A flower theorem in dimension two

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The local dynamics of a tangent to the identity biholomorphism in dimension one is described by Leau-Fatou flower theorem, that guarantees the existence of simply connected domains with 0 in the boundary, covering a punctured neighborhood of 0, in which the dynamics is either attracting or repelling and where the biholomorphism is conjugated to the unit translation. We present a two-dimensional version of this result, valid when the fixed point is a non-degenerate singular point. This is a joint work with Rudy Rosas.