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# Synthesis of 5-Arylisoxazole-3-carboxylates Derived from Salicylaldehyde

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**Abstract**—A procedure has been developed for the synthesis of 5-arylisoxazole-3-carboxylates on the basis of phenols and oximes derived from salicylaldehyde. Selective reduction of 4-(2-ethoxybenzylideneaminophenyl) 5-arylisoxazole-3-carboxylates afforded the corresponding amines.

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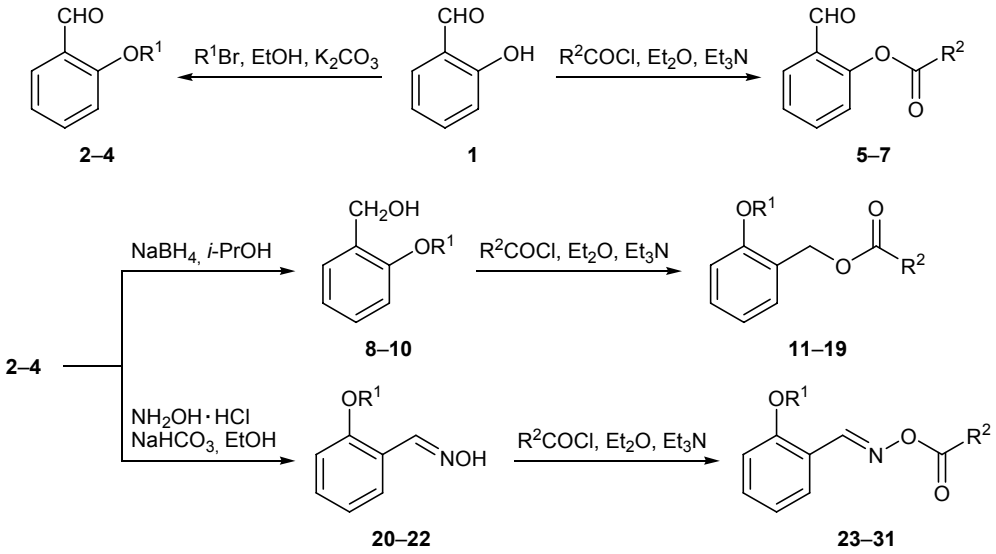
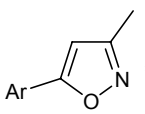
Like other isoxazole derivatives [1, 2], 5-arylisoxazole-3-carboxylic acid esters exhibit various kinds of biological activity, while natural alcohol and phenol fragments are capable of acting as vehicles for targeted delivery of pharmacophoric heterocyclic compounds [3–6].

In the present article we describe a procedure for the synthesis of 5-arylisoxazole-3-carboxylates **5**–**7**, **11**–**19**, **23**–**31**, and **33**–**38** from alcohols and phenols derived from salicylaldehyde (**1**). Salicylaldehyde (**1**) is a natural *o*-aldehydophenol occurring in essential oils of some spirea (*Spiraea ulmaria, Spiraea digitata*) and tobacco species *(Nicotiána solanaceae*); it is also used in perfumery and as fungicide [7, 8]. We believed it reasonable to synthesize compounds **5**–**7**, **11**–**19**, **23**–**31**, and **33**–**38** and test them for antitumor activity.

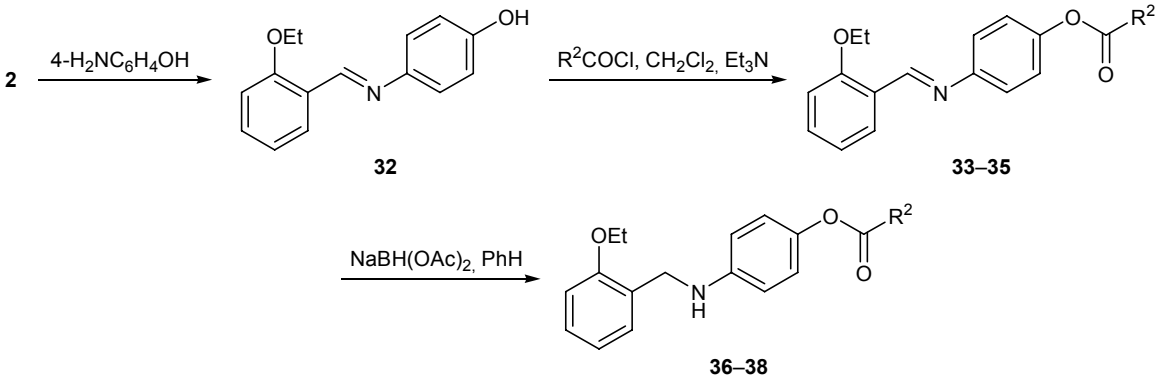
**Scheme 1.**

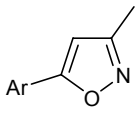



**2**, **8**, **11**, **14**, **17**, **20**, **23**, **26**, **29**, $R^1$ = Et; **3**, **9**, **12**, **15**, **18**, **21**, **24**, **27**, **30**, $R^1$ = Bu; **4**, **10**, **13**, **16**, **19**, **22**, **25**, **28**, **31**, $R^1$ = $PhCH_2$;

$R^2$ =  ; **5**, **11**–**13**, **23**–**25**, Ar = Ph; **6**, **14**–**16**, **26**–**28**, Ar = 4-$MeC_6H_4$; **7**, **17**–**19**, **29**–**31**, Ar = 2,5-$Me_2C_6H_3$.

**Scheme 2.**




$R^2$ =  ; **33**, **36**, Ar = Ph; **34**, **37**, 4-$MeC_6H_4$; **35**, **38**, Ar = 2,5-$Me_2C_6H_3$.

Esterification of salicylaldehyde (**1**) with 5-arylisoxazole-3-carbonyl chlorides in anhydrous diethyl ether in the presence of triethylamine gave esters **5**–**7** in 75–80% yield. Aldehyde **1** reacted with alkyl bromides or benzyl chloride in ethanol in the presence of potassium carbonate to form esters **2**–**4** which were reduced with $NaBH_4$ in isopropyl alcohol to alcohols **8**–**10**, and the latter were treated with 5-arylisoxazole-3-carbonyl chlorides to obtain esters **11**–**19** (yield 74–82%; Scheme 1). 2-Alkoxybenzaldehydes **2**–**4** reacted with hydroxylamine hydrochloride in ethanol in the presence of $NaHCO_3$ to produce the corresponding oximes **20**–**22** which were converted into oxime esters **23**–**31** (yield 72–78%) by the action of 5-arylisoxazole-3-carbonyl chlorides in anhydrous diethyl ether in the presence of triethylamine at 0°C [6].

By condensation of 2-ethoxyphenyl ester **2** with 4-aminophenol in anhydrous methanol we obtained known hydroxy-containing (*E*)-Schiff base **32** [6], and the subsequent mild esterification of **32** with 5-arylisoxazole-3-carbonyl chlorides in methylene chloride in the presence of triethylamine afforded 65–75% of esters **33**–**35**. Careful reduction of **33**–**35** with $NaBH(OAc)_3$ in anhydrous benzene gave 76–85% of benzylamino derivatives **36**–**38** in which the ester moiety remained intact (Scheme 2).

The structure of compounds **5**–**7**, **11**–**19**, **23**–**31**, and **33**–**38** was determined on the basis of their elemental compositions, IR and $^1H$ and $^{13}C$ NMR spectra, and GC/MS data. The electron-impact mass spectra of **5**–**7**, **11**–**19**, and **33**–**35** contained the molecular ion peaks and appropriate fragment ion peaks.

Some of the synthesized compounds are now being tested for neurotropic activity. It is believed that 5-arylisoxazole-3-carboxylates **4**–**6**, **10**–**18**, **22**–**33**, and **36**–**38** are capable of inhibiting synaptic transmission, which attracts strong interest from the viewpoint of development of antitumor agents for chemotherapy of brain tumors with concomitant ischemic processes.

