

# PolySeed<sup>®</sup>

## Technical Report

### Low GGA

#### Question:

My GGA yields 150 – 170 mg/L what can I do to bring them in range?

#### Answer:

If your GGA's are in low, eliminate all possible problems by using the checklist below:

**Is the GGA fresh and of high quality?**

Always ensure that the GGA has not expired and has not been contaminated. Remember, exposure to air can biologically contaminate the GGA.

**Has your labware been properly cleaned?**

Always ensure your labware, including pipettes, tubing and air diffusers have been properly sanitized and stored in a dry cool place.

**Has your technique changed?**

Make sure your technique is proper and consistent, paying special attention to your pipetting technique.

**Have you checked the water quality?**

The DI/Distilled water pH should be between 6 – 7 with a conductivity of less than 2.0 micromhos. The BOD water pH should fall between 6.5 – 7.5 with a conductivity of 125 – 160 micromhos.

**Finally, have you reviewed and properly followed the current application procedures?**

A copy of these procedures is provided with each bottle of product and should be reviewed regularly for changes. These procedures can also be downloaded at [www.polyseed.com](http://www.polyseed.com).

If you have gone through the checklist and are still having issues with your GGA's, Standard Methods states that poor GGA test results often indicate an incorrect amount of seed is being used. You can try increasing the volume of seed used in the GGA bottles by 1-2mls. If that does not work, it might be an indication that the food-to-bacteria ratio is off in the GGA bottle. To elaborate, if you have too much bacteria (seed) and not enough food (GGA) for them to consume, you will yield low results. If you have too much food (GGA) and not enough bacteria (seed) to consume it, you will yield low results.

- If you are using the recommended volume of PolySeed (4ml) in the GGA bottles, have a strong seed control (above 8.0mg/L), but yielding low GGA values, this may be a good indication the food-to-bacteria ratio is off. Try reducing the volume of seed used in the GGA bottle by 1-2mls.
- If you are using the recommended volume of PolySeed (4ml) in the GGA bottles, have a seed control with at least .6 mg/L, but yielding low GGA values, decrease rehydration dilution water by 50-250mls.