Mekanisme Air Purification untuk Kualitas Udara Ruang Dalam Primary Enclosure pada Companion Animal Boarding = Air Purification Mechanism for Indoor Air Quality on Primary Enclosure in the Companion Animal Boarding

; Anggi Sukma Dewi, author; Anggi Sukma Dewi, author

Abstrak

Memiliki hewan pendamping atau companion animal mengalami tren kenaikan pada setiap tahunnya. Selaras dengan hal tersebut maka terdapat potensi adanya permintaan yang tinggi terkait fasilitas untuk menunjang kebutuhan hewan pendamping. Salah satu dari fasilitas penunjang kebutuhan hewan yaitu animal boarding atau tempat penitipan. Terdapat potensi ancaman polutan pada fasilitas penunjang kesehatan hewan seperti patogen zoonosis, zat alergen, potensi meledaknya jumlah okupan sebagai penghasil polutan karbon dioksida (CO2), dan polutan dari gas amonia yang disebabkan oleh perilaku spraying dari companion animal. Di beberapa tempat, hampir setengah dari pekerja yang bekerja di fasilitas hewan telah dilaporkan mengalami gejala terkait alergi seperti rhinitis, konjungtivitis, asma, urtikaria kontak, dan jenis dermatitis alergi lainnya. Karena adanya potensi tercemarnya udara ruang dalam pada animal boarding dari polutan-polutan berbahaya, sistem penjernihan udara banyak diaplikasikan pada ruangan-ruangan yang rentan terhadap polutan di animal boarding. Dengan demikian, penelusuran mengenai mekanisme penjernihan udara pada animal boarding sangat menarik dilakukan.
.....Having a companion animal experiences an increasing trend every year. The number of pets worldwide has also been systematically increasing since 2010. Over the past 10 years, the pet population has grown. In line with this, it can be ensured that there is a high demand for facilities to support the well-being and health of companion animals. The presence of pollutants is one of the factors that affect Kualitas Udara Ruang Dalam. There is a potential threat of pollutants in animal facilities such as zoonotic pathogens , allergenic substances, the potential for an increase in occupant numbers leading to carbon dioxide (CO2) emissions, and pollutants from ammonia gas caused by spraying behavior from companion animals. In some places, almost half of the workers in animal facilities have reported allergy-related symptoms such as rhinitis, conjunctivitis, asthma, contact urticaria, and other types of allergic dermatitis. Due to the potential air contamination in animal boarding from harmful pollutants, air purification systems are widely applied in rooms susceptible to pollutants in animal boarding. Therefore, exploring the mechanisms of air purification in animal boarding is highly interesting to be conducted.