Balears Verd: Jerarquia Regenerativa

Etymologically, ‘hierarchy’ comes from the Greek hierós (‘sacred’, ‘divine’) and arkhei (‘order’ or ‘command’). It is defined as a mode of organisation in which each element is subordinate to the one on the top rung. Hierarchies not only allow us to understand the context, but also provide a roadmap towards its continuous improvement.

For a long (too) long time, we have had a hierarchy of only two rungs: that of the agroecological approach versus conventional production. However, this hierarchy is now enriched by the emergence of new rungs (concepts) that are an inevitable consequence of scientific progress and a new social and environmental perception. Let us see what they are:

Before the emergence of organic agriculture, **agroecology**, born of Central American small farmers (such as Via Campesina), demanded a fair distribution for small farmers, the preservation of their traditional seeds and the promotion of the local economy. **Permaculture**, formulated by Australian university professors, joins this trend and offers a conceptual framework that, for the first time, connects concepts that until now moved in watertight compartments.

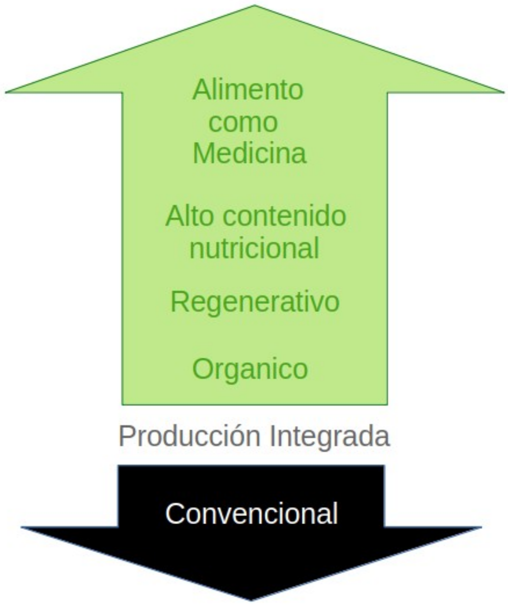
Thus, we have small farmers and intellectuals on the one hand, but not the owners of large farms, those who ‘feed the world’, as the multinationals tell us, ignoring the fact that two thirds of the planet is fed by farms of less than 2 hectares.

In Europe, the transition from conventional to organic farming is not easy. Ironically, it is necessary to prove that no pesticides are used, while those who use them do not have to explain themselves. However, the noise generated by the various forms of organic farming has managed to convince some consumers, which has alerted conventional producers who are more aware that the playing field is shifting.

Those who are convinced of the need for change, but who cannot move in the short term, adopt so-called **integrated production**, a planned process of gradual reduction in the use of synthetic plant protection products and fertilisers, replacing them with authorised alternatives in organic farming.

In the US and Australia, large landowners fell into the productivity trap of the market and, in the late 1990s, ended up in the hands of banks and distributors, deeply in debt. These farmers naturally had large-scale management skills and some were university educated.So, faced with ruin, they decided to reinvent themselves through **Regenerative Agriculture**.

Regenerative agriculture and **syntropic agriculture** (proposed by Ernst Götsch in Brazil), together with agroecology and permaculture, point out the structural limitations of ecological agriculture. These currents redesign the system by focusing on the recovery of the water cycle, the carbon cycle and the return of biodiversity. This implies including environmental services in the valuation, without losing sight of production objectives.



Proposal for a regenerative hierarchy (Miquel Ramis 2024)

At the moment, the discussion is focused on the ethical realm: farmers are no longer simply producers, but are an integral part of the system and therefore co-responsible for the growing number of health problems and degenerative diseases caused by the current agro-industrial system of food production and distribution. As science shows that food has less and less nutritional content and more and more contaminants and pesticides, awareness of the relationship between food and disease prevention is growing. This is where the concept of '**nutrient-dense food**' comes in, and its top step that sums up the whole paradigm shift: '**Food as Medicine**'. This radical approach (because we finally get to the root of the problem) transforms the scenario: foods with high nutritional content can prevent disease.

What are these scientific facts?

To begin with, there is nothing new under the sun. Since the 1930s, scientists, doctors and researchers have been sounding the alarm about the progressive deterioration of the nutritional content of the soil and, consequently, of the food it produces, of the indissoluble relationship between agricultural activity and the ecosystem that sustains it.

In 1936, Dr. Charles Northern made history when he presented a document to the Senate (No. 264) in which he showed that the quality of nutrients in food was declining alarmingly. When the Senate, *which had commissioned the report*, learned what it would cost to return to the status quo ante, it simply decided to shelve the matter.

