

## **BAB VI**

### **KESIMPULAN DAN SARAN**

#### **6.1. Kesimpulan**

1. Jenis pengemas yang berbeda tidak memberikan pengaruh pada perubahan *yield*, total fenol, total flavonoid, total antosianin serta kemampuan menangkal radikal bebas DPPH serta kemampuan mereduksi ion besi pada beras merah organik varietas Saodah. Namun memberikan pengaruh yang berbeda pada pengujian kadar air beras merah varietas Saodah.
2. Lama penyimpanan mempengaruhi perubahan *yield* beras organik merah dengan pengemas polipropilen yang meningkat hingga bulan ke-4 (11,86%), serta beras organik merah dengan pengemas polietilen (12,16%) hingga bulan ke-5, namun setelah itu mengalami penurunan.
3. Lama penyimpanan meningkatkan kadar total fenol dan total flavonoid beras organik merah dengan pengemas polipropilen hingga bulan ke-5 (21,49 mg EAG/g berat basis kering; 4,38 mg EK/g berat basis kering), namun pada kadar total antosianin cenderung mengalami penurunan hingga 0,0008 mg ekivalen sianidin-3-glikosida /g berat basis kering. Selain itu lama penyimpanan juga meningkatkan kadar total fenol beras dan total flavonoid organik merah dengan pengemas polietilen hingga bulan ke-4 (20,79 mg EAG/g berat basis kering; 4,55 mg EK/g berat basis kering serta menurunkan kadar antosianin hingga 0,0003 mg ekivalen sianidin-3-glikosida/g berat basis kering
4. Lama penyimpanan meningkatkan aktivitas antioksidan kemampuan mereduksi ion besi beras organik merah pengemas polipropilen serta polietilen hingga bulan ke-4 (39,53 mg EAG/g berat basis kering; 44,22 mg EAG/g berat basis kering), sedangkan kemampuan menangkal

radikal bebas DPPH pada beras merah dengan pengemas polipropilen mengalami penurunan pada bulan ke-4 hingga 1,13 mg EAG/g berat basis kering.

## **6.2. Saran**

1. Perlu dilakukan penelitian lebih lanjut mengenai penggunaan jenis kemasan laminasi yang berbeda dan teknik pengemasan secara vakum terhadap perubahan kadar senyawa bioaktif dan aktivitas antioksidan beras organik merah.
2. Perlu dilakukan penelitian lebih lanjut untuk mengidentifikasi senyawa fenolik yang terdegradasi selama penyimpanan beras organik merah.

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