## EXPERIMENTAL

The IR spectra were recorded from thin films or KBr pellets on a Nicolet Protégé-460 spectrometer with Fourier transform. The $^1H$ and $^{13}C$ NMR spectra were recorded on a Bruker Avance-500 spectrometer from solutions in $CDCl_3$ (**5**–**7**, **11**–**17**, **19**, **23**–**31**, **33**–**38**) and DMSO-$d_6$ (**18**); the chemical shifts were measured relative to the residual proton and carbon signals of the deuterated solvents. The mass spectra (electron impact, 70 eV) were obtained on a Hewlett Packard 5890/5972 GC/MS system (HP-5MS capillary column, 30 m × 0.25 mm, film thickness 0.25 μm; injector temperature 250°C).

Salicylaldehyde (**1**) was distilled prior to use (bp 197–198°C); its physicochemical constants, as well as those of ethers **2**–**4**, alcohols **8**–**10**, oximes **20**–**22**, and Schiff base **32**, were consistent with published data [6].

**Esters 5–7 and 11–19** ***(general procedure).*** Salicylaldehyde (**1**), 10 mmol, was dissolved in 50 mL of anhydrous diethyl ether, 11 mmol of the corresponding 5-arylisoxazole-3-carbonyl chloride and 11 mmol of anhydrous triethylamine were added, and the mixture was stirred for 5 h at 23°C. The precipitate of triethylamine hydrochloride was filtered off, the filtrate was evaporated to a volume of 10 mL, 20 mL of hexane was added to the residue, and the mixture was

cooled to −10°C. The precipitate was filtered off, washed with hexane, and dried under reduced pressure.

**2-Formylphenyl 5-phenyl-1,2-oxazole-3-carboxylate (5).** Yield 77%, mp 158–160°C. IR spectrum, ν, $cm^{-1}$: 3145, 3128, 3092, 3063, 3039, 3008, 2924, 2875 (C–H), 2774 (O=C–H), 1754 (C=O, ester), 1697 (CH=O), 1606, 1591, 1584, 1571, 1497, 1483, 1459, 1437, 1403 (C=C, C=N), 1236, 1129 (C–O–C). $^1$H NMR spectrum, δ, ppm: 7.08 s (1H, 4-H), 7.37 m (1H, $H_{arom}$), 7.49 m (4H, $H_{arom}$), 7.69 m (1H, $H_{arom}$), 7.83 m (2H, $H_{arom}$), 7.93 m (1H, $H_{arom}$), 10.18 s (1H, CHO). $^{13}$C NMR spectrum, $\delta_C$, ppm: 100.47 ($C^4$), 123.39 ($CH_{arom}$), 126.12 (2C, $CH_{arom}$), 127.29 ($CH_{arom}$), 129.33 (2C, $CH_{arom}$), 131.16 ($CH_{arom}$), 131.82 ($CH_{arom}$), 135.60 ($CH_{arom}$), 126.50, 127.94, 150.58, 156.10, 158.31, 172.46 (3-C=O), 188.58 (CHO). Mass spectrum: *m*/*z* 293 $[M]^+$. Found, %: C 69.54; H 3.82; N 4.48. $C_{17}H_{11}NO_4$. Calculated, %: C 69.62; H 3.78; N 4.78. M 293.27.

**2-Formylphenyl 5-(4-methylphenyl)-1,2-oxazole-3-carboxylate (6).** Yield 80%, mp 153–154°C. IR spectrum, ν, $cm^{-1}$: 3137, 3102, 3073, 3059, 3033, 3013, 2922, 2876 (C–H), 2772 (O=C–H), 1753 (C=O, ester), 1694 (CH=O), 1605, 1593, 1583, 1567, 1512, 1483, 1457, 1441, 1403 (C=C, C=N), 1237, 1114 (C–O–C). $^1$H NMR spectrum, δ, ppm: 2.42 s (3H, Me), 7.03 s (1H, 4-H), 7.31 d (2H, $H_{arom}$, $^3J$ = 8 Hz), 7.38 d (1H, $H_{arom}$, $^3J$ = 8 Hz), 7.48 t (1H, $H_{arom}$, $^3J$ = 7.6 Hz), 7.69 t (1H, $H_{arom}$, $^3J$ = 7.6 Hz), 7.73 d (2H, $H_{arom}$, $^3J$ = 8 Hz), 7.95 d (1H, $H_{arom}$, $^3J$ = 7.6 Hz), 10.19 s (1H, CHO). $^{13}$C NMR spectrum, $\delta_C$, ppm: 21.70 (Me), 99.88 ($C^4$), 123.42 ($CH_{arom}$), 126.09 (2C, $CH_{arom}$), 127.28 ($CH_{arom}$), 130.03 (2C, $CH_{arom}$), 131.70 ($CH_{arom}$), 135.61 ($CH_{arom}$), 123.84, 127.99, 141.66, 150.71, 156.04, 158.42, 172.71 (3-C=O), 188.55 (CHO). Mass spectrum: *m*/*z* 307 $[M]^+$. Found, %: C 70.02; H 4.25; N 4.17. $C_{18}H_{13}NO_4$. Calculated, %: C 70.35; H 4.26; N 4.56. M 307.30.

**2-Formylphenyl 5-(2,5-dimethylphenyl)-1,2-oxazole-3-carboxylate (7).** Yield 75%, mp 104–105°C. IR spectrum, ν, $cm^{-1}$: 3174, 3141, 3103, 3083, 3036, 2958, 2924, 2853 (C–H), 2766 (O=C–H), 1756 (C=O, ester), 1698 (CH=O), 1605, 1582, 1505, 1481, 1455, 1422, 1400 (C=C, C=N), 1232, 1150 (C–O–C). $^1$H NMR spectrum, δ, ppm: 2.39 s (3H, Me), 2.50 s (3H, Me), 6.99 s (1H, 4-H), 7.21 s (2H, $H_{arom}$), 7.39 d (1H, $H_{arom}$, $^3J$ = 8 Hz), 7.48 t (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 7.60 s (1H, $H_{arom}$), 7.71 t (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 7.95 d (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 10.20 s (1H, CHO). $^{13}$C NMR spectrum, $\delta_C$, ppm: 20.99 (Me), 21.10 (Me), 103.35 ($C^4$), 123.41 ($CH_{arom}$), 127.27 ($CH_{arom}$), 129.11 ($CH_{arom}$), 131.63 ($CH_{arom}$), 131.68 ($CH_{arom}$), 131.72 ($CH_{arom}$), 135.61 ($CH_{arom}$), 125.79, 127.99, 133.46, 136.20, 150.70, 155.74, 158.47, 172.69 (3-C=O), 188.54 (CH=O). Mass spectrum: *m*/*z* 321 $[M]^+$. Found, %: C 71.11; H 4.75; N 4.01. $C_{19}H_{15}NO_4$. Calculated, %: C 71.02; H 4.71; N 4.36. M 321.33.

**2-Ethoxybenzyl 5-phenyl-1,2-oxazole-3-carboxylate (11).** Yield 82%, mp 84–85°C. IR spectrum, ν, $cm^{-1}$: 3146, 3129, 3059, 3026, 2981, 2931, 2883 (C–H), 1731 (C=O), 1607, 1592, 1573, 1501, 1473, 1448 (C=C, C=N), 1246, 1148, 1124 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.41 t (3H, Me, $^3J$ = 7 Hz), 4.05 q (2H, $OCH_2$, $^3J$ = 7 Hz), 5.52 s ($C\mathbf{H}_2C_6H_4$), 6.88 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 6.92 s (1H, 4-H), 6.96 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.30 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.45 m (4H, $H_{arom}$), 7.78 m (2H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.83 (Me), 63.32 ($CH_2$), 63.70 ($CH_2$), 99.99 ($C^4$), 111.40 ($CH_{arom}$), 120.31 ($CH_{arom}$), 125.86 (2C, $CH_{arom}$), 129.11 (2C, $CH_{arom}$), 129.81 ($CH_{arom}$), 129.91 ($CH_{arom}$), 130.76 ($CH_{arom}$), 123.45, 126.59, 156.94, 157.00, 159.86, 171.61 (C=O). Mass spectrum: *m*/*z* 323 $[M]^+$. Found, %: C 70.77; H 5.42; N 3.97. $C_{19}H_{17}NO_4$. Calculated, %: C 70.58; H 5.30; N 4.33. M 323.34.

