Reduce Costs and Potentially Double Production of Astaxanthin in Algal Systems

Montana State University seeks partners to license and commercialize a process to induce greater Astaxanthin production in *Haematococcus pluvialis* algal systems.

**Description:**
Montana State University (MSU) researchers have developed a patented process to meter in bicarbonate to double the rate of Astaxanthin production in commercial algal systems.

**Benefits:**
- **Increased Production of Algae and Astaxanthin:** The researchers have demonstrated that a timely addition of bicarbonate can significantly increase the rate of Astaxanthin produced by *Haematococcus pluvialis* in an experimental system.
- **Potentially Double Production of Astaxanthin:** The experimental results indicate commercial algal systems could potentially double the rate of Astaxanthin produced.
- **Low Cost and Non-toxic Solution:** The MSU process uses NaHCO₃ (sodium bicarbonate, baking soda), a low cost, readily available, non-toxic chemical.
- **Diverse Applications:** Bicarbonate triggering can also be applied to the production of lipids as well as other carotenoids produced in algal systems.

**Opportunity:**
- Licensing of patented technology for enhancing growth of high value products from algal production system
- The research is ongoing at MSU and the engineering team is available for collaboration.
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