Answer on Question #48167 - Chemistry – Other

Question

Raising the concentration of carbon dioxide in a greenhouse to approximately 10 000 ppm is effective in eliminating pests such as mites. what is the mass of carbon dioxide that would be present in 1kg of air?

Answer:

1 ppm = 1 part per million, and 1 kg = 1000 g

Make a proportion:

10 000 parts of carbon dioxide (CO_2) in 1 000 000 parts of air

x g of CO_2 in 1000 g of air

$$x = \frac{10\ 000 \cdot 1000}{1\ 000\ 000} = 10\ g$$

Answer: if concentration of carbon dioxide in a greenhouse is 10 000 ppm, then 1 kg of air contains 10 g of carbon dioxide.