**2-Butoxybenzyl 5-phenyl-1,2-oxazole-3-carboxylate (12).** Yield 80%, mp 113–115°C. IR spectrum, ν, $cm^{-1}$: 3148, 3135, 3063, 3013, 2953, 2927, 2872 (C–H), 1726 (C=O), 1614, 1601, 1589, 1571, 1498, 1469, 1451, 1440, 1400 (C=C, C=N), 1246, 1148, 1112 (C–O–C). $^1$H NMR spectrum, δ, ppm: 0.96 t (3H, Me, $^3J$ = 7.4 Hz), 1.50 sext (2H, $C\mathbf{H}_2Me$, $^3J$ = 7.4 Hz), 1.78 q (2H, $OCH_2C\mathbf{H}_2$, $^3J$ = 7 Hz), 4.01 t (2H, $OCH_2$, $^3J$ = 6.4 Hz), 5.52 s ($C\mathbf{H}_2C_6H_4$), 6.90 d (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 6.92 s (1H, 4-H), 6.96 t (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 7.32 t (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 7.44 d (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 7.47 m (3H, $H_{arom}$), 7.79 m (2H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 13.92 (Me), 19.38 ($\mathbf{C}H_2Me$), 31.34 ($OCH_2\mathbf{C}H_2$), 63.46 ($OCH_2$), 67.86 ($OCH_2$), 100.04 ($C^4$), 111.40 ($CH_{arom}$), 120.32 ($CH_{arom}$), 125.95 (2C, $CH_{arom}$), 129.20 (2C, $CH_{arom}$), 130.00 ($CH_{arom}$), 130.01 ($CH_{arom}$), 130.88 ($CH_{arom}$), 123.38, 126.71, 157.00, 157.27, 159.96, 171.69 (C=O). Mass spectrum: *m*/*z* 351 $[M]^+$. Found, %: C 72.19; H 6.01; N 3.68. $C_{21}H_{21}NO_4$. Calculated, %: C 71.78; H 6.02; N 3.99. M 351.40.

**2-(Benzyloxy)benzyl 5-phenyl-1,2-oxazole-3-carboxylate (13).** Yield 81%, mp 88–90°C. IR spectrum, ν, $cm^{-1}$: 3151, 3135, 3059, 3029, 2985, 2931, 2883

(C–H), 1716 (C=O), 1604, 1590, 1583, 1491, 1462, 1443 (C=C, C=N), 1259, 1143, 1120 (C–O–C). $^1$H NMR spectrum, δ, ppm: 5.15 s (2H, PhC**H**$_2$O), 5.58 s ($C_6H_4C$**H**$_2$O), 6.91 s (1H, 4-H), 6.99 d (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 7.01 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.34 m (2H, $H_{arom}$), 7.38 t (2H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.48 m (6H, $H_{arom}$), 7.80 m (2H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 63.54 ($CH_2$), 70.09 ($CH_2$), 100.11 ($C^4$), 112.03 ($CH_{arom}$), 120.90 ($CH_{arom}$), 125.98 (2C, $CH_{arom}$), 127.30 (2C, $CH_{arom}$), 128.01 ($CH_{arom}$), 128.66 (2C, $CH_{arom}$), 129.22 (2C, $CH_{arom}$), 130.11 ($CH_{arom}$), 130.23 ($CH_{arom}$), 130.87 ($CH_{arom}$), 123.71, 126.71, 136.90, 156.87, 156.97, 160.00, 171.71 (C=O). Mass spectrum: *m*/*z* 385 $[M]^+$. Found, %: C 74.68; H 4.95; N 3.41. $C_{24}H_{19}NO_4$. Calculated, %: C 74.79; H 4.97; N 3.63. *M* 385.41.

**2-Ethoxybenzyl 5-(4-methylphenyl)-1,2-oxazole-3-carboxylate (14).** Yield 75%, mp 98–99°C. IR spectrum, ν, cm$^{-1}$: 3137, 3065, 3042, 3008, 2983, 2925, 2856 (C–H), 1732 (C=O), 1618, 1607, 1595, 1501, 1473, 1446 (C=C, C=N), 1251, 1148, 1124 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.42 t (3H, $CH_2$**Me**, $^3J$ = 7 Hz), 2.40 s (3H, Me), 4.07 q (2H, C**H**$_2$Me, $^3J$ = 7 Hz), 5.51 s ($C_6H_4C$**H**$_2$), 6.87 s (1H, 4-H), 6.89 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 6.96 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.27 d (2H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.31 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.44 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.68 d (2H, $H_{arom}$, $^3J$ = 8.1 Hz). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.92 ($CH_2$**Me**), 21.59 (Me), 63.36 ($CH_2$), 63.80 ($CH_2$), 99.47 ($C^4$), 111.48 ($CH_{arom}$), 120.39 ($CH_{arom}$), 125.91 (2C, $CH_{arom}$), 129.87 (3C, $CH_{arom}$), 129.95 ($CH_{arom}$), 123.49, 124.03, 141.26, 156.92, 157.09, 160.05, 171.92 (C=O). Mass spectrum: *m*/*z* 337 $[M]^+$. Found, %: C 71.20; H 5.69; N 3.78. $C_{20}H_{19}NO_4$. Calculated, %: C 71.20; H 5.68; N 4.15. *M* 337.37.

**2-Butoxybenzyl 5-(4-methylphenyl)-1,2-oxazole-3-carboxylate (15).** Yield 74%, mp 112–113°C. IR spectrum, ν, cm$^{-1}$: 3138, 3065, 3037, 3013, 2966, 2935, 2865 (C–H), 1723 (C=O), 1618, 1606, 1592, 1503, 1473, 1445, 1414 (C=C, C=N), 1253, 1146, 1123 (C–O–C). $^1$H NMR spectrum, δ, ppm: 0.97 t (3H, $CH_2$**Me**, $^3J$ = 7.4 Hz), 1.50 sext (2H, C**H**$_2$Me, $^3J$ = 7.4 Hz), 1.78 q (2H, $OCH_2C$**H**$_2$, $^3J$ = 7 Hz), 2.40 s (3H, Me), 4.00 t (2H, O**CH**$_2$CH$_2$, $^3J$ = 6.4 Hz), 5.51 s ($C_6H_4C$**H**$_2$), 6.87 s (1H, 4-H), 6.90 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 6.96 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.27 d (2H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.32 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.44 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.68 d (2H, $H_{arom}$, $^3J$ = 8.1 Hz). $^{13}$C NMR spectrum, $\delta_C$, ppm: 13.88 ($CH_2$**Me**), 19.35 (**C**H$_2$Me), 21.52 (Me), 31.31 ($OCH_2$**C**H$_2$), 63.35 ($CH_2$), 63.81 ($CH_2$), 99.40 ($C^4$), 111.35 ($CH_{arom}$), 120.28 ($CH_{arom}$), 125.84 (2C, $CH_{arom}$), 129.83 (2C, $CH_{arom}$), 129.91 ($CH_{arom}$), 129.95 ($CH_{arom}$), 123.38, 123.99, 141.20, 156.90, 157.21, 159.99, 171.85 (C=O). Mass spectrum: *m*/*z* 365 $[M]^+$. Found, %: C 72.71; H 6.35; N 3.49. $C_{22}H_{23}NO_4$. Calculated, %: C 72.31; H 6.34; N 3.83. *M* 365.42.

