# We tested the soil and it's GOOD!

- PLANT wanted to know if the soils used to grow food in the Tayport Community Garden were of good quality and free of harmful contaminants.
- So in June 2016, PLANT tested soils for general fertility and for heavy metals contamination using the soil testing services at the YARA Lancrop Lab in York.
- The Department for Environment Food and Rural Affairs (DEFRA) in the UK provide recommendations for nutrients and pH in soils for food production.
- The European Commission (EC) makes recommendations for soil quality based on what is typical of European soils and safe for human health. If soils contain metals concentrations less than the EC Directive 86/278/EEC criteria, food grown in this soil is considered safe to eat.
- These graphs show nutrient concentrations (#1) and pH (#2), as well as heavy metals concentrations (#3 – 10) in soils from four locations in the garden (See Map).

*ALL SOILS CONTAINED SUFFICIENT NUTRIENTS AND ARE CONSIDERED SAFE FOR GROWING FOOD!*

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*EXAMPLE*
EC Directive 86/278/EEC Criteria

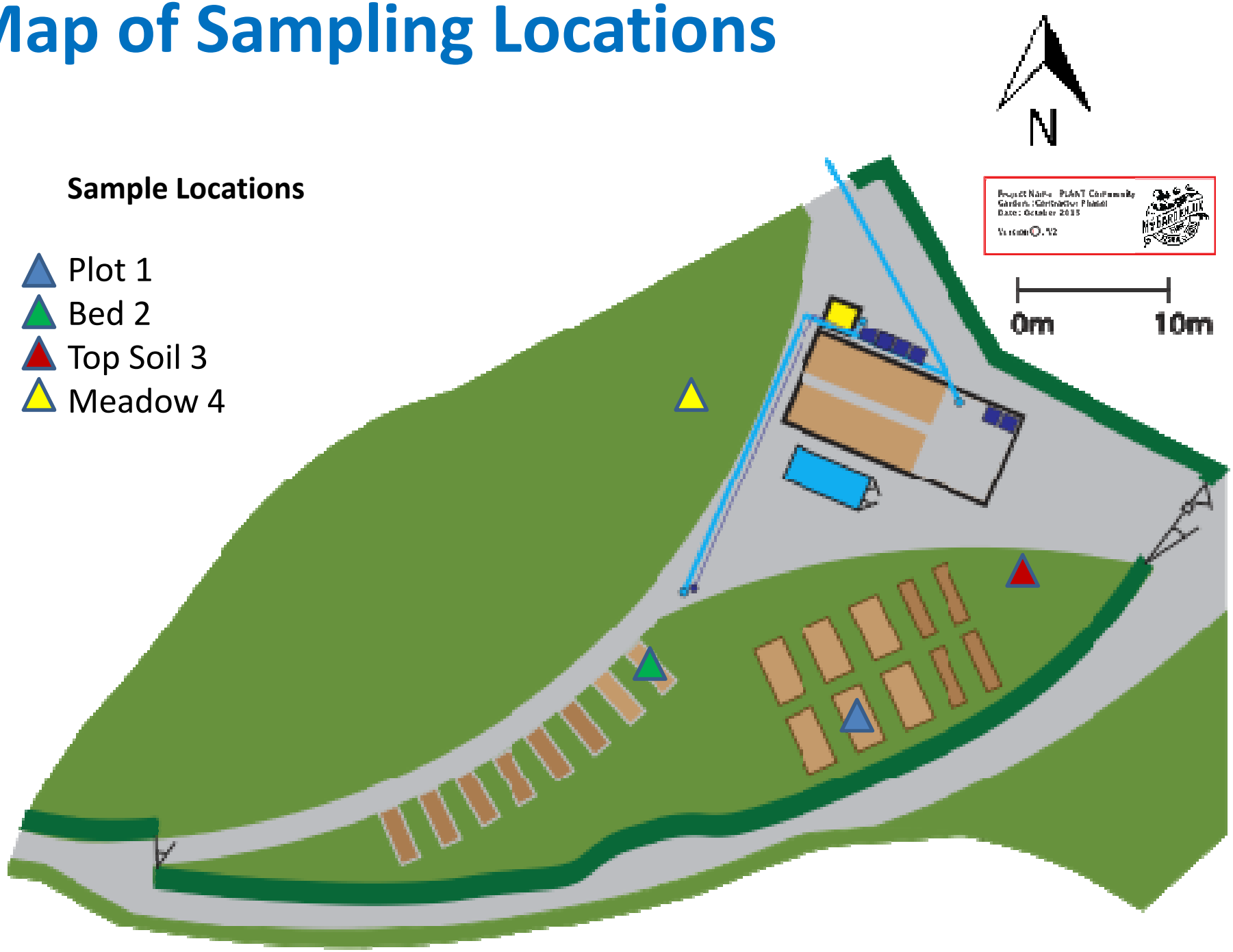
(110 mg/kg @ pH >7.1)

On the following graphs, bars lower than the EC Criteria are considered LOW in metals.

