BIOREACTOR FOR GROWING BIOLOGICAL MATERIALS SUPPORTED ON A LIQUID SURFACE

ABSTRACT OF THE DISCLOSURE

A bioreactor assembly of the present invention for holding a media and supporting growth of a plurality of plants. The assembly includes a light source and a container having a light transmissive wall structure and defining a reservoir. A major axis of the reservoir is substantially horizontal allowing the reservoir to be filled with media to a partial level and to define a relatively large surface area for support of the plants. The assembly may also include clamps to secure and seal separate wall structure portions of the container together, and end caps to the wall portions, to define an aseptic environment. As another option, the clamps may define openings therethrough that allow passage of various devices for measuring and controlling bioreactor function such as a gas supply nozzle, a gas exit nozzle, an air temperature probe, a pH probe, a sampling drain, a gas composition probe and a media temperature probe.

Fig. 1