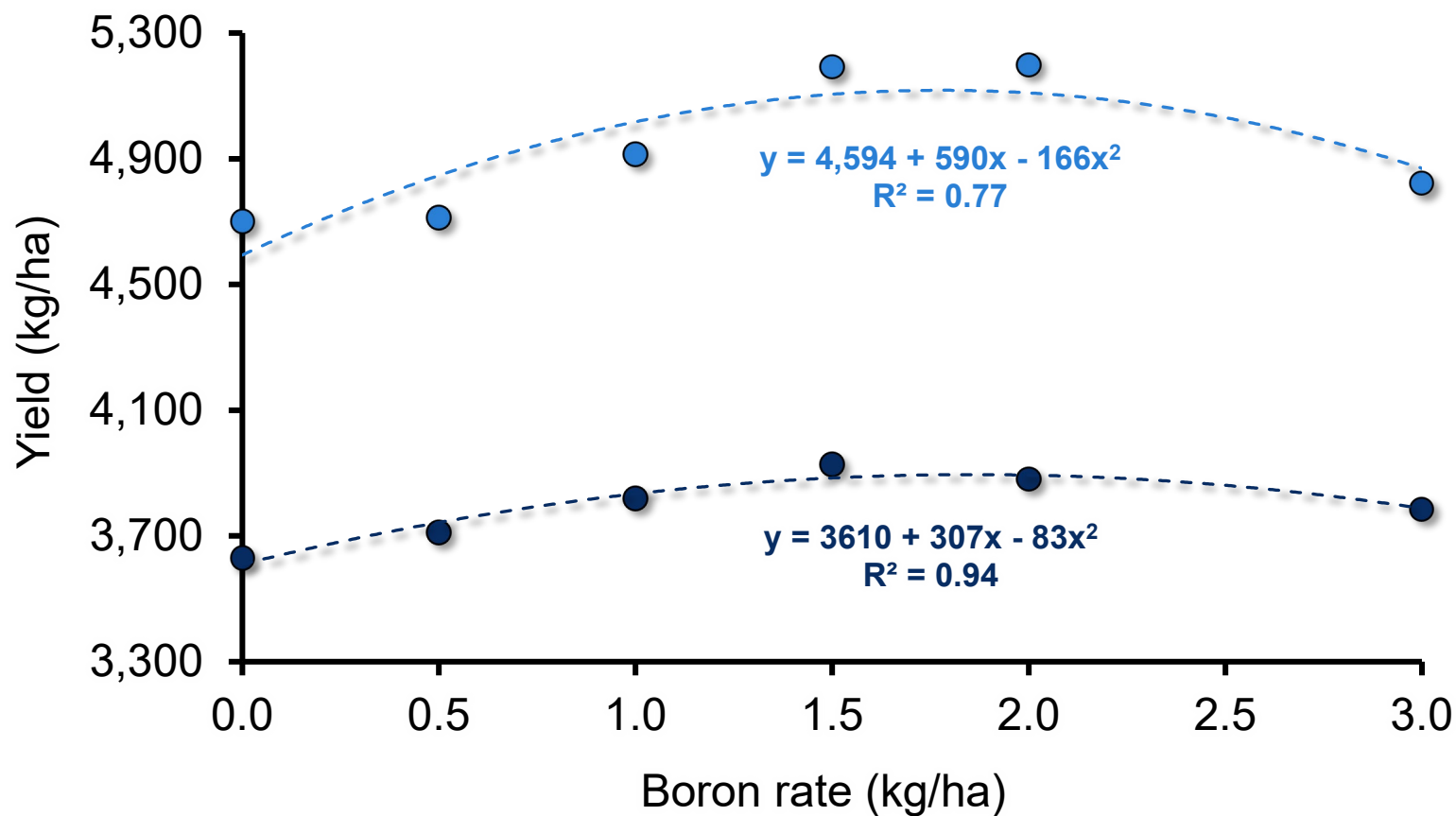


# Application of boron in soybean



● Year 1      ● Year 2



Dystrophic Red-Yellow Latosol  
(Oxisol)

Soil information (0-20 cm)	
B	0.16 mg/dm <sup>3</sup>
pH CaCl <sub>2</sub>	4.9
Organic matter	1.96%
Clay	41%