**2-(Benzyloxy)benzyl 5-(4-methylphenyl)-1,2-oxazole-3-carboxylate (16).** Yield 76%, mp 116–117°C. IR spectrum, ν, cm$^{-1}$: 3141, 3088, 3065, 3030, 2935, 2923, 2854 (C–H), 1726 (C=O), 1613, 1606, 1594, 1511, 1494, 1473, 1448, 1413 (C=C, C=N), 1252, 1147, 1112 (C–O–C). $^1$H NMR spectrum, δ, ppm: 2.42 s (3H, Me), 5.15 s (2H, PhC**H**$_2$O), 5.57 s (2H, $C_6H_4C$**H**$_2$O), 6.84 s (1H, 4-H), 6.98 d (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 7.01 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.29 d (2H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.33 m (2H, $H_{arom}$), 7.37 t (2H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.46 d (2H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.48 d (1H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.69 d (2H, $H_{arom}$, $^3J$ = 8.1 Hz). $^{13}$C NMR spectrum, $\delta_C$, ppm: 21.30 (Me), 63.48 ($CH_2$), 70.16 ($CH_2$), 99.52 ($C^4$), 112.10 ($CH_{arom}$), 120.94 ($CH_{arom}$), 125.95 (2C, $CH_{arom}$), 127.31 (2C, $CH_{arom}$), 128.01 ($CH_{arom}$), 128.67 (2C, $CH_{arom}$), 129.91 (2C, $CH_{arom}$), 130.08 ($CH_{arom}$), 130.22 ($CH_{arom}$), 123.84, 124.09, 136.95, 141.29, 156.90, 156.95, 160.09, 171.85 (C=O). Mass spectrum: *m*/*z* 399 $[M]^+$. Found, %: C 75.54; H 5.35; N 3.24. $C_{25}H_{21}NO_4$. Calculated, %: C 75.17; H 5.30; N 3.51. *M* 399.44.

**2-Ethoxybenzyl 5-(2,5-dimethylphenyl)-1,2-oxazole-3-carboxylate (17).** Yield 80%, mp 118–120°C. IR spectrum, ν, cm$^{-1}$: 3182, 3132, 3092, 3049, 3026, 2972, 2926, 2901, 2866 (C–H), 1736 (C=O), 1604, 1591, 1572, 1500, 1477, 1458 (C=C, C=N), 1250, 1156, 1119 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.43 t (3H, $CH_2$**Me**, $^3J$ = 7 Hz), 2.37 s (3H, Me), 2.46 s (3H, Me), 4.07 q (2H, C**H**$_2$Me, $^3J$ = 7 Hz), 5.53 s (2H, $CH_2O$), 6.83 s (1H, 4-H), 6.89 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 6.97 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.18 s (2H, $H_{arom}$), 7.31 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.45 d (1H$_{arom}$, $^3J$ = 8.1 Hz), 7.55 s (1H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.87 ($CH_2$**Me**), 20.86 (Me), 20.96 (Me), 63.32 ($CH_2$), 63.74 ($CH_2$), 102.90 ($C^4$), 111.43 ($CH_{arom}$), 120.34 ($CH_{arom}$), 128.90 ($CH_{arom}$), 129.87 ($CH_{arom}$), 129.91 ($CH_{arom}$), 131.37 ($CH_{arom}$), 131.45 ($CH_{arom}$), 123.41, 125.92, 133.23, 135.97, 156.61, 157.04, 160.10, 171.85 (C=O). Mass spectrum: *m*/*z* 351 $[M]^+$. Found, %: C 71.99; H 6.03;

N 3.64. $C_{21}H_{21}NO_4$. Calculated, %: C 71.78; H 6.02; N 3.99. *M* 351.40.

**2-Butoxybenzyl 5-(2,5-dimethylphenyl)-1,2-oxazole-3-carboxylate (18).** Yield 79%, mp 83–85°C. IR spectrum, ν, $cm^{-1}$: 3162, 3125, 3076, 3043, 3027, 2968, 2957, 2938, 2926, 2869 (C–H), 1738 (C=O), 1602, 1592, 1568, 1508, 1497, 1452 (C=C, C=N), 1246, 1157, 1109 (C–O–C). $^1$H NMR spectrum, δ, ppm: 0.85 t (3H, $CH_2$**Me**, $^3J$ = 7.4 Hz), 1.39 sext (2H, C**H**$_2$Me, $^3J$ = 7.4 Hz), 1.65 q (2H, $OCH_2C$**H**$_2$, $^3J$ = 6.9 Hz), 2.31 s (3H, Me), 2.40 s (3H, Me), 3.99 t (2H, OC**H**$_2$Me, $^3J$ = 6.3 Hz), 5.41 s ($C_6H_4C$**H**$_2$), 6.96 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.03 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.15 s (1H, 4-H), 7.23 d (1H, $H_{arom}$, $^3J$ = 7.9 Hz), 7.26 d (1H, $H_{arom}$, $^3J$ = 7.9 Hz), 7.35 t (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.43 d (1H, $H_{arom}$, $^3J$ = 8.1 Hz), 7.57 s (1H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.20 ($CH_2$**Me**), 19.35 (**C**$H_2$Me), 20.90 (Me), 20.97 (Me), 31.33 ($OCH_2$**C**$H_2$), 63.57 ($CH_2$), 67.94 ($CH_2$), 103.70 ($C^4$), 112.41 ($CH_{arom}$), 120.74 ($CH_{arom}$), 129.32 ($CH_{arom}$), 130.75 ($CH_{arom}$), 130.84 ($CH_{arom}$), 132.04 (2C, $CH_{arom}$), 123.54, 125.95, 133.59, 136.31, 156.92, 157.54, 159.91, 172.05 (C=O). Mass spectrum: *m*/*z* 379 $[M]^+$. Found, %: C 72.52; H 6.16; N 3.68. $C_{23}H_{25}NO_4$. Calculated, %: C 72.80; H 6.64; N 3.69. M 379.45.

**2-(Benzyloxy)benzyl 5-(2,5-dimethylphenyl)-1,2-oxazole-3-carboxylate (19).** Yield 78%, mp 63–64°C. IR spectrum, ν, $cm^{-1}$: 3153, 3062, 3049, 3033, 2954, 2923, 2853 (C–H), 1747 (C=O), 1604, 1591, 1579, 1557, 1496, 1452, 1425 (C=C, C=N), 1239, 1151, 1111 (C–O–C). $^1$H NMR spectrum, δ, ppm: 2.39 s (3H, Me), 2.47 s (3H, Me), 5.15 s (2H, PhC**H**$_2$O), 5.58 s ($C_6H_4C$**H**$_2$O), 6.81 s (1H, 4-H), 6.98 d (1H, $H_{arom}$, $^3J$ = 8.5 Hz), 7.01 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.20 s (2H, $H_{arom}$), 7.32 m (2H, $H_{arom}$), 7.37 t (2H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.47 d (2H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.49 d (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.56 s (1H, $H_{arom}$). $^{13}$C NMR spectrum, δ, ppm: 21.01 (Me), 21.10 (Me), 63.54 ($CH_2$), 70.17 ($CH_2$), 103.06 ($C^4$), 112.10 ($CH_{arom}$), 120.96 ($CH_{arom}$), 127.33 (2C, $CH_{arom}$), 128.05 ($CH_{arom}$), 128.71 (2C, $CH_{arom}$), 129.09 ($CH_{arom}$), 130.12 ($CH_{arom}$), 130.31 ($CH_{arom}$), 131.49 ($CH_{arom}$), 131.56 ($CH_{arom}$), 123.83, 126.09, 133.39, 136.12, 136.98, 156.69, 156.94, 160.25, 172.00 (C=O). Mass spectrum: *m*/*z* 413 $[M]^+$. Found, %: C 75.28; H 5.64; N 3.24. $C_{26}H_{23}NO_4$. Calculated, %: C 75.53; H 5.61; N 3.39. *M* 413.47.