☹High

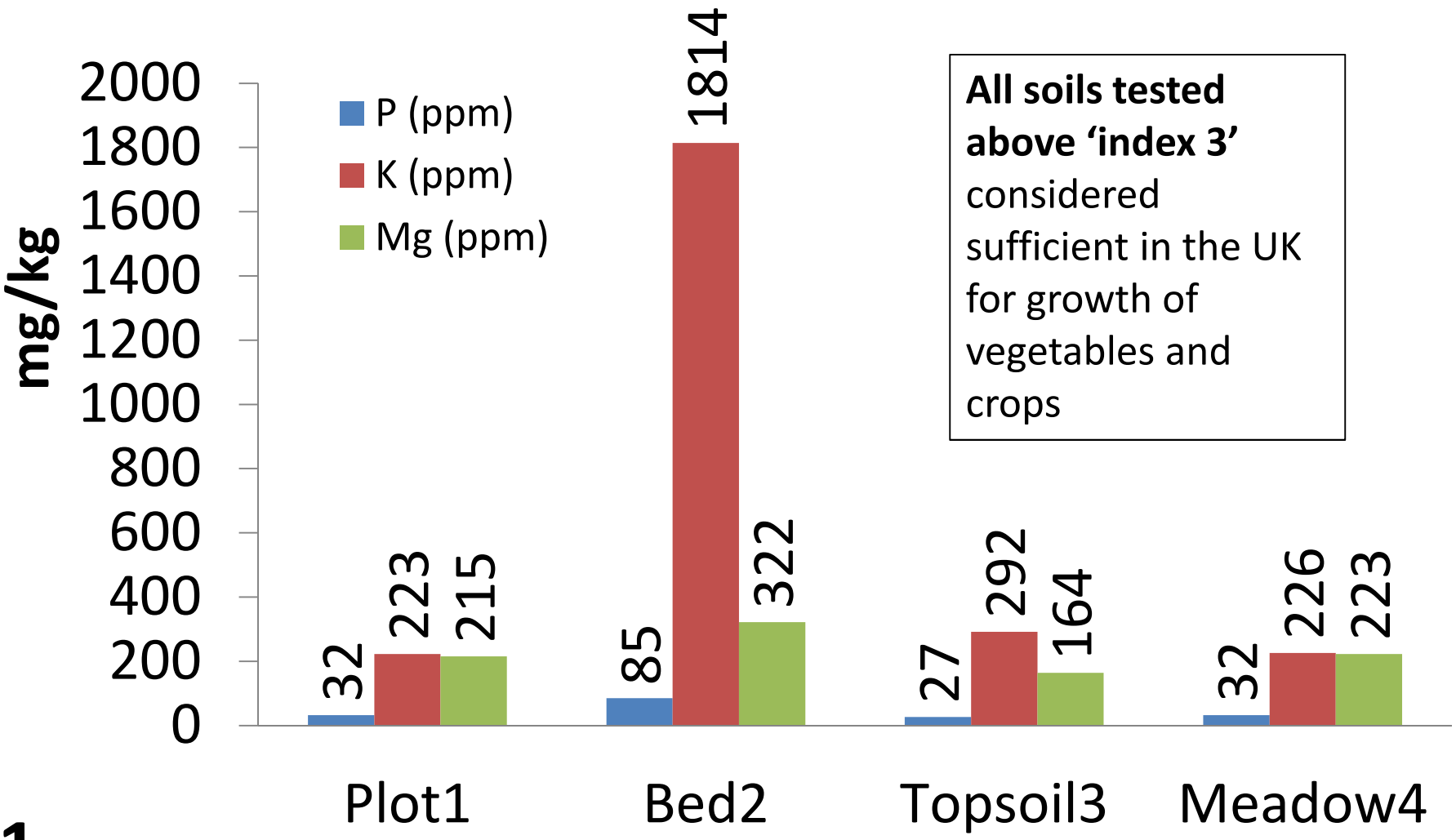
☺LOW

# Map of Sampling Locations



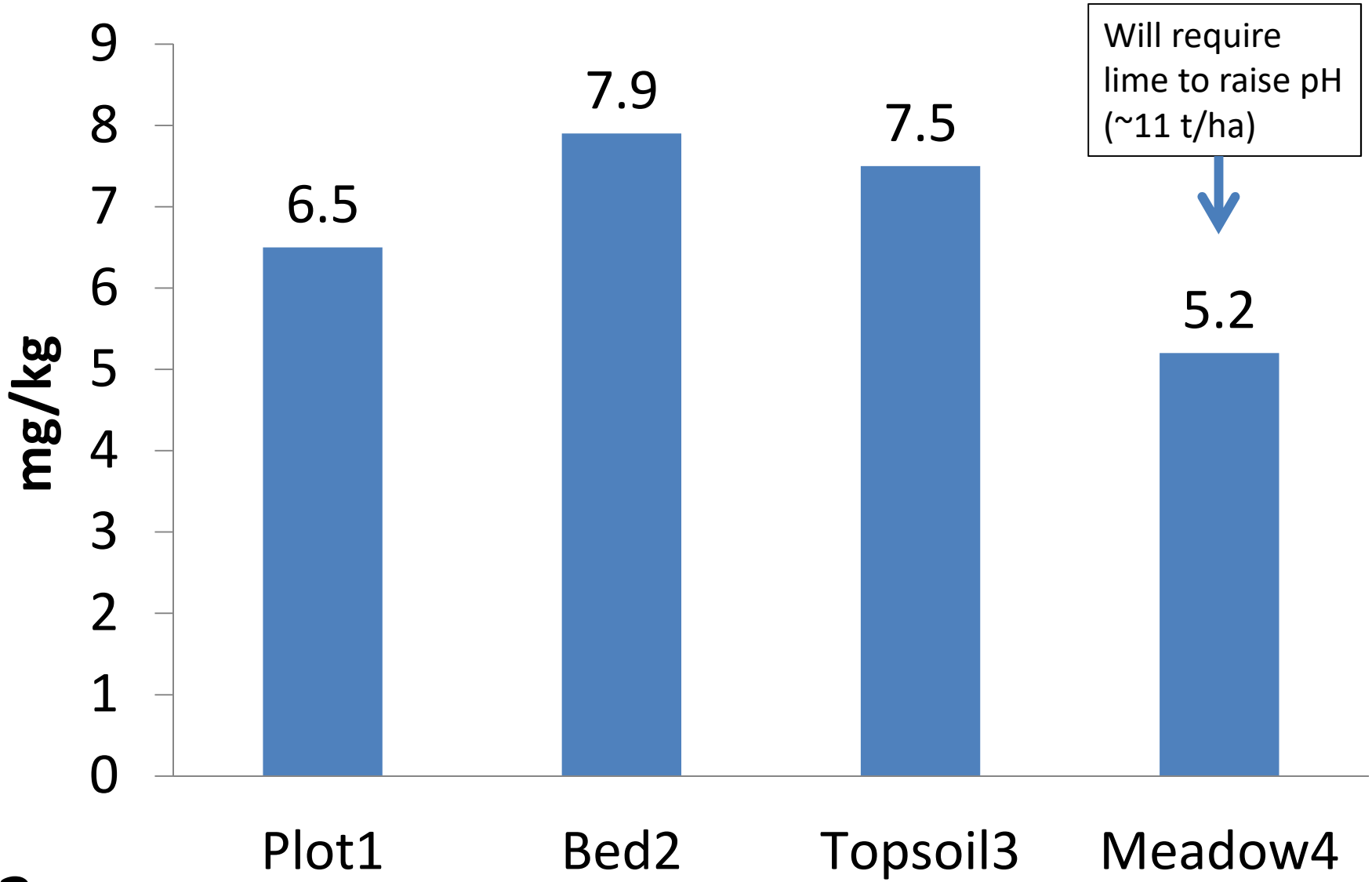
# Soil Testing for Plant Nutrients

Phosphorus (P) Potassium (K) Magnesium (Mg)



