

ABSTRAK

ANALISIS RISIKO DAN USULAN PERBAIKAN ALAT PELINDUNG DIRI DENGAN PENDEKATAN ERGONOMI PARTISIPATORI PETANI NANAS DI KECAMATAN KARANGREJA, PURBALINGGA

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Petani nanas di Kecamatan Karangreja, Kabupaten Purbalingga, berisiko tinggi mengalami kecelakaan kerja akibat tertusuk duri nanas, terutama karena alat pelindung diri (APD) yang digunakan belum sesuai dengan kondisi kerja. Penelitian ini bertujuan untuk menganalisis keluhan dan penyebab kecelakaan kerja, serta menyusun usulan perbaikan APD yang relevan, nyaman, dan mudah diterapkan. Pengumpulan data dilakukan melalui observasi langsung, pengisian kuesioner *Nordic Body Map* (NBM) dan perilaku penggunaan APD oleh 93 responden, serta wawancara terhadap beberapa petani yang bersedia. Hasil menunjukkan bahwa sebagian besar petani mengalami cedera di bagian tangan, kaki, dan wajah karena tertusuk duri nanas, serta minimnya penggunaan APD akibat ketidaknyamanan desain dan material yang digunakan. Mayoritas responden berusia 41–50 tahun dengan pengalaman kerja lebih dari lima tahun. Berdasarkan analisis data dan partisipasi petani, disusun enam usulan perbaikan APD, yaitu: sarung tangan tahan duri dan lentur, sepatu boot ringan dan anti-selip, wearpack sejuk dan tahan sobek, masker ringan yang mudah bernapas, kacamata pelindung dari duri dan debu, serta topi leher panjang. Usulan ini diharapkan mampu meningkatkan perlindungan dan keselamatan kerja petani secara efektif.

Kata Kunci : Petani nanas, kecelakaan kerja, APD, REBA, NBM, ergonomi partisipatori.

ABSTRACT

RISK ANALYSIS AND PERSONAL PROTECTIVE EQUIPMENT IMPROVEMENT OF PINEAPPLE FARMERS USING PARTICIPATORY ERGONOMICS APPROACH IN KARANGREJA DISTRICT, PURBALINGGA

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Pineapple farmers in Karangreja Subdistrict, Purbalingga Regency, are at high risk of workplace accidents due to pineapple thorns, particularly because the personal protective equipment (PPE) used is not suitable for the working conditions. This study aims to analyze complaints and causes of workplace accidents, as well as propose improvements to PPE that are relevant, comfortable, and easy to implement. Data collection was conducted through direct observation, completion of the Nordic Body Map (NBM) questionnaire and PPE usage behavior by 93 respondents, as well as interviews with several farmers who were willing to participate. The results indicate that most farmers suffer injuries to their hands, feet, and faces due to pineapple thorns, and there is minimal use of PPE due to the discomfort caused by the design and materials used. The majority of respondents are aged 41–50 years with over five years of work experience. Based on data analysis and farmer participation, six recommendations for PPE improvements were developed: thorn-resistant and flexible gloves, lightweight and slip-resistant boots, cool and tear-resistant workwear, lightweight and breathable masks, protective goggles against thorns and dust, and long-neck hats. These recommendations are expected to effectively enhance farmers' protection and workplace safety.

Keywords : *Pineapple farmers, workplace accidents, PPE, REBA, NBM, participatory ergonomics.*