

DAFTAR ISI

SKRIPSI	i
HALAMAN PENGESAHAN SKRIPSI	ii
SURAT PERNYATAAN	iii
HALAMAN PERSEMBAHAN	iv
PRAKATA	v
DAFTAR ISI	vi
DAFTAR TABEL	viii
DAFTAR GAMBAR	ix
DAFTAR LAMPIRAN	x
INTISARI	xi
ABSTRACT	xii
BAB I PENDAHULUAN	1
I.1 Latar Belakang	1
I.2 Tujuan Penelitian	3
I.3 Manfaat Penelitian	3
BAB II TINJAUAN PUSTAKA DAN PERUMUSAN HIPOTESIS	4
II.1 Tinjauan Pustaka	4
II.1.1 Selulosa daun nanas	4
II.1.2 Polietilenimina (PEI)	5
II.1.3 Glutaraldehyd	7
II.1.4 <i>Sunset yellow</i>	8
II.1.5 Adsorpsi	10
II.1.6 Isoterm adsorpsi	11
II.1.7 Kinetika adsorpsi	13
II.2 Perumusan Hipotesis	15
II.2.1 Perumusan hipotesis 1	15
II.2.2 Perumusan hipotesis 2	15
II.2.3 Perumusan hipotesis 3	16
II.2.4 Perumusan hipotesis 4	16
II.2.5 Rancangan penelitian	17
BAB III METODE PENELITIAN	18
III.1 Bahan Penelitian	18
III.2 Alat penelitian	18
III.3 Prosedur Penelitian	18
III.3.1 Isolasi selulosa dari daun nanas	18
III.3.2 Sintesis adsorben Sel-Gal-Pei	19
III.3.3 Penentuan variasi adsorben Sel-Gal-Pei terbaik	19
III.3.4 Penentuan kestabilan adsorben Sel-Gal-Pei	19
III.3.5 Penentuan <i>pH point zero charge</i> (pH_{pzc}) adsorben Sel-Gal-Pei	20
III.3.6 Penentuan pH optimum adsorpsi <i>sunset yellow</i>	20
III.3.7 Penentuan model isoterm adsorpsi <i>sunset yellow</i>	20
III.3.8 Penentuan model kinetika adsorpsi <i>sunset yellow</i>	21
III.3.9 Uji desorpsi <i>sunset yellow</i> dari adsorben Sel-Gal-Pei	21

BAB IV HASIL DAN PEMBAHASAN	22
IV.1 Isolasi Selulosa dari Daun Nanas	22
IV.2 Sintesis Adsorben Sel-Gal-Pei	23
IV.3 Karakterisasi Bahan Utama dan Adsorben Sel-Gal-Pei	26
IV.3.1 Karakterisasi FTIR	26
IV.3.2 Karakterisasi SEM-EDX	29
IV.3.3 Karakterisasi XRD	30
IV.4 Uji Stabilitas Adsorben Sel-Gal-Pei	31
IV.5 <i>Point Zero Charge</i> (pH_{pzc}) Adsorben Sel-Gal-Pei	32
IV.6 Studi Adsorpsi <i>Sunset Yellow</i> Menggunakan Adsorben Sel-Gal-Pei	33
IV.6.1 Penentuan pH optimum adsorpsi <i>sunset yellow</i>	33
IV.6.2 Penentuan isoterm adsorpsi <i>sunset yellow</i>	35
IV.6.3 Penentuan kinetika adsorpsi <i>sunset yellow</i>	38
IV.7 Karakterisasi Adsorben Sel-Gal-Pei Setelah Adsorpsi	40
IV.7.1 Karakterisasi FTIR	40
IV.7.2 Karakterisasi SEM-EDX	42
IV.8 Studi Desorpsi <i>Sunset Yellow</i> dari Adsorben Sel-Gal-Pei	43
BAB V KESIMPULAN DAN SARAN	45
V.1 Kesimpulan	45
V.2 Saran	45
DAFTAR PUSTAKA	46