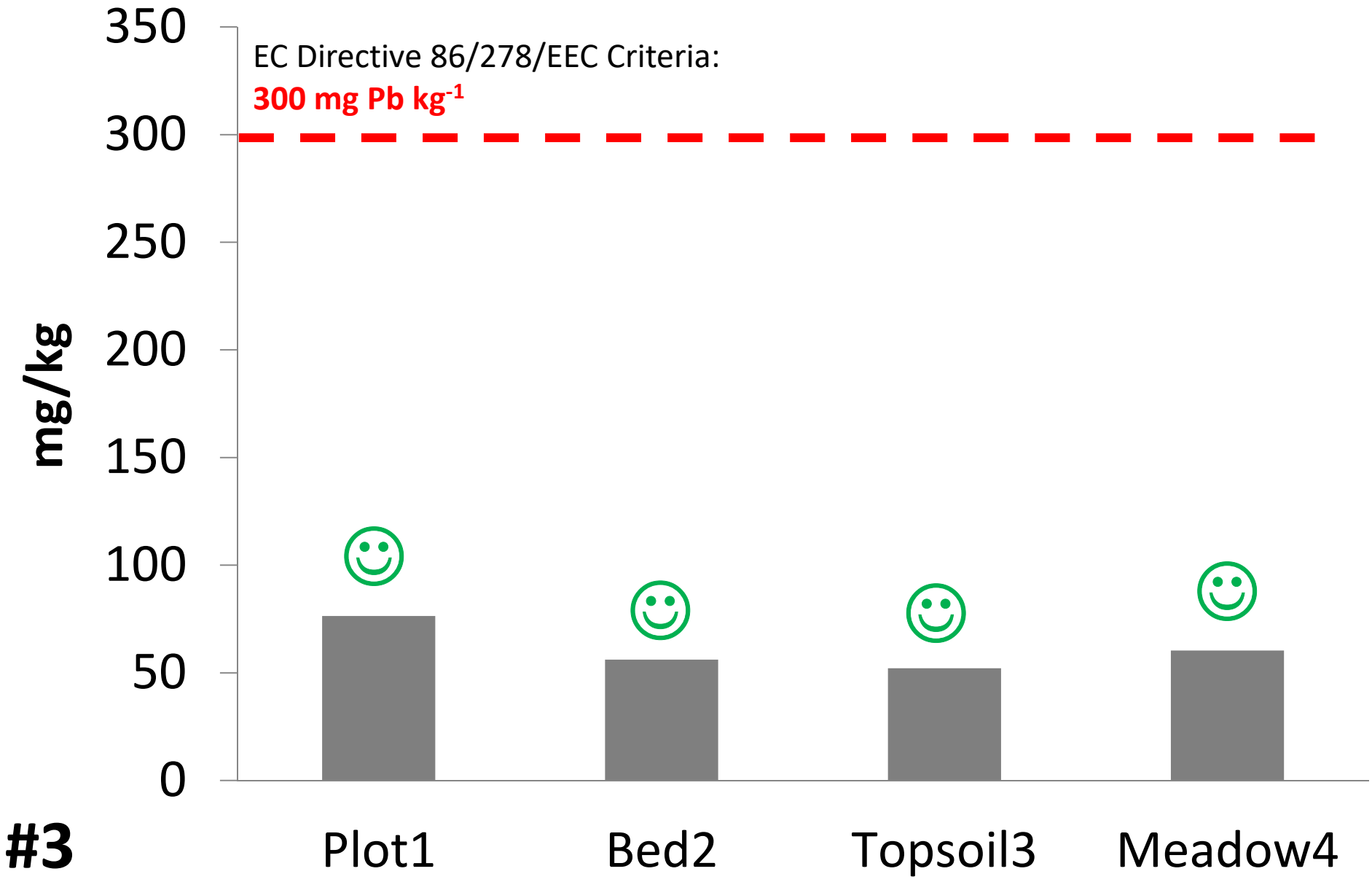

**#1**

# Soil Testing for pH



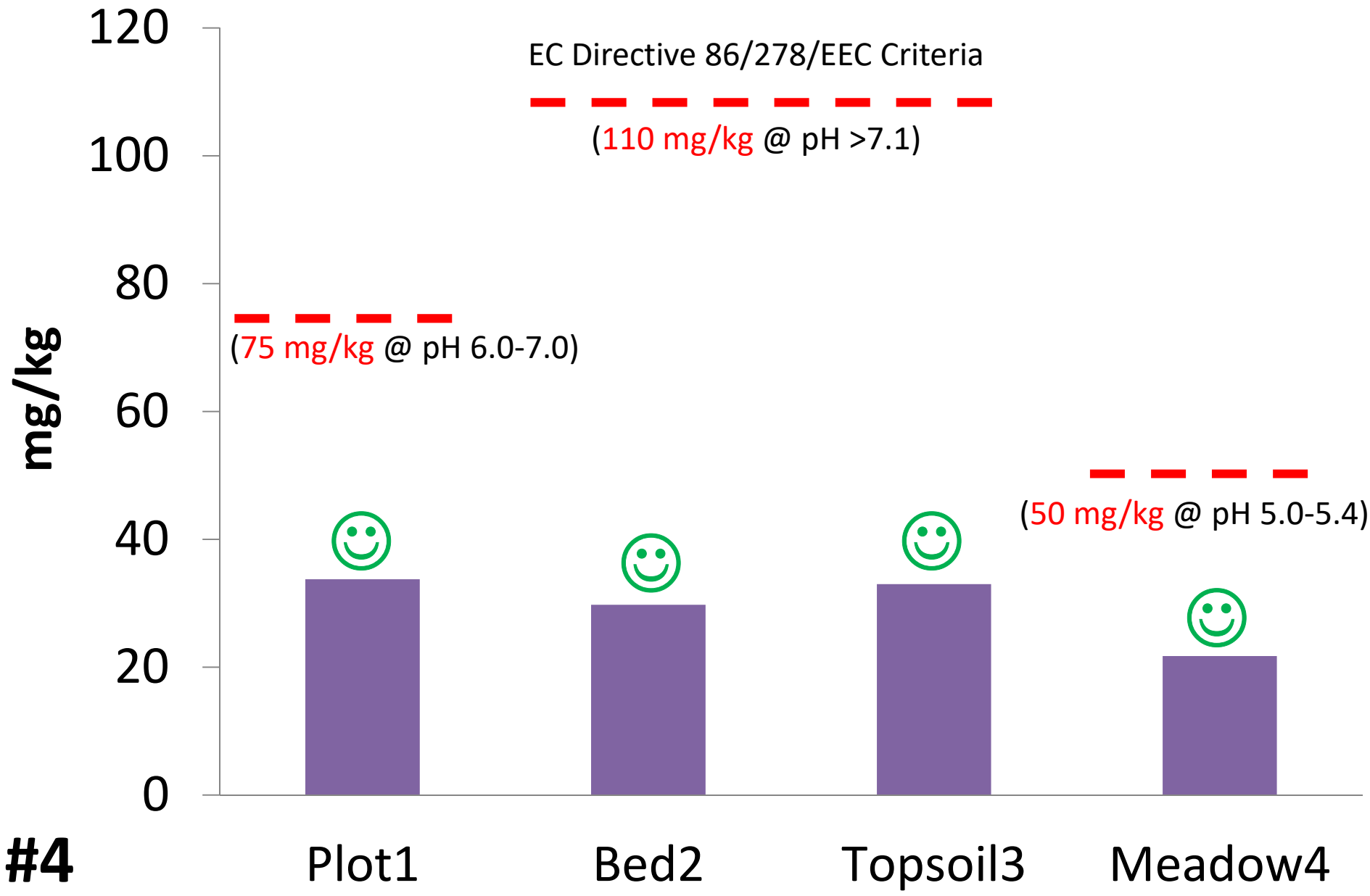

#2