**Oxime esters 23–31 (***general procedure***).** A solution of 11 mmol of 5-arylisoxazole-3-carbonyl chloride and 11 mmol of anhydrous triethylamine in 50 mL of anhydrous diethyl ether was cooled to –10°C, 10 mmol of oxime **20**–**22** was added under stirring, and the mixture was stirred for 5 h at –10°C. The precipitate of triethylamine hydrochloride was filtered off, the filtrate was evaporated under reduced pressure to a volume of 10 mL, 20 mL of hexane was added to the residue, and the mixture was cooled to –10°C. The precipitate was filtered off, washed with hexane, and dried under reduced pressure.

**(*E*)-2-Ethoxybenzaldehyde *O*-(5-phenyl-1,2-oxazole-3-carbonyl) oxime (23).** Yield 77%, mp 118–120°C. IR spectrum, ν, $cm^{-1}$: 3150, 3133, 3059, 3040, 2981, 2924, 2854 (C–H), 1763 (C=O), 1610, 1601, 1572, 1491, 1448, 1414 (C=C, C=N), 1260, 1225, 1116 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.46 t (3H, Me, $^3J$ = 6.9 Hz), 4.10 q (2H, $CH_2$, $^3J$ = 6.9 Hz), 6.93 d (1H, $H_{arom}$, $^3J$ = 8.3 Hz), 7.00 t (1H, $H_{arom}$, $^3J$ = 7.6 Hz), 7.07 s (1H, 4-H), 7.45 t (1H, $H_{arom}$, $^3J$ = 7.9 Hz), 7.51 m (3H, $H_{arom}$), 7.84 m (2H, $H_{arom}$), 8.05 d (1H, $H_{arom}$, $^3J$ = 7.8 Hz), 9.08 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.96 (Me), 64.29 ($CH_2$), 100.46 ($C^4$), 112.16 ($CH_{arom}$), 120.90 ($CH_{arom}$), 126.16 (2C, $CH_{arom}$), 127.85 ($CH_{arom}$), 129.36 (2C, $CH_{arom}$), 131.12 ($CH_{arom}$), 133.80 ($CH_{arom}$), 154.48 (N=CH), 118.11, 126.65, 155.96, 157.89, 158.39, 172.07 (C=O). Found, %: C 67.47; H 4.68; N 7.94. $C_{19}H_{16}N_2O_4$. Calculated, %: C 67.85; H 4.79; N 8.33.

**(*E*)-2-Butoxybenzaldehyde *O*-(5-phenyl-1,2-oxazole-3-carbonyl) oxime (24).** Yield 72%, mp 130–131°C. IR spectrum, ν, $cm^{-1}$: 3146, 3130, 3074, 3053, 2964, 2939, 2877 (C–H), 1752 (C=O), 1610, 1601, 1570, 1493, 1477, 1460, 1435 (C=C, C=N), 1260, 1223, 1124 (C–O–C). $^1$H NMR spectrum, δ, ppm: 0.99 t (3H, Me, $^3J$ = 7.4 Hz), 1.50 sext (2H, C**H**$_2$Me, $^3J$ = 7.4 Hz), 1.80 q (2H, $OCH_2C$**H**$_2$, $^3J$ = 7 Hz), 4.02 t (2H, OC**H**$_2$Me, $^3J$ = 6.4 Hz), 6.92 d (1H, $H_{arom}$, $^3J$ = 8.4 Hz), 6.98 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.05 s (1H, 4-H), 7.43 t (1H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.49 m (3H, $H_{arom}$), 7.83 m (2H, $H_{arom}$), 8.04 d (1H, $H_{arom}$, $^3J$ = 7.3 Hz), 9.04 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 13.96 ($CH_2$**Me**), 19.42 (**C**$H_2$Me), 31.28 ($OCH_2$**C**$H_2$), 68.35 ($OCH_2$), 100.41 ($C^4$), 112.11 ($CH_{arom}$), 120.77 ($CH_{arom}$), 126.09 (2C, $CH_{arom}$), 127.79 ($CH_{arom}$), 129.31 (2C, $CH_{arom}$), 131.07 ($CH_{arom}$), 133.76 ($CH_{arom}$), 154.28 (N=CH), 118.04, 126.56, 155.90, 157.83, 158.47, 172.00 (C=O). Found, %: C 69.01; H 5.44; N 7.29. $C_{21}H_{20}N_2O_4$. Calculated, %: C 69.22; H 5.53; N 7.69.

**(*E*)-2-(Benzyloxy)benzaldehyde *O*-(5-phenyl-1,2-oxazole-3-carbonyl) oxime (25).** Yield 76%,

mp 148–150°C. IR spectrum, ν, $cm^{-1}$: 3149, 3109, 3063, 3026, 3007, 2923, 2854 (C–H), 1751 (C=O), 1611, 1600, 1570, 1489, 1450, 1436 (C=C, C=N), 1239, 1215, 1114 (C–O–C). $^1$H NMR spectrum, δ, ppm: 5.13 s (PhC**H**$_2$), 7.02 m (2H, H$_{arom}$), 7.04 s (1H, 4-H), 7.37 m (1H, H$_{arom}$), 7.43 m (5H, H$_{arom}$), 7.49 m (3H, H$_{arom}$), 7.82 m (2H, H$_{arom}$), 8.08 d (1H, H$_{arom}$, $^3J$ = 7.6 Hz), 9.07 s (1H, N=CH). $^{13}$C NMR spectrum, δ$_C$, ppm: 70.63 (Ph**C**H$_2$), 100.35 (C$^4$), 112.62 (CH$_{arom}$), 121.28 (CH$_{arom}$), 126.06 (2C, CH$_{arom}$), 127.72 (2C, CH$_{arom}$), 128.01 (CH$_{arom}$), 128.42 (CH$_{arom}$), 128.86 (2C, CH$_{arom}$), 129.28 (2C, CH$_{arom}$), 131.04 (CH$_{arom}$), 133.75 (CH$_{arom}$), 154.20 (N=CH), 118.38, 126.53, 136.10, 155.80, 157.75, 158.01, 171.96 (C=O). Found, %: C 72.13; H 4.64; N 6.70. $C_{24}H_{18}N_2O_4$. Calculated, %: C 72.35; H 4.55; N 7.03.

**(*E*)-2-Ethoxybenzaldehyde *O*-[5-(4-methylphenyl)-1,2-oxazole-3-carbonyl] oxime (26).** Yield 78%, mp 145–147°C. IR spectrum, ν, $cm^{-1}$: 3135, 3073, 3043, 2980, 2923, 2857 (C–H), 1758 (C=O), 1610, 1599, 1573, 1510, 1493, 1483, 1451 (C=C, C=N), 1259, 1228, 1132 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.45 t (3H, CH$_2$**Me**, $^3J$ = 6.9 Hz), 2.41 s (3H, Me), 4.09 q (2H, C**H**$_2$Me, $^3J$ = 6.9 Hz), 6.92 d (1H, H$_{arom}$, $^3J$ = 7.5 Hz), 6.99 t (1H, H$_{arom}$, $^3J$ = 7.5 Hz), 7.00 s (1H, 4-H), 7.30 d (2H, H$_{arom}$, $^3J$ = 8 Hz), 7.44 t (1H, H$_{arom}$, $^3J$ = 7.5 Hz), 7.72 d (2H, H$_{arom}$, $^3J$ = 8 Hz), 8.05 d (1H, H$_{arom}$, $^3J$ = 7.5 Hz), 9.07 s (1H, N=CH). $^{13}$C NMR spectrum, δ$_C$, ppm: 14.94 (CH$_2$**Me**), 21.70 (Me), 64.27 (CH$_2$), 99.84 (C$^4$), 112.14 (CH$_{arom}$), 120.87 (CH$_{arom}$), 126.08 (2C, CH$_{arom}$), 127.82 (CH$_{arom}$), 130.01 (2C, CH$_{arom}$), 133.76 (CH$_{arom}$), 154.41 (N=CH), 118.12, 123.94, 141.55, 155.87, 157.94, 158.37, 172.25 (C=O). Found, %: C 68.26; H 5.25; N 7.64. $C_{20}H_{18}N_2O_4$. Calculated, %: C 68.56; H 5.18; N 8.00. *M* 350.37.