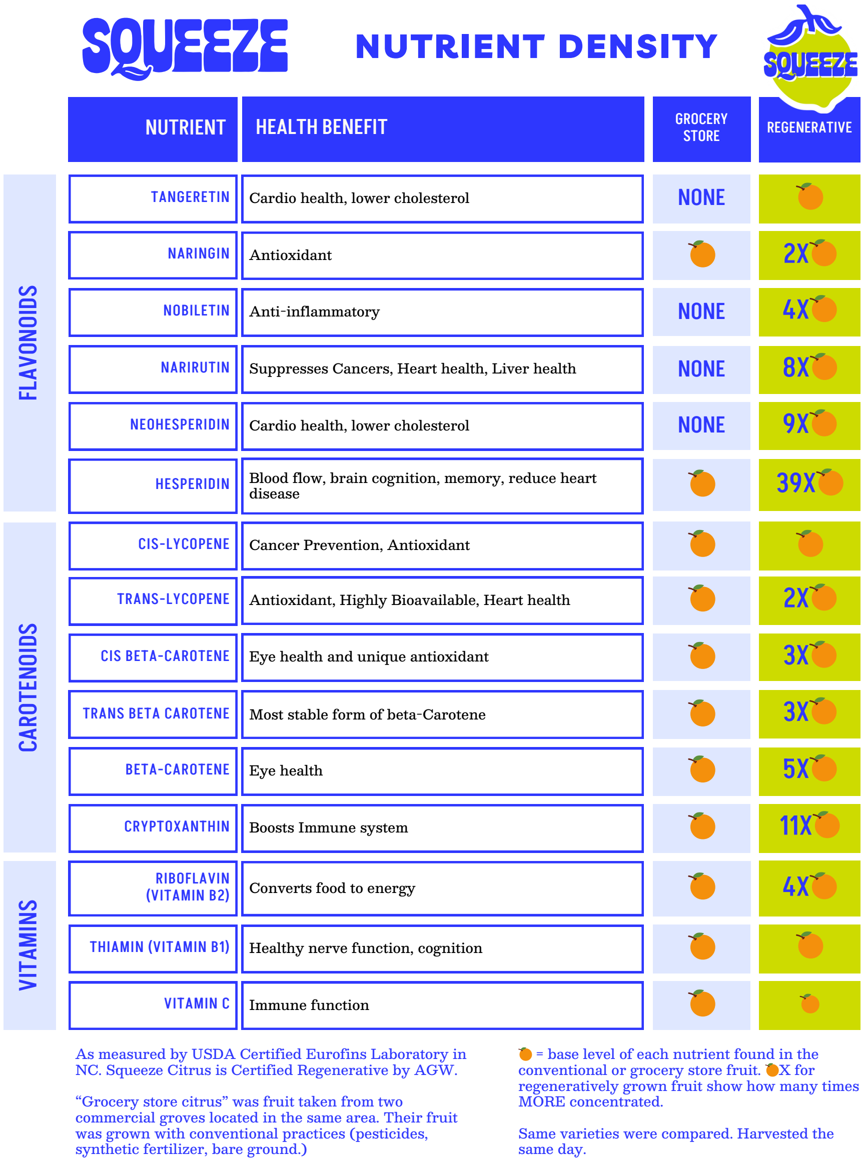
http://www.nutritionsecurity.org/PDF/Brix.pdf

In 1962, Rachel Carson published ‘Silent Spring’, exposing the ecocide generated by the use of DDT. Since then, numerous studies have corroborated and expanded information on the effects of pesticides on ecosystems and humans. However, these studies have been actively opposed by other ‘scientists’, perhaps financed by the pharmaceutical and agro-industrial industries, with the clear intention of blurring, distracting, discrediting and/or silencing ‘the dissidents’, condemning their authors to suicide at work if they decide to publish according to their conscience. The lines of research in universities and R&D centres are tied up and tied up tight. If something is discovered that cannot be patented, then there is no funding. Fortunately, the truth is coming out through the cracks of a system that cannot contain the Internet and alternative channels. At least part of the population is beginning to ask the right questions in the face of the overwhelming number of contradictions it discovers... if it looks.

An example: A retired pesticide salesman turned regenerative farmer sells oranges on his farm that contain several times more flavonoids, carotenoids and vitamins than their conventionally produced neighbours

Moreover, conventional oranges lack some of these antioxidants. In reality, the difference is even greater, as the comparison was made with local oranges, but those that reach the market usually go through cold storage at low temperatures, a process that also causes an appreciable loss of vitamin C, a factor that we can transpose to all those vegetables and fruit that we buy in the supermarket and park directly in the fridge...

Other studies have reported very low levels of vitamin C in commercial oranges, a fascinating fact when we remember that mass consumption of citrus fruit soared in the 19th century with the discovery of its efficacy against scurvy.