# Testing for Heavy Metals: Lead (Pb)



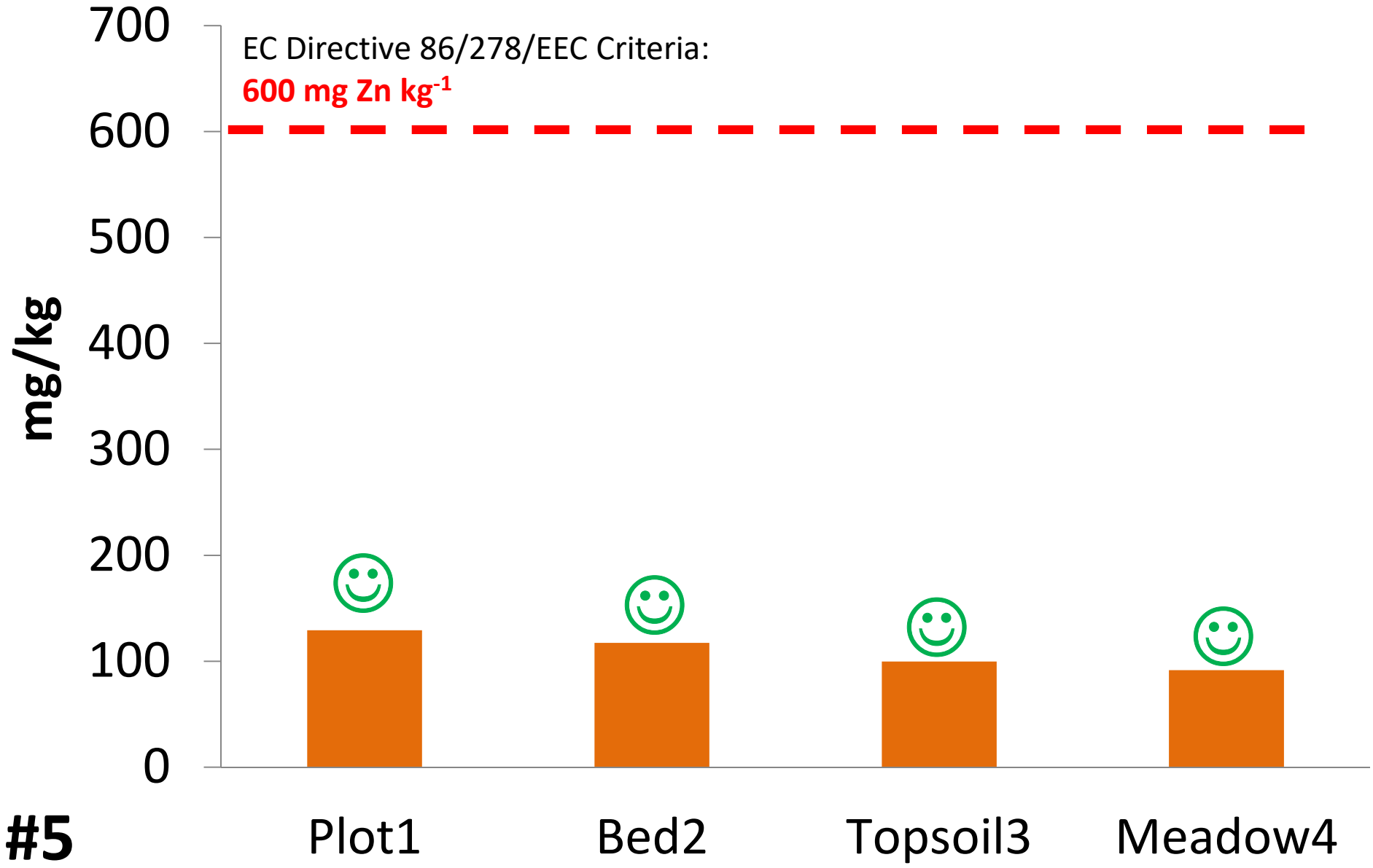

#3

# Testing for Heavy Metals: Nickel (Ni)



