Anon: 1975. Approach to mechanization brings crop to the worker. *The Grower* 84(10):406-409.

Most economists now consider that labor costs are likely to be more critical factors in European greenhouse production in the long run than greatly increased fuel costs. There are several approaches to the industrialization of greenhouse crops. The NIAE gantry approach, and the IMAG idea of bringing the plants to the worker. Probably both ideas will prove complementary.

The special characteristic of most horticultural produce is that is is grown for an open market where there is a direct relationship between price and quality. The importance of high quality places a restriction on mechanization. The diversity of crops limit the application of universal machines. A range of specific machines must be designed for horticulture. Obviously mechanization requires high capital investment which can be justified if the equipment can be used efficiently. A highly mechanized plant production requires far-reaching adaptations of growing methods and crop varieties.

Outstanding examples of mechanization are mushroom growing, chicory forcing and bulb forcing. All three crops require very minimal amounts of light. With high light crops, industrialization becomes more complicated. Same is true for gall crops. Management training will have to go together with development of new techniques.

Uniformity is the main requirement for industrial production of all crops, especially in the harvesting stage. At present, once-over harvesting is a condition for efficient mechanization of the harvesting operation. A great deal of work must be done to achieve crop uniformity.

The greatest possibility for mechanization is in container-grown crops, or crops on pallets which can be moved to operators in a work room.

Special note: Another problem not mentioned in this article is the need for greater uniformity in structures. Engineering and design costs cannot be recovered if one must build a machine to fit each individual establishment. A cursory examination of greenhouses in Denver will show that no two places are identical. Mechanization will not occur until several growers decide that this is the route to go, and plan their structures accordingly. JJH