Leaf responses of Aristotelia chilensis (Molina) stuntz (Elaeocarpaceae) to the fragmentation of the Maulino forest Respuestas foliares de Aristotelia chilensis (Molina) stuntz (Elaeocarpaceae) a la fragmentación del bosque maulino Repetto-Giavelli, Fiorella

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Fragmentation of the Maulino forest implies significant habitat loss, as well as the modification of the microclimatic conditions of the remaining forest patches. Fragments are drier, hotter and receive more light than the continuous forest. These changes might induce morphological, chemical and physiological responses on individuals inhabiting forest patches. This study aims to identify morpho and physiological changes in Aristotelia chilensis, an evergreen tree that grows both in forest fragments and continuous forest. Leaves were 1.2 times smaller in forest fragments than in the continuous forest. Similar reduction was observed on specific leaf area (SLA). In forest fragments, the thickness of epidermis and of the spongy mesophyll was more than 1.3 times larger than that on the continuous forest, whereas the thickness of the palisade mesophyll did not differ. The amount of foliar nitrogen was 1.2 times larger in the continuous forest than in fragments, whereas the carbon content did