## PART A

## **BOTANY OF COMFREY**

## "Comfrey is the common name given to the genus Symphytum, a member of the Boraginaceae (Borage) family. It is native of Eastern Europe and Western Asia in the Caucasus area.

Comfrey is a coarse perennial herb up to five feet (1.5 meter) high, leafy, branching, with hairy stems and leaves; the lower leaves are generally larger than the upper ones; extensive fleshy root system; flowers whitish, yellowish or dull purple; generally adapted to moist cool places."

-Comfrey Report: The Story of the World's Fastest Protein Builder and Herbal Healer, Conservation Gardening and Farming Series: Series C by Lawrence D. Hills. England: Henry Doubleday Research Association, 1975, page 26.

**Comfrey is native to Europe and countries around the Mediteranean Sea** (Spain, France, Italy, Sicily, Slovenia, Croatia, Serbia, Albania, Greece, Turkey, Syria, Lebanon, Israel, Egypt, Libya, Tunisia, Algeria, Morocco). **It is also native to the Caucasus.** The Caucasus Mountains are located at the border of Europe and Asia, between the Black Sea and Caspian Sea and occupied by Russia, Georgia, Azerbaijan, and Armenia.

"Russian Comfrey is a perennial fodder crop, in the lucerne (alfalfa) class for nutritional value but with a vastly greater yield. This yield, in from six to eight cuts between early April and the end of November, totals forty tons an acre for a poor crop, and a hundred tons for a good one.

It is a member of the order Boraginaceae (Borage-wort, Borage-root) and therefore avoids the galaxy of viruses and eelworms that beset so many modern crops.

Its high average protein of 24 percent of the dry matter, and low average fibre at 10 percent when cut at the leafy stage, makes it ideally suited for pigs and poultry."

-Russian Comfrey: A Hundred Tons an Acre of Stock or Compost for Farm, Garden or Smallholding by Lawrence D. Hills. London England: Faber and Faber, Limited, 1953, page 15.

"The Comfrey plant has the quickest turnover of capital of all, to build cut after cut of leaves and stems, any one of which is a season's work for most crops. Much of this leaf-won food from sun and air is hoarded in the great roots, and gives the starting stock the energy that allows a first cut before the soil is warmed and kindly for surface-rooting grasses. The Russian Comfrey grows with semi-tropical speed in a cold climate, and therefore there must be something rather unusual about the chloroplasts in its cells and its metabolism in general."

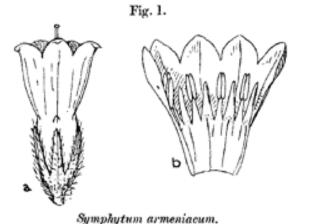
-Russian Comfrey: A Hundred Tons an Acre of Stock or Compost for Farm, Garden or Smallholding by Lawrence D. Hills. London England: Faber and Faber, Limited, 1953, page 143.

**"Comfrey (Symphytum spp.) is the fastest growing plant in the temperate zone.** Its taproot is extremely deep, and loaded with allantoin, double that of leaves. Its leaves are very important, due to content of allantoin.

**Protein content is so great that Comfrey is the highest protein yielding plant known.** If the soil is good, protein content is 25% - 30%. It has a more balanced ratio of calcium (2) to phosphorus (1), than alfalfa has, as a forage for cows."

-The Organic Method Primer: A Practical Explanation: The How and Why for the Beginner and the Experienced by Bargyla and Gylver Rateaver. San Diego, California: The Rateavers, 1993, page 163.

(sp.= single species) (spp.= more than 1 species)



## Symphytum Armeniacum Flower

'A Revision of the Genus Symphytum, Tourn.' by Cedric Bucknall, Journal of the Linnean Society of London, England, Botanical Journal, Volume 41, Issue 284, December 1913.

a. Flower

b. Corolla, opened to show stamens and corolla-scales

a. Flower. b. Corolla, opened to show stamens and corolla-scales. × 2.