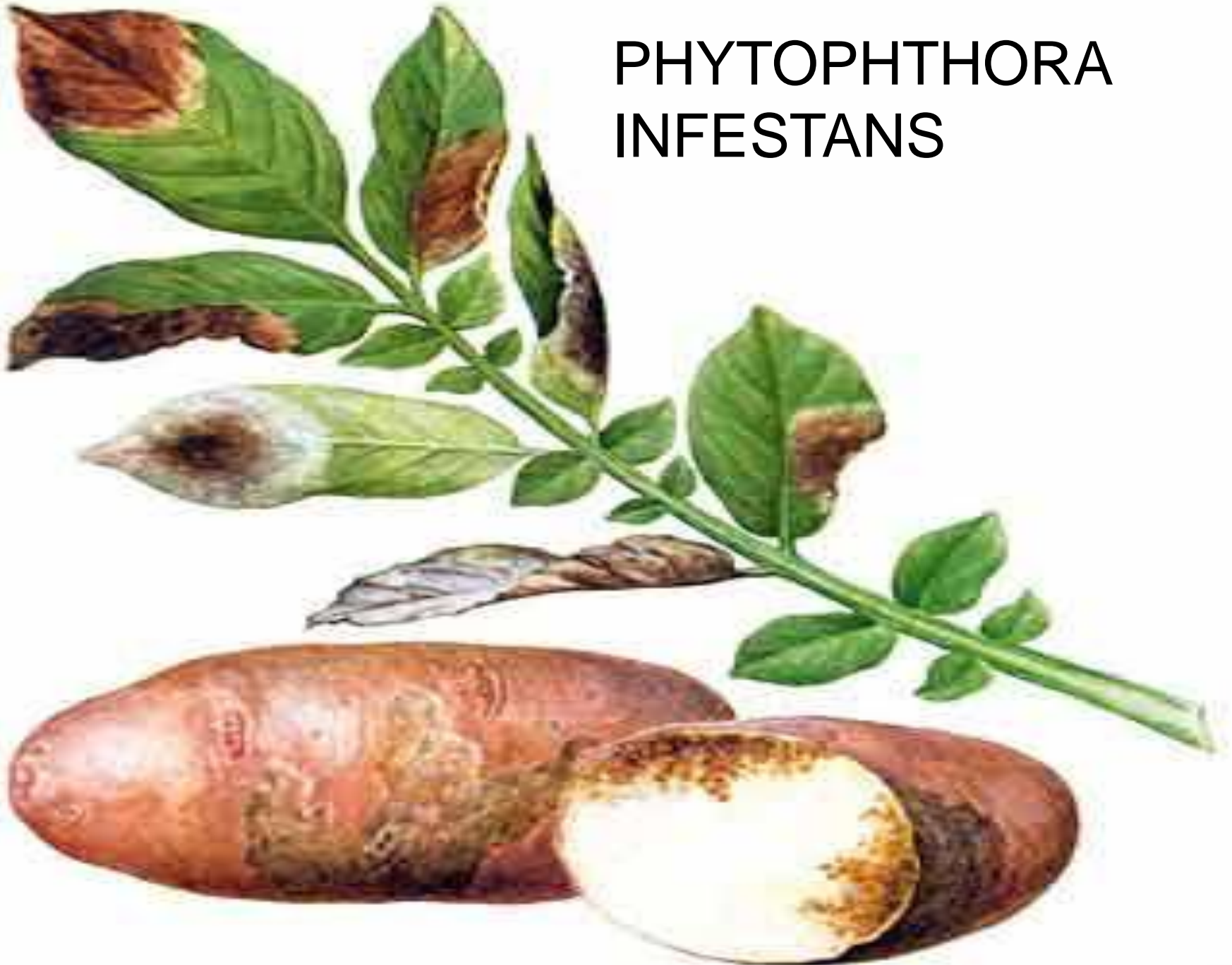


Table 1.5. Estimated yearly population growth in some Western European countries (percentages)