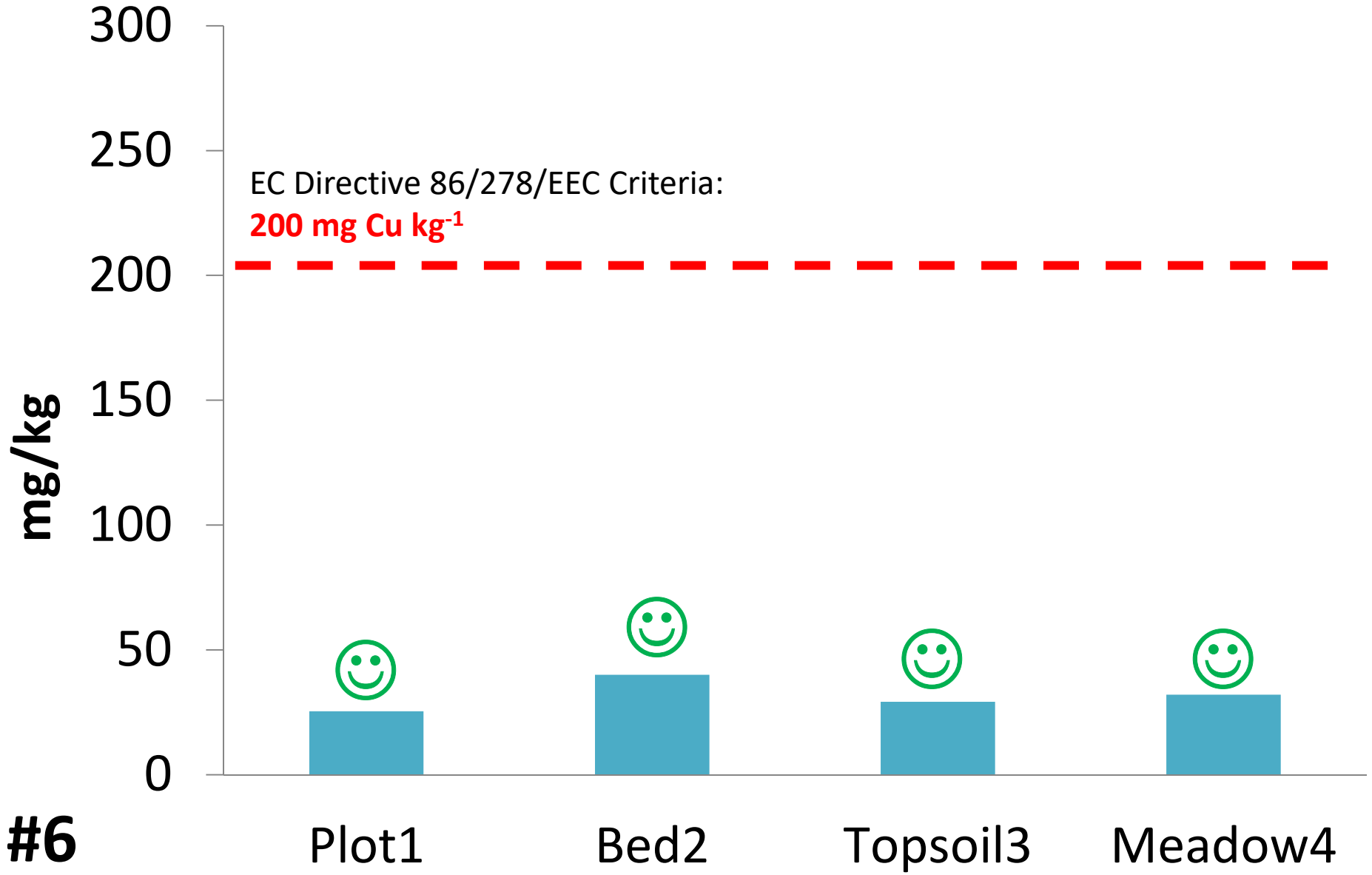

#4

# Testing for Heavy Metals: Zinc (Zn)



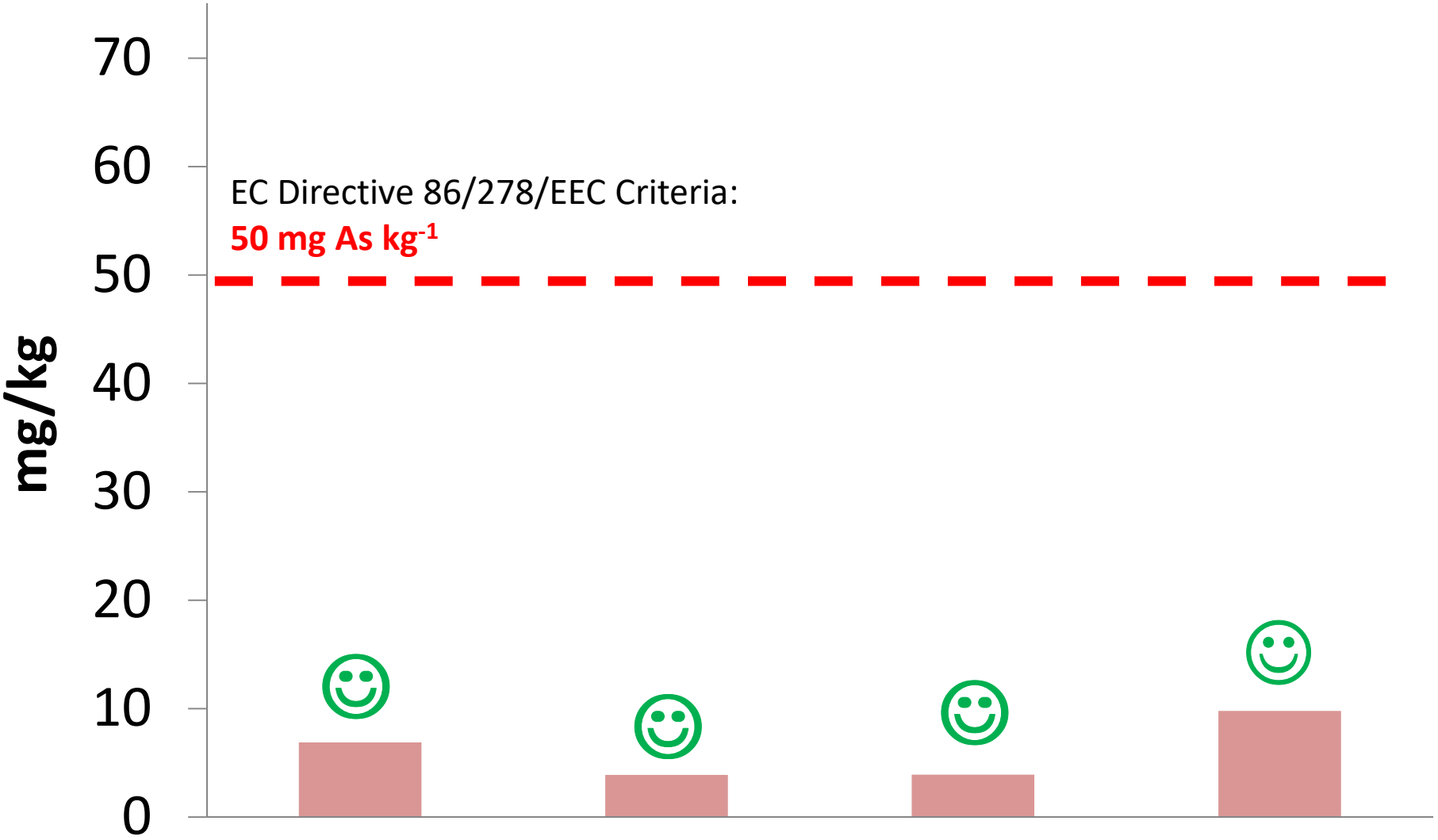