SQUEEZE NUTRIENT DENSITY

	NUTRIENT	HEALTH BENEFIT	GROCERY STORE	REGENERATIVE
FLAVONOIDS	TANGERETIN	Cardio health, lower cholesterol	NONE	🍊
	NARINGIN	Antioxidant	🍊	2X🍊
	NOBILETIN	Anti-inflammatory	NONE	4X🍊
	NARIRUTIN	Suppresses Cancers, Heart health, Liver health	NONE	8X🍊
	NEOHESPERIDIN	Cardio health, lower cholesterol	NONE	9X🍊
	HESPERIDIN	Blood flow, brain cognition, memory, reduce heart disease	🍊	39X🍊
CAROTENOIDS	CIS-LYCOPENE	Cancer Prevention, Antioxidant	🍊	🍊
	TRANS-LYCOPENE	Antioxidant, Highly Bioavailable, Heart health	🍊	2X🍊
	CIS BETA-CAROTENE	Eye health and unique antioxidant	🍊	3X🍊
	TRANS BETA CAROTENE	Most stable form of beta-Carotene	🍊	3X🍊
	BETA-CAROTENE	Eye health	🍊	5X🍊
	CRYPTOXANTHIN	Boosts Immune system	🍊	11X🍊
VITAMINS	RIBOFLAVIN (VITAMIN B2)	Converts food to energy	🍊	4X🍊
	THIAMIN (VITAMIN B1)	Healthy nerve function, cognition	🍊	🍊
	VITAMIN C	Immune function	🍊	🍊

As measured by USDA Certified Eurofins Laboratory in NC. Squeeze Citrus is Certified Regenerative by AGW.

"Grocery store citrus" was fruit taken from two commercial groves located in the same area. Their fruit was grown with conventional practices (pesticides, synthetic fertilizer, bare ground.)

🍊 = base level of each nutrient found in the conventional or grocery store fruit. 🍊X for regeneratively grown fruit show how many times MORE concentrated.

Same varieties were compared. Harvested the same day.

Independent laboratory analysis by Herb Young, Squeezecitrus. X indicates the number of times it doubles the content compared to its competitors.

https://squeezecitrus.com/pages/health-benefits

Another example: in a conventionally managed orchard, the frost has burnt the fruit trees and the crop has been lost. However, in the neighbouring regenerative orchard, the crop is in perfect condition. This mystery can be solved by any primary school child who has learned that water freezes at 0°C, while the water contained in fruits with high nutritional content, having a higher proportion of sugars, does not freeze until the temperature reaches -5°C, for example.

All this is obviously unnecessary, as we have common sense: if a plant needs 42 minerals to fully develop, conventionally grown on a diet of NPK (Nitrogen, Phosphorus and Potassium), we cannot expect the plant to properly form its amino acids, which are the essential building blocks for the creation of proteins. This also affects our ability to properly form our human proteins from 'defective' building blocks that are lacking or deficient in some element.

The conventional oranges in Young's study lacked 4 antioxidants that are beneficial for the heart, kidneys and directly prevent inflammation and cancer. Meanwhile, oranges from regenerative farming had up to 9 times more than the industry average. It is important to emphasise that this is not 9 times more than neighbouring oranges, as these are directly lacking in these antioxidants. In the case of herperidin (which benefits blood circulation, brain function, memory and prevents heart disease), the difference is 39 times!!!

These surprising data, which we are unlikely to see in the media (Thank you, Cambio16!), lead us to another reflection: should I eat 39 oranges when I get the same antioxidant with just one? Would we accept having to eat 39 plates of food if we could feed ourselves with just one plate? Are we beginning to glimpse the possibility of a link between morbid obesity and a lack of nutrients?

So the need for a new hierarchy is not only related to the health of the soil and the planet, but also to our own health. But this requires pedagogy and the dissemination of good information. Let us hope that, whether out of a sense of planetary solidarity or the legitimate selfish right to improve our health, we will slowly converge towards more responsible and efficient modes of production, distribution and consumption.

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Balears Verd is a proposal for the regeneration of the terrestrial and marine ecosystems of the Balearic Islands. Its main objective is the planting of one million fruit trees and bushes in a Food Forest Garden, the recovery of the water cycle, the carbon cycle, the return of biodiversity and the reactivation of the primary and secondary sectors. Indirectly, recovery of Posidonia by progressively eliminating agricultural waste and reducing runoff, erosion and salinisation of our soils. We firmly believe that the objective of agricultural and livestock production must be reoriented towards the production of food with a high nutritional content that will heal the planet and its inhabitants.

Artifexbalear is the first entity registered in the Balearic Registry of Compensation Projects of the Balearic Government (File 001/2024) and also the first in Spain certified by a public administration to issue Regenerative Carbon Credits, i.e. Carbon Credits generated by the application of Regenerative Agriculture techniques, recovery of the water cycle and return of plant and animal biodiversity.

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