	1840/45	1845/46	1846/47	1847/48	1848/49	1849/50	1850/60
Belgium	+1.1%	+0.9%	+0.9%	+0.0%	+0.5%	+0.2%	+0.7%
Denmark	+1.1%	+1.0%	+0.8%	+1.0%	+1.0%	+1.0%	+1.2%
Sweden	+1.1%	+0.8%	+0.6%	+1.0%	+1.3%	+1.2%	+1.0%
France	+0.5%	+0.7%	+0.4%	+0.1%	+0.3%	+0.0%	+0.5%
Germany (total)	+1.0%	+1.0%	+0.5%	+0.2%	+0.1%	+0.9%	+0.7%
Prussia	+1.3%	+1.4%	+0.8%	+0.5%	+0.4%	+0.9%	+1.0%
Netherlands	+1.1%	+1.1%	+0.3%	-0.2%	+0.1%	+0.3%	+0.7%
United Kingdom*	+1.2%	+1.2%	+0.7%	+0.7%	+0.7%	+0,7%	+1.3%
Ireland	+0.4%	-0.2%	-4%	-4%	-4%	-4%	-1.7%.

Note *: United Kingdom is excluding Ireland, and the result of interpolation between 5-year estimates. The figures for Ireland are very rough estimates. Source: Denmark, Sweden and United Kingdom: Maddison (2003: 34-35, 42-43), mid-year numbers have been compared. France: 'Recensement' (1966); Prussia: www.learn-line.nrw.de/angebote/eda/medio/preussen; the Netherlands: Smits et al (2000: 109-110); Belgium: *Population* (1843-1851); *Documents* (1857-1869). For these countries 1845/46 relates to the development from 1 January 1845 to 1 January 1846.

Excess mortality

- Mostly indirectly related to crisis (famine related diseases)
- Intervening factors: cholera (1848/49), malaria (NL) and possibly influenza (1848)
- Ireland: app. 1,000,000 losses
- Belgium (ca. 40/50,000), The Netherlands (ca. 30,000), Prussia (ca. 42,000), South Germany (some)
- France (ca. 30,000), Sweden and Denmark (ca. 10,000).
- Total about 200,000 till maximum 300,000 extra deaths outside Ireland in the period 1846-1847

Fertility and migration

Fall in fertility (with delay):

- Ireland $-1/3^e$
- Flanders $-1/3^e$ till $-1/5^e$
- Prussia $-1/8^e$
- The Netherlands $-1/5^e$ till $-1/10^e$
- France $-1/16^e$
- Denmark & Sweden -negligible

Rise in migration,

* mainly in Ireland and Scottish Highlands

An international view

Economic growth before 1850 without a rise in food availability per capita (vulnerability)

A widespread fall in agricultural food production in 1845-1847 on a for the 18th century unprecedented scale

Improved transport facilities, however, are theoretically capable to provide 'enough' food everywhere in Europe (prices move in tandem)

So, having entitlements to food (money or production) becomes crucial to secure 'enough' food

Creating problems for: 1. lower (wage-earning) rural classes in commercial long-distance regions, 2. urban poor, 3. partly self-sufficient peasants in depressed proto-industry

--> Making the 1846-1847 European subsistence crisis a traditional food crisis in a modern setting

A national view of the depth of the potato crisis of 1845/1847

- Sweden, Denmark in the north and to a higher extent France and Spain in the south: minor impact
- Netherlands, Belgium and Germany: 'moderate' food crisis
- Ireland and to a lesser extent the Scottish Highlands: famine

However, large regional differences existed!

Regional differences

- Inner Flanders (peasants and proto-industry) <-> South Belgium (industrialised)
- Dutch coastal parts <-> inland parts (less urban and less rural wage-dependency)
- East Prussia (commercial long distance food export) and Western German cities <-> Western Prussia (small and middle-ranged farmers)
- Scottish Highlands (peasants) <-> Lowlands (industrialised)
- South Sweden <-> Northern Sweden (climatic resistance)
- Only parts of France and South Germany

Crucial Factors

- Share of potato in consumption
- Extent of failure of the potato harvest (climate)
- Combination with failure rye harvest
- Combination with (proto-)industrial crisis
- Entitlements (wage/market dependency opposed to self-sufficiency)
- Organisation of local poverty relief and reaction of the local elite

Regional differences in all these factors create the large differences in regional impact across all countries

The impact of national policies (import, export and production regulations, relief systems) though much discussed seems to have been comparatively small