**(*E*)-2-Butoxybenzaldehyde *O*-[5-(4-methylphenyl)-1,2-oxazole-3-carbonyl] oxime (27).** Yield 75%, mp 96–97°C. IR spectrum, ν, $cm^{-1}$: 3137, 3075, 3034, 2960, 2931, 2872 (C–H), 1750 (C=O), 1613, 1599, 1507, 1491, 1445, 1410 (C=C, C=N), 1258, 1224, 1127 (C–O–C). $^1$H NMR spectrum, δ, ppm: 0.97 t (3H, CH$_2$**Me**, $^3J$ = 7.4 Hz), 1.50 sext (2H, C**H**$_2$Me, $^3J$ = 7.4 Hz), 1.79 q (2H, OCH$_2$C**H**$_2$, $^3J$ = 7 Hz), 2.41 s (3H, Me), 3.99 t (2H, OC**H**$_2$Me, $^3J$ = 6.4 Hz), 6.88 d (1H, H$_{arom}$, $^3J$ = 7.4 Hz), 6.98 t (1H, H$_{arom}$, $^3J$ = 7.5 Hz), 7.00 s (1H, 4-H), 7.29 d (2H, H$_{arom}$, $^3J$ = 8 Hz), 7.44 t (1H, H$_{arom}$, $^3J$ = 7.5 Hz), 7.71 d (2H, H$_{arom}$, $^3J$ = 8 Hz), 8.06 d (1H, H$_{arom}$, $^3J$ = 7.7 Hz), 9.04 s (1H, N=CH). $^{13}$C NMR spectrum, δ$_C$, ppm: 13.95 (CH$_2$**Me**), 19.41 (**C**H$_2$Me), 21.65 (Me), 31.33 (OCH$_2$**C**H$_2$), 68.18 (OCH$_2$), 99.81 (C$^4$), 112.11 (CH$_{arom}$), 120.66 (CH$_{arom}$), 126.02 (2C, CH$_{arom}$), 127.81 (CH$_{arom}$), 129.96 (2C, CH$_{arom}$), 133.73 (CH$_{arom}$), 154.26 (N=CH), 118.06, 123.86, 141.52, 155.81, 157.95, 158.47, 172.20 (C=O). Found, %: C 69.69; H 5.92; N 7.25. $C_{22}H_{22}N_2O_4$. Calculated, %: C 69.83; H 5.86; N 7.40.

**(*E*)-2-(Benzyloxy)benzaldehyde *O*-[5-(4-methylphenyl)-1,2-oxazole-3-carbonyl] oxime (28).** Yield 76%, mp 127–128°C. IR spectrum, ν, $cm^{-1}$: 3143, 3061, 3033, 2923, 2874, 2854 (C–H), 1755 (C=O), 1611, 1599, 1571, 1511, 1489, 1447, 1413 (C=C, C=N), 1247, 1222, 1105 (C–O–C). $^1$H NMR spectrum, δ, ppm: 2.41 s (3H, Me), 5.13 s (PhC**H**$_2$), 6.98 s (1H, 4-H), 7.02 m (2H, H$_{arom}$), 7.29 d (2H, H$_{arom}$, $^3J$ = 8 Hz), 7.36 m (1H, H$_{arom}$), 7.43 m (5H, H$_{arom}$), 7.71 d (2H, H$_{arom}$, $^3J$ = 8 Hz), 8.08 d (1H, H$_{arom}$, $^3J$ = 7.6 Hz), 9.07 s (1H, N=CH). $^{13}$C NMR spectrum, δ$_C$, ppm: 21.66 (Me), 70.65 (CH$_2$), 99.77 (C$^4$), 112.63 (CH$_{arom}$), 121.30 (CH$_{arom}$), 126.02 (2C, CH$_{arom}$), 127.74 (2C, CH$_{arom}$), 128.04 (CH$_{arom}$), 128.44 (CH$_{arom}$), 128.88 (2C, CH$_{arom}$), 129.97 (2C, CH$_{arom}$), 133.74 (CH$_{arom}$), 154.18 (N=CH), 118.44, 123.87, 136.13, 141.51, 155.75, 157.85, 158.03, 172.19 (C=O). Found, %: C 72.56; H 4.92; N 6.55. $C_{25}H_{20}N_2O_4$. Calculated, %: C 72.80; H 4.89; N 6.79.

**(*E*)-2-Ethoxybenzaldehyde *O*-[5-(2,5-dimethylphenyl)-1,2-oxazole-3-carbonyl] oxime (29).** Yield 73%, mp 128–130°C. IR spectrum, ν, $cm^{-1}$: 3168, 3143, 3088, 3043, 3022, 2981, 2928, 2897, 2867 (C–H), 1752 (C=O), 1610, 1597, 1585, 1501, 1492, 1453 (C=C, C=N), 1256, 1222, 1147 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.44 t (3H, CH$_2$**Me**, $^3J$ = 6.9 Hz), 2.37 s (3H, Me), 2.48 s (3H, Me), 4.08 q (2H, C**H**$_2$Me, $^3J$ = 6.9 Hz), 6.89 d (1H, H$_{arom}$, $^3J$ = 8.4 Hz), 6.94 s (1H, 4-H), 6.98 t (1H, H$_{arom}$, $^3J$ = 7.4 Hz), 7.19 s (2H, H$_{arom}$), 7.43 t (1H, H$_{arom}$, $^3J$ = 7.8 Hz), 7.57 s (1H, H$_{arom}$), 8.04 d (1H, H$_{arom}$, $^3J$ = 7.6 Hz), 9.06 s (1H, N=CH). $^{13}$C NMR spectrum, δ$_C$, ppm: 14.86 (CH$_2$**Me**), 20.94 (Me), 21.07 (Me), 64.19 (CH$_2$), 103.20 (C$^4$), 112.08 (CH$_{arom}$), 120.78 (CH$_{arom}$), 127.72 (CH$_{arom}$), 129.00 (CH$_{arom}$), 131.57 (CH$_{arom}$), 131.59 (CH$_{arom}$), 133.71 (CH$_{arom}$), 154.31 (N=CH), 118.01, 125.79, 133.38, 136.10, 155.50, 157.90, 158.29, 172.16 (C=O). Found, %: C 69.10; H 5.59; N 7.33. $C_{21}H_{20}N_2O_4$. Calculated, %: C 69.22; H 5.53; N 7.69.