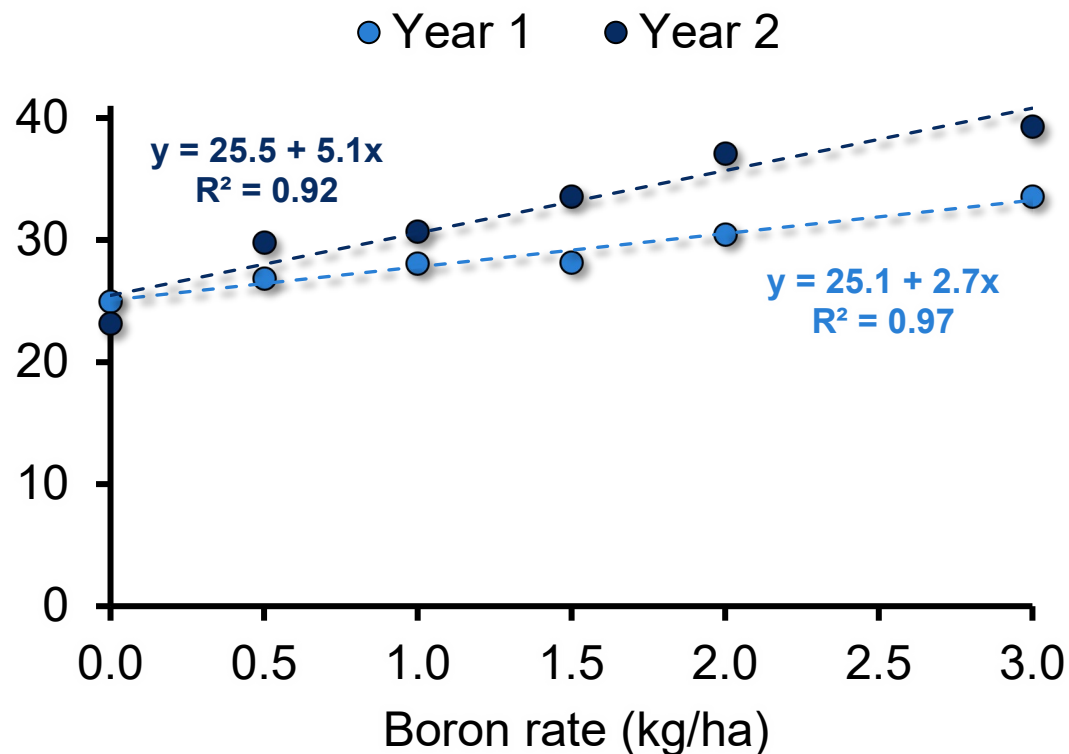


Source: C. Kappes (2024).

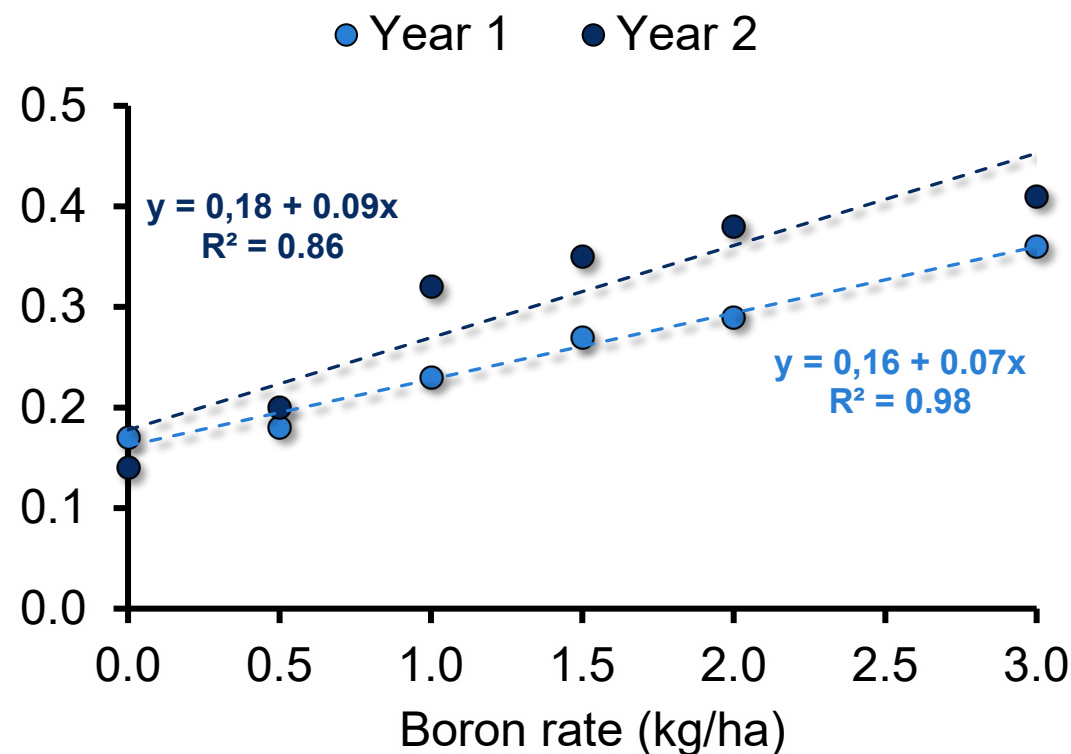
# Application of boron in soybean



### Boron foliar (mg/kg)



### Boron soil (mg/dm<sup>3</sup>)



# Application of boron in soybean



In this field experiment, conducted in Santa Carmem, MT – Brazil, during two consecutive crop seasons (2022/2023 and 2023/2024), it was possible to verify the importance of the element boron (B) for obtaining high soybean yields. The study was conducted in clayey soil, cultivated in the “safrinha” soybean-corn system for more than 15 years in a no-tillage soil system. The source of B used was *Granubor*<sup>®</sup> (15% B), which was applied at the time of sowing.

The results obtained allow us to conclude that:

1. Applications of 2.0 and 1.5 kg/ha of boron via *Granubor* in the first and second crop season of the study provided higher soybean yields, with increases of 498 and 294 kg/ha compared to the control treatment, respectively (Figure 1)
2. In both crop seasons, the application of increasing doses of B linearly increased the levels of the element in the leaf (blooming flowers) and in the soil (Figure 2), where the lowest values were verified in the treatment that did not receive its application
3. Visual symptoms of B toxicity in seedlings were observed at the highest dose (3.0 kg/ha of B). However, this was considered to be of “mild” intensity, since the symptoms were restricted to the unifoliate leaves, ie, there was no persistence of symptoms over time and no harm to plant development.

