

Organic Coffee Production: Myth or Reality - a Review

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SUMMARY

Organic coffee is one of several types of speciality coffees selling at a premium over mainstream coffees because of distinct origin and flavour, environment-friendly production, or socio-economic concerns for the smallholder coffee growers. The demand for organic coffee (Western Europe, North America and Japan) exceeds the present supply, which is still small (< 1% of annual world production). More than 85% of organic coffees come from Latin America and practically all is (washed) arabica coffee. The production of certified organic coffee follows the principles of organic farming developed in Europe and the United States out of concern for the perceived negative effects of conventional high-input agriculture on health and environment. It claims superior ecological sustainability in combination with sound economic viability. A rather complex and expensive system of certification has to be passed before such coffees can be sold as truly organic. Growers adhering to the strict rules of organic coffee production may to some extent share the concern of the health- and environment-conscious consumers, but they are motivated primarily by the social and economic benefits from the premium received for certified organic coffee. Nevertheless, there appears to be considerable injustice between the extreme preconditions demanded for “organics” by the largely urban consumer of the industrialized world and the modest rewards received by the organic coffee growers for their strenuous efforts. From an agronomic point of view there is also considerable ground for criticism on the principles of organic farming when applied to coffee. For instance, to sustain economically viable yield levels (1 t green coffee/ha/year) large additional amounts of composted organic matter will have to come from external sources to meet nutrient requirements (especially N and K). Most smallholders will be unable to acquire such quantities and have to face declining yields. Organic farming does not necessarily reduce incidence of diseases and pests below economically harmful thresholds, while the humid conditions of heavily shaded coffee may actually stimulate the outbreak of others. These and other aspects peculiar to the preconditions of organic coffee production are addressed in this review. It is concluded that the concept of organic farming in its strict sense, when applied to coffee, is not sustainable and also not serving the interests of the producer and consumer as much as the proponents would like us to believe. On the other hand, ecologically and economically sustainable coffee production is possible by applying best practices of agronomy, crop protection and post-harvest processing.