**(*E*)-2-Butoxybenzaldehyde *O*-[5-(2,5-dimethylphenyl)-1,2-oxazole-3-carbonyl] oxime (30).** Yield 76%, mp 90–92°C. IR spectrum, ν, $cm^{-1}$: 3176, 3132, 3074,

3032, 3002, 2959, 2933, 2871 (C–H), 1755 (C=O), 1610, 1599, 1571, 1505, 1491, 1454 (C=C, C=N), 1255, 1222, 1146 (C–O–C). $^1$H NMR spectrum, δ, ppm: 0.99 t (3H, $CH_2$**Me**, $^3J$ = 7.4 Hz), 1.50 sext (2H, C**H**$_2$Me, $^3J$ = 7.4 Hz), 1.80 q (2H, $OCH_2$C**H**$_2$, $^3J$ = 7 Hz), 2.37 s (3H, Me), 2.48 s (3H, Me), 4.02 t (2H, OC**H**$_2$Me, $^3J$ = 6.4 Hz), 6.92 d (1H, $H_{arom}$, $^3J$ = 8.4 Hz), 6.95 s (1H, 4-H), 6.98 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.19 s (2H, $H_{arom}$), 7.43 t (1H, $H_{arom}$, $^3J$ = 7.9 Hz), 7.57 s (1H, $H_{arom}$), 8.05 d (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 9.06 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 13.93 ($CH_2$**Me**), 19.40 (**C**$H_2$Me), 20.96 (Me), 21.08 (Me), 31.26 ($OCH_2$**C**$H_2$), 68.33 ($OCH_2$), 103.25 ($C^4$), 112.09 ($CH_{arom}$), 120.74 ($CH_{arom}$), 127.77 ($CH_{arom}$), 129.02 ($CH_{arom}$), 131.58 ($CH_{arom}$), 131.60 ($CH_{arom}$), 133.72 ($CH_{arom}$), 154.22 (N=CH), 118.03, 125.80, 133.40, 136.12, 155.52, 157.96, 158.44, 172.18 (C=O). Found, %: C 69.98; H 6.07; N 6.75. $C_{23}H_{24}N_2O_4$. Calculated, %: C 70.39; H 6.16; N 7.14.

**(*E*)-2-(Benzyloxy)benzaldehyde *O*-[5-(2,5-dimethylphenyl)-1,2-oxazole-3-carbonyl] oxime (31).** Yield 77%, mp 103–105°C. IR spectrum, ν, cm$^{-1}$: 3180, 3140, 3076, 3058, 3033, 2956, 2920, 2865, 2854 (C–H), 1751 (C=O), 1610, 1599, 1574, 1496, 1490, 1448 (C=C, C=N), 1256, 1225, 1107 (C–O–C). $^1$H NMR spectrum, δ, ppm: 2.38 s (3H, Me), 2.49 s (3H, Me), 5.13 s (2H, PhC**H**$_2$), 6.94 s (1H, 4-H), 7.03 m (2H, $H_{arom}$), 7.21 s (2H, $H_{arom}$), 7.37 m (1H, $H_{arom}$), 7.44 m (5H, $H_{arom}$), 7.58 s (1H, $H_{arom}$), 8.09 d (1H, $H_{arom}$, $^3J$ = 7.6 Hz), 9.09 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 20.95 (Me), 21.09 (Me), 70.60 (Ph**C**$H_2$), 103.19 ($C^4$), 112.59 ($CH_{arom}$), 121.26 ($CH_{arom}$), 127.70 (2C, $CH_{arom}$), 128.00 ($CH_{arom}$), 128.41 ($CH_{arom}$), 128.84 (2C, $CH_{arom}$), 129.01 ($CH_{arom}$), 131.57 (2C, $CH_{arom}$), 133.72 ($CH_{arom}$), 154.16 (N=CH), 118.38, 125.78, 133.38, 136.08, 136.10, 155.44, 157.88, 157.99, 172.13 (C=O). Found, %: C 73.19; H 5.21; N 6.22. $C_{26}H_{22}N_2O_4$. Calculated, %: C 73.23; H 5.20; N 6.57.

**Schiff base esters 33–35 (*general procedure*).** Schiff base **32** was added to a solution of 2 mmol of 5-aryl-1,2-oxazole-3-carbonyl chloride and 2.1 mmol of anhydrous triethylamine in 25 mL of anhydrous methylene chloride, and the mixture was stirred for 3 h at 30°C. The mixture was washed with water (3×50 mL), the organic layer was separated and dried over sodium sulfate, the solvent was distilled off under reduced pressure, and 10 mL of anhydrous methanol was added to the residue. The precipitate was filtered off, washed with cold methanol, and dried under reduced pressure.

**(*E*)-4-[(2-Ethoxybenzylidene)amino]phenyl 5-phenyl-1,2-oxazole-3-carboxylate (33).** Yield 83%, mp 139–140°C. IR spectrum, ν, cm$^{-1}$: 3143, 3127, 3076, 3063, 3050, 3038, 2988, 2934, 2888, 2854 (C–H), 1750 (C=O), 1621, 1603, 1590, 1570, 1501, 1491, 1477, 1459, 1447, 1437 (C=C, C=N), 1242, 1182, 1123 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.46 t (3H, Me, $^3J$ = 7 Hz), 4.12 q (2H, $OCH_2$, $^3J$ = 7 Hz), 6.94 d (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 7.03 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.07 s (1H, 4-H), 7.29 m (4H, $H_{arom}$), 7.43 t (1H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.50 m (3H, $H_{arom}$), 7.85 m (2H, $H_{arom}$), 8.16 d (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 8.96 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.93 (Me), 64.12 ($OCH_2$), 100.40 ($C^4$), 112.17 ($CH_{arom}$), 120.83 ($CH_{arom}$), 122.06 (2C, $CH_{arom}$), 122.23 (2C, $CH_{arom}$), 126.09 (2C, $CH_{arom}$), 127.61 ($CH_{arom}$), 129.32 (2C, $CH_{arom}$), 131.09 ($CH_{arom}$), 133.02 ($CH_{arom}$), 157.30 (N=CH), 124.64, 126.57, 147.94, 151.27, 156.61, 158.73, 159.15, 172.24 (C=O). Found, %: C 72.94; H 4.80; N 6.62. Mass spectrum: *m*/*z* 412 $[M]^+$. $C_{25}H_{20}N_2O_4$. Calculated, %: C 72.80; H 4.89; N 6.79. *M* 412.44.

**(*E*)-4-[(2-Ethoxybenzylidene)amino]phenyl 5-(4-methylphenyl)-1,2-oxazole-3-carboxylate (34).** Yield 86%, mp 140–141°C. IR spectrum, ν, cm$^{-1}$: 3136, 3100, 3055, 3040, 2983, 2921, 2897, 2854 (C–H), 1753 (C=O), 1615, 1600, 1587, 1575, 1501, 1487, 1473, 1446, 1411 (C=C, C=N), 1220, 1183, 1100 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.46 t (3H, $CH_2$**Me**, $^3J$ = 6.9 Hz), 2.42 s (3H, Me), 4.12 q (2H, $CH_2$, $^3J$ = 6.9 Hz), 6.94 d (1H, $H_{arom}$, $^3J$ = 8.3 Hz), 7.01 s (1H, 4-H), 7.03 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.29 m (6H, $H_{arom}$), 7.43 t (1H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.73 d (2H, $H_{arom}$, $^3J$ = 7.7 Hz), 8.15 d (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 8.96 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.93 ($CH_2$**Me**), 21.67 (Me), 64.12 ($CH_2$), 99.80 ($C^4$), 112.17 ($CH_{arom}$), 120.83 ($CH_{arom}$), 122.07 (2C, $CH_{arom}$), 122.23 (2C, $CH_{arom}$), 126.03 (2C, $CH_{arom}$), 127.61 ($CH_{arom}$), 129.99 (2C, $CH_{arom}$), 133.02 ($CH_{arom}$), 157.31 (N=CH), 123.89, 124.64, 141.55, 147.97, 151.24, 156.55, 158.81, 159.15, 172.45 (C=O). Mass spectrum: *m*/*z* 426 $[M]^+$. Found, %: C 73.28; H 5.40; N 6.41. $C_{26}H_{22}N_2O_4$. Calculated, %: C 73.23; H 5.20; N 6.57. *M* 426.46.

