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A global quality index for Trichogramma

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Reliable supplies of superior quality *Trichogramma* spp. are required for their effective use in biological control programs. While research has been concentrated primarily on maximizing the yields from rearing facilities, both quality and quantity are crucial. Consequently, mass-rearing must be accompanied by the development of quality control methods. A quality index for mass reared *Trichogramma* has been developed that measures their overall vitality and productivity. It predicts their ability to perform the functions for which they are produced. This standardized assessment of *Trichogramma* is quick and reliable, and estimates generalized criteria for effectiveness in the field. The quality index provides a means of calculating release rates based on pest density, weather conditions, plant phenology, and application methods. It could be used as a global standard for mass-produced *Trichogramma*, particularly for those produced commercially. Ultimately, production, quality control and utilization technologies are interdependent and require interdisciplinary input, e.g., biology (behavior, physiology, ecology), industrial chemistry and engineering, and food processing technology. The goal is to optimize rearing systems designed for both high capacity and the production of high quality insects.