

## GENETIC DIFFERENCE BETWEEN TWO PHENOTYPICALLY SIMILAR MEMBERS OF ASTERACEAE BY THE USE OF INTERGENIC SPACER ATPB

### ÃfÂçÃçÂ,Â-ÃçÂ€Âœ RBCL

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<b>Author Order</b>	of
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<b>Abstract</b>	<p>Two Asteraceae species, i.e. <i>Synedrella nodiflora</i> (L.) Gaertn and <i>Eleutheranthea ruderalis</i> (Swartz) Sch.-Bpi. are phenotypically similar with each other, although some differences in morphological and anatomical traits are apparently observable. Molecular comparison using particular marker is required to support a phenotype-based study that previously reported. Chloroplast DNA marker, . atpB ? rbcL IGS, was used to identify genetic difference between both species. Six samples of the respective species were collected randomly from some places in Banyumas Regency, Central Java, Indonesia. Amplification of the marker was performed employing a pair of universal primers. Sequence alignment on the PCR products showed that no difference in atpB ? rbcL IGS sequences, either within <i>S. nodiflora</i> or <i>E. ruderalis</i> samples was observed. On the other hands, several deletions and base substitution in both <i>S. nodiflora</i> and <i>E. ruderalis</i> were detected when alignment was made between both species. This result suggests that they reveal a convincing genetic difference. In spite of no direct correlation between this genetic and some visible phenotypic differences, this finding provides preliminary scientific background on the phenotypic traits of both species, which are often difficult to find at a rapid observation.</p>
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