

ABSTRAK

Penelitian ini bertujuan untuk membentuk fungsi diskriminan berdasar pada variabel karakteristik morfologi, sehingga diperoleh diskriminator terbaik untuk mengidentifikasi dan mendeterminasi individu dan menempatkan individu tersebut ke dalam kategori keturunan persilangan intraspesies atau merupakan keturunan hibrid dari *Eucalyptus urophylla* dan *Eucalyptus alba*.

Objek penelitian adalah individu-individu *E. urophylla*, *E. alba*, dan hibrid putatifnya yang tumbuh di dalam tegakan uji genetika *E. urophylla* di Wanagama. Hibridisasi alami antara *E. urophylla* dengan *E. alba* di duga terjadi di daerah tumpang tindih sebaran alami spesies ini. Pada daerah tumpang tindih sejumlah individu pohon sering menunjukkan karakteristik dalam kisaran karakteristik *E. urophylla* dan *E. alba*. Sampel penelitian hibrid putatif secara menyolok ditandai oleh karakteristik yang berbeda dari *E. urophylla*, yaitu karakter kulit batang, warna batang dan bentuk daun yang menyerupai *E. alba*.

Data yang dikumpulkan dianalisis dengan menggunakan analisis diskriminan multivariat yang dilakukan terhadap sejumlah karakteristik morfologi terukur. Hasil penelitian menunjukkan *E. urophylla*, *E. alba*, dan hibridnya dibedakan dengan baik berdasar pada tiga karakter morfologi berikut: Variabel nisbah panjang daun dikurangi akumen terhadap panjang daun, diameter buah, dan besar sudut antara ibu tulang daun dengan pertulangan lateral. Sebagian besar hibrid memiliki karakteristik mendekati karakteristik *E. alba*, sisanya bersifat "intermediate".

ABSTRACT

The purpose of this study was to develop discriminant functions based on morphological characteristics variables, so as to find the best discriminator to identify individuals and place them into categories of intraspecific crosses or hybrid offsprings between *Eucalyptus urophylla* and *Eucalyptus alba*.

The objects of study were individuals of *E. urophylla*, *E. alba*, and their putative hybrids which occurred in *E. urophylla* genetic trial stand at Wanagama. Natural hybridization involving *E. urophylla* and *E. alba* seems to occur at their overlapping nature distribution of these species. In this overlapping area a number of individual trees that have a characteristic in the range of *E. urophylla* and *E. alba* variations were often appeared. The samples of putative hybrids showed strikingly differences characteristic from *E. urophylla*, with regard to the characteristics of bark, stem colour, and leaf shape resembled *E. alba*.

The collected data were analyzed using multivariate discriminant analysis for a number of quantitative morphological characteristics. The result of this study showed that *E. urophylla*, *E. alba*, and their hybrid were best differentiated based upon the following three morphological traits : the ratio of leaf length minus acumen to leaf length, fruit diameter, and the angle of the lateral veins divergence from the midrib variables. The majority of hybrids possessed characteristics close to those of *E. alba*, the rest of individual hybrid was intermediate.