Herbivore feeding elicits defence responses in infested plants, typically the emission of a blend of volatile organic compounds (VOCs) that mediates interactions with the parasites or enemies of the herbivore. The defense is initiated and controlled by a network of interacting plant hormones. The oxylipin jasmonic acid (JA) and its metabolites, collectively known as jasmonates, are important plant signaling molecules that mediate biotic and abiotic stress responses as well as aspects of growth and development. The conjugate of jasmonate and isoleucine is the major regulator which controls gene expression and production of secondary metabolites via the JAZ-proteins [1]. Coronalon, a synthetic 6-ethyl indanoyl isoleucine conjugate and related compounds are designed as a highly active and easily accessible mimics of JA-Ile [2]. When these compounds are tested in biological systems, some of them surpass the effect of the octadecanoid hormones. In addition, small changes in the structures of these compounds resulted in large differences in the particular defensive systems that were activated [3]. Indanoyl amino acid conjugates are also promising tools in photoaffinity or Click-chemistry approaches towards identification of their macromolecular targets. All active compounds demonstrated strong COI1-JAZ9 interactions in a Y2H assay.