#5

# Testing for Heavy Metals: Copper (Cu)



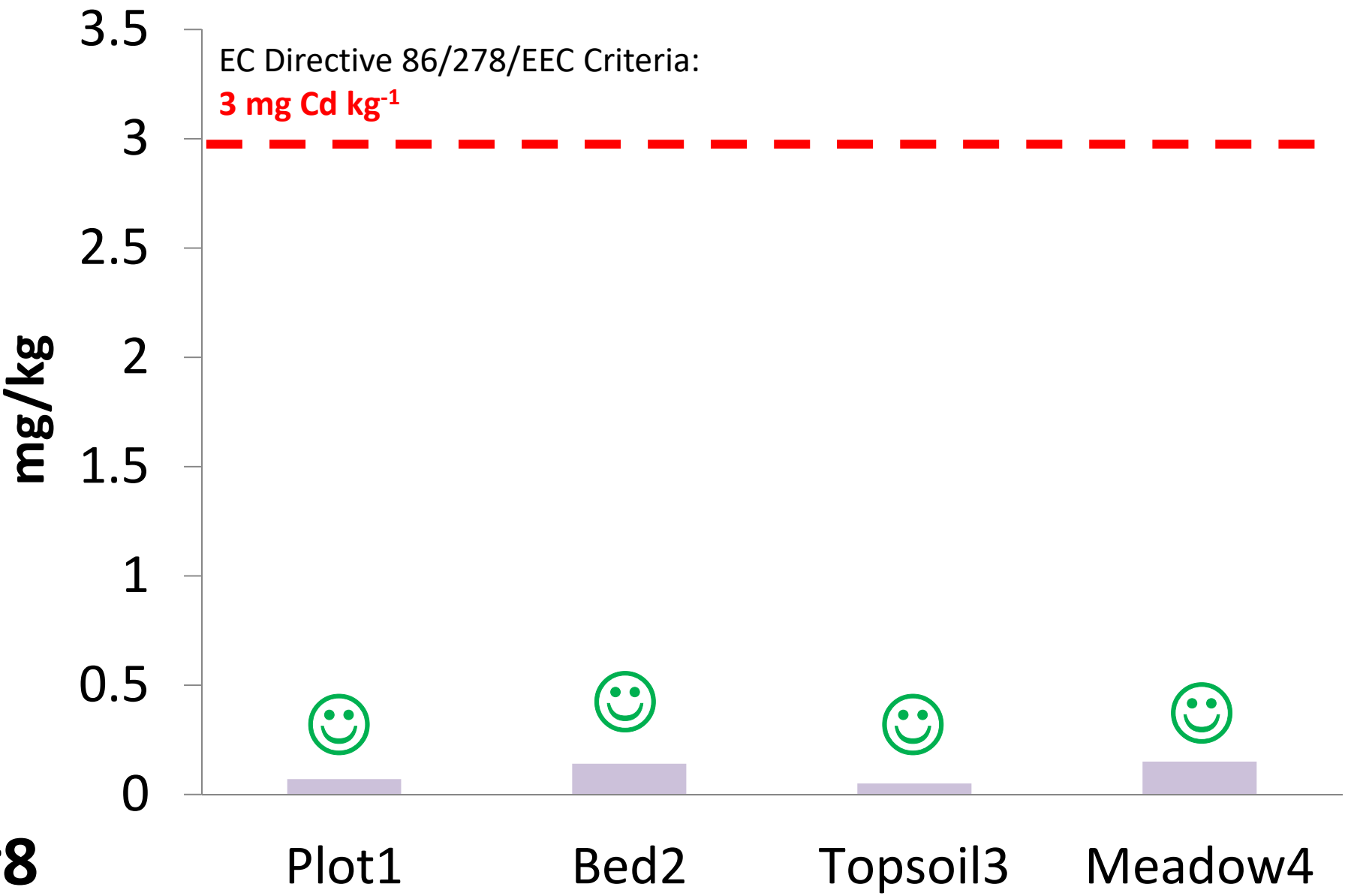

#6

# Testing for Heavy Metals: Arsenic (As)



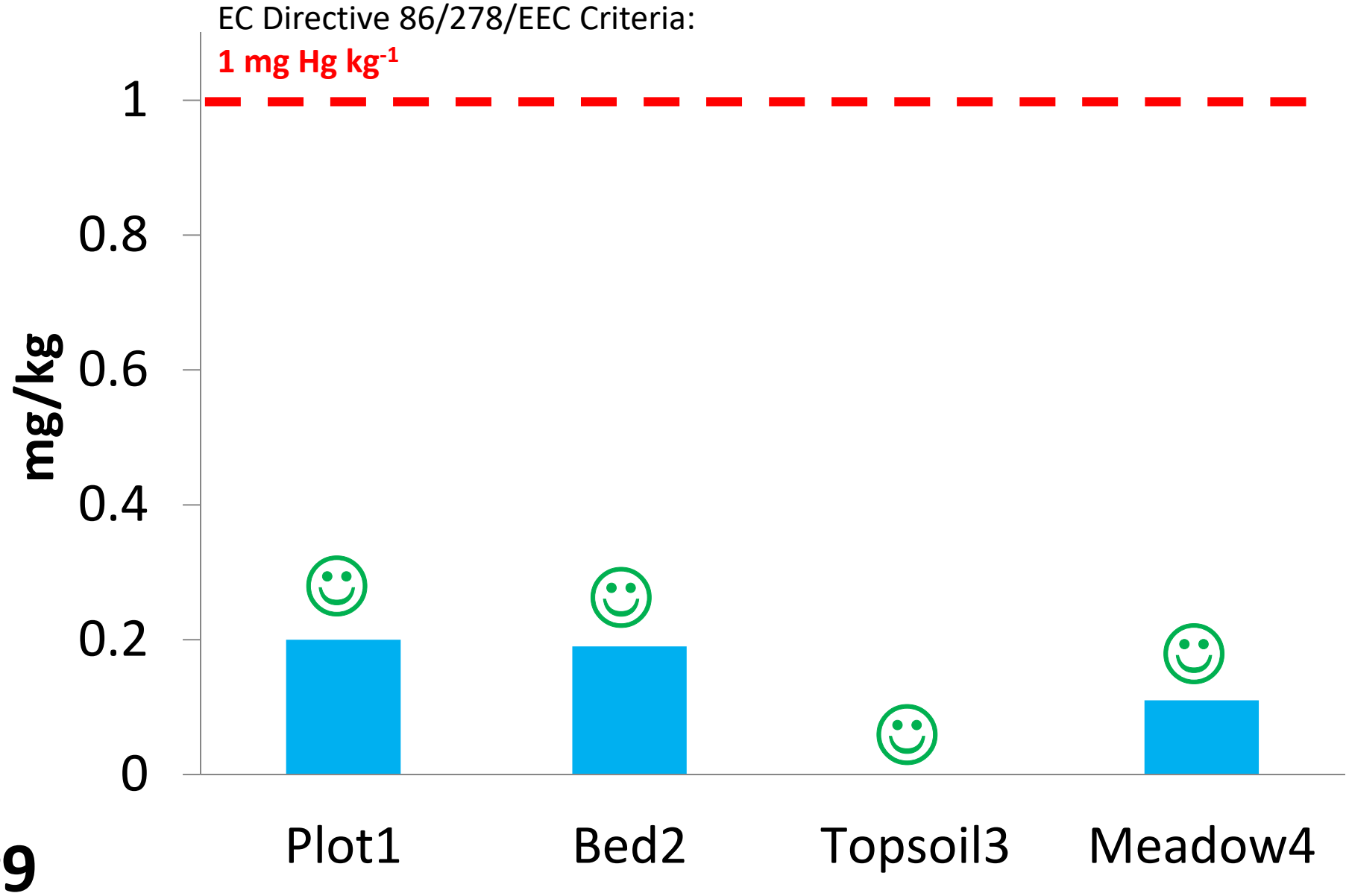

#7

# Testing for Heavy Metals: Cadmium (Cd)



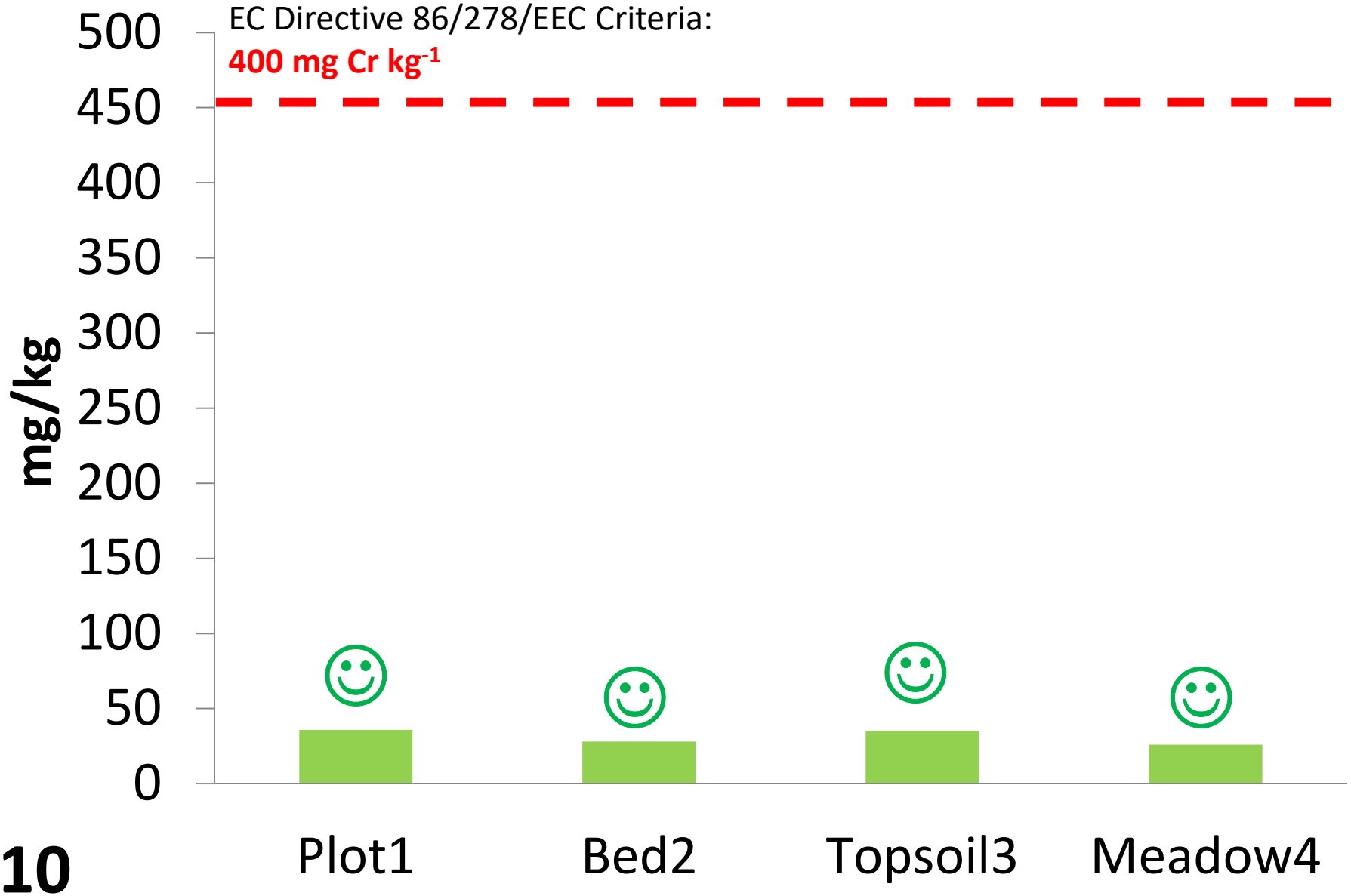

#8

# Testing for Heavy Metals: Mercury (Hg)




#9

# Testing for Heavy Metals: Chromium (Cr)




**#10**