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Abstract

In recent years, great concerns have been raised about salicylic acid (SA) and its derivatives as plant regulators. Therefore, precise determination of the distribution of SAs in the living plants is necessary for not only fundamental researches but also the regulating mechanisms. In this study, a custom-made solid phase microextraction (SPME) fiber based on diallyl dimethyl ammonium chloride-assembled graphene oxide-coated C18 composite (C18@GO@PDDA) was proposed for *in vivo* detection of salicylic acid, acetylsalicylic acid (ASA), 4-methyl salicylic acid (4-SA) and 3-methyl salicylic acid (3-SA) in aloe plants. Under the optimized conditions, the analytical performance evaluated in