

Grain

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Abstract

In this paper, I describe grain.
The paper ends with "The End"

Introduction

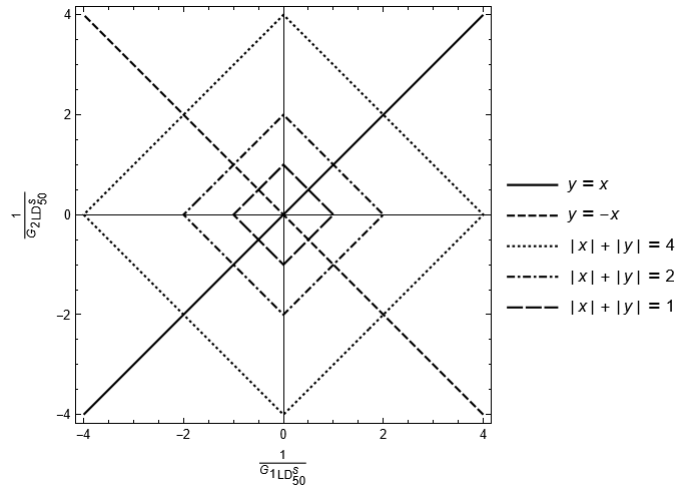
In a previous paper, I've described poison, vitamin and food using the concepts of ${}^sLD_{50}^s$, species diagram and substance diagram.
The knowledge of grain is **crucial** to every economy.
In this paper, I describe grain using the same concepts.

Grain

A **grain** is any substance that when **consumed** in positive quantities **doesn't** harm **nor** causes death of an individual.

Species diagram of grain

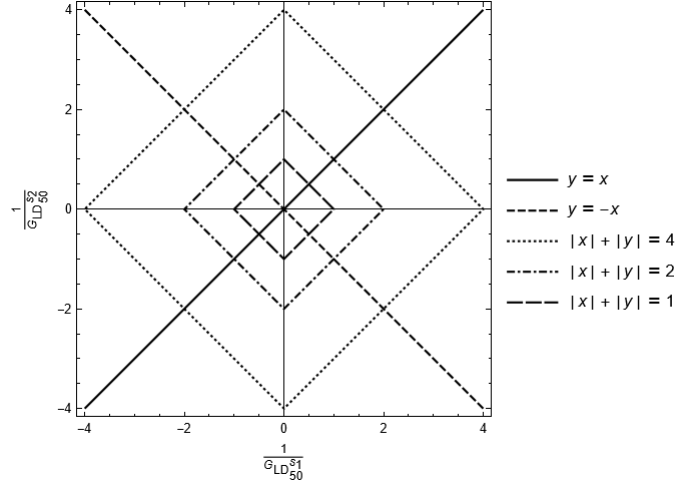
For a **fixed** species s and two grains G_1 and G_2 ,
the **species diagram of grain** is a two-dimensional Cartesian co-ordinate plane
where the X-axis represents $\frac{1}{G_1 LD_{50}^s}$ and the Y-axis represents $\frac{1}{G_2 LD_{50}^s}$.



A species diagram of grain showing the two isoclines and some square level curves.

Substance diagram of grain

For a **fixed** grain G and two species s_1 and s_2 , the **substance diagram of grain** is a two-dimensional Cartesian co-ordinate plane where the X-axis represents $\frac{1}{G_{LD_{50}^{s_1}}}$ and the Y-axis represents $\frac{1}{G_{LD_{50}^{s_2}}}$.



A substance diagram of grain showing the two isoclines and some square level curves.

Square level curves

A **square level curve** with level c in a species/substance diagram of grain is the curve $|x| + |y| = c$.

The two isoclines

The two isoclines in any species/substance diagram are the lines $y = x$ and $y = -x$, with the former called the **standard isocline** and the latter called the **special isocline**.

The truth of each species

For each species s , there exists at least one grain $G(s)$ that can be consumed by s .

In simpler words, for each species there exists at least one grain.

The truth of each grain

For each grain G , there exists at least one species $s(G)$ that consumes G .

In simpler words, each grain can be consumed by at least one species.

The End