**(*E*)-4-[(2-Ethoxybenzylidene)amino]phenyl 5-(2,5-dimethylphenyl)-1,2-oxazole-3-carboxylate (35).** Yield 78%, mp 91–92°C. IR spectrum, ν, cm$^{-1}$: 3195, 3072, 3038, 2976, 2923, 2854 (C–H), 1746 (C=O), 1619, 1602, 1593, 1578, 1501, 1488, 1462 (C=C, C=N), 1227, 1183, 1103 (C–O–C). $^1$H NMR

spectrum, δ, ppm: 1.47 t (3H, $CH_2$**Me**, $^3J$ = 7 Hz), 2.40 s (3H, Me), 2.52 s (3H, Me), 4.13 q (2H, $CH_2$, $^3J$ = 7 Hz), 6.95 d (1H, $H_{arom}$, $^3J$ = 8.3 Hz), 6.97 s (1H, 4-H), 7.03 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.22 s (2H, $H_{arom}$), 7.30 m (4H, $H_{arom}$), 7.43 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.61 s (1H, $H_{arom}$), 8.15 d (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 8.96 s (1H, N=CH). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.97 ($CH_2$**Me**), 21.02 (Me), 21.13 (Me), 64.15 ($CH_2$), 103.32 ($C^4$), 112.19 ($CH_{arom}$), 120.86 ($CH_{arom}$), 122.09 (2C, $CH_{arom}$), 122.26 (2C, $CH_{arom}$), 127.64 ($CH_{arom}$), 129.10 ($CH_{arom}$), 131.63 ($CH_{arom}$), 131.67 ($CH_{arom}$), 133.03 ($CH_{arom}$), 157.33 (N=CH), 124.68, 125.90, 133.44, 136.20, 147.99, 151.28, 156.29, 158.91, 159.17, 172.47 (C=O). Mass spectrum: *m*/*z* 440 $[M]^+$. Found, %: C 73.77; H 5.52; N 6.29. $C_{27}H_{24}N_2O_4$. Calculated, %: C 73.62; H 5.49; N 6.36. *M* 440.49.

**Reduction of Schiff base esters 33–35 (***general procedure***).** Glacial acetic acid, 0.5 mL (9 mmol), was added dropwise to a suspension of 0.12 g (3 mmol) of sodium tetrahydridoborate in 40 mL of anhydrous benzene, the mixture was stirred for 20 min, and 1.5 mmol of ester **33**–**35** was added. The mixture was stirred for 4 h at 20°C, treated with 50 mL of water, and stirred for 20 min, and the organic phase was separated, washed with 50 mL of water, and dried over sodium sulfate. The solvent was distilled off under reduced pressure, 10 mL of anhydrous methanol was added to the residue, and the precipitate was filtered off, washed with cold methanol, and dried under reduced pressure.

**4-[(2-Ethoxybenzyl)amino]phenyl 5-phenyl-1,2-oxazole-3-carboxylate (36).** Yield 88%, mp 144–145°C. IR spectrum, ν, $cm^{-1}$: 3419 (NH), 3161, 3148, 3134, 3064, 3034, 2984, 2920, 2867 (C–H), 1740 (C=O), 1611, 1599, 1590, 1573, 1523, 1492, 1473, 1453, 1447, 1439 (C=C, C=N), 1236, 1191, 1124 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.46 t (3H, Me, $^3J$ = 7 Hz), 4.10 q (2H, C**H**$_2$Me, $^3J$ = 7 Hz), 4.37 s (2H, $CH_2N$), 6.69 d (2H, $H_{arom}$, $^3J$ = 8.9 Hz), 6.91 d (1H, $H_{arom}$, $^3J$ = 8.2 Hz), 6.94 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 7.04 s (1H, 4-H), 7.08 d (2H, $H_{arom}$, $^3J$ = 8.9 Hz), 7.25 t (1H, $H_{arom}$, $^3J$ = 7.7 Hz), 7.33 d (1H, $H_{arom}$, $^3J$ = 7.3 Hz), 7.38 s (1H, NH), 7.51 m (3H, $H_{arom}$), 7.85 m (2H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 15.08 (Me), 43.93 ($CH_2N$), 63.61 (**C**$H_2$Me), 100.39 ($C^4$), 111.29 ($CH_{arom}$), 113.44 (2C, $CH_{arom}$), 120.50 ($CH_{arom}$), 121.93 (2C, $CH_{arom}$), 126.06 (2C, $CH_{arom}$), 128.45 ($CH_{arom}$), 128.97 ($CH_{arom}$), 129.28 (2C, $CH_{arom}$), 130.99 ($CH_{arom}$), 126.66, 127.18, 141.37, 146.99, 156.85 (2C), 159.18, 172.03 (C=O). Found, %: C 72.58; H 5.47; N 6.68. $C_{25}H_{22}N_2O_4$. Calculated, %: C 72.45; H 5.35; N 6.76.

**4-[(2-Ethoxybenzyl)amino]phenyl 5-(4-methylphenyl)-1,2-oxazole-3-carboxylate (37).** Yield 94%, mp 125–126°C. IR spectrum, ν, $cm^{-1}$: 3402 (NH), 3133, 3063, 3041, 2979, 2926, 2868 (C–H), 1743 (C=O), 1606, 1593, 1518, 1498, 1473, 1453, 1440, 1409 (C=C, C=N), 1244, 1192, 1110 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.45 t (3H, $CH_2$**Me**, $^3J$ = 6.9 Hz), 2.43 s (3H, Me), 4.09 q (2H, C**H**$_2$Me, $^3J$ = 6.9 Hz), 4.37 s (2H, $CH_2N$), 6.68 d (2H, $H_{arom}$, $^3J$ = 8.4 Hz), 6.91 m (2H, $H_{arom}$), 6.98 s (1H, 4-H), 7.07 d (2H, $H_{arom}$, $^3J$ = 8.4 Hz), 7.25 t (1H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.32 m (4H, $H_{arom}$, NH), 7.73 d (2H, $H_{arom}$, $^3J$ = 8.5 Hz). $^{13}$C NMR spectrum, $\delta_C$, ppm: 15.08 ($CH_2$**Me**), 21.65 (Me), 43.95 ($CH_2N$), 63.62 (**C**$H_2$Me), 99.80 ($C^4$), 111.30 ($CH_{arom}$), 113.44 (2C, $CH_{arom}$), 120.51 ($CH_{arom}$), 121.95 (2C, $CH_{arom}$), 126.01 (2C, $CH_{arom}$), 128.45 ($CH_{arom}$), 128.98 ($CH_{arom}$), 129.96 (2C, $CH_{arom}$), 123.99, 127.19, 141.41, 141.43, 146.98, 156.80, 156.86, 159.26, 172.24 (C=O). Found, %: C 72.95; H 5.61; N 6.51. $C_{26}H_{24}N_2O_4$. Calculated, %: C 72.88; H 5.65; N 6.54.

**4-[(2-Ethoxybenzyl)amino]phenyl 5-(2,5-dimethylphenyl)-1,2-oxazole-3-carboxylate (38).** Yield 82%, mp 92–93°C. IR spectrum, ν, $cm^{-1}$: 3417 (NH), 3168, 3138, 3063, 3036, 2978, 2926, 2872 (C–H), 1747 (C=O), 1611, 1602, 1589, 1576, 1515, 1494, 1474, 1454, 1422 (C=C, C=N), 1234, 1195, 1115 (C–O–C). $^1$H NMR spectrum, δ, ppm: 1.47 t (3H, $CH_2$**Me**, $^3J$ = 7 Hz), 2.41 s (3H, Me), 2.51 s (3H, Me), 4.10 q (2H, C**H**$_2$Me, $^3J$ = 7 Hz), 4.38 s (2H, $CH_2N$), 6.70 d (2H, $H_{arom}$, $^3J$ = 8.8 Hz), 6.90 d (1H, $H_{arom}$, $^3J$ = 8 Hz), 6.94 t (1H, $H_{arom}$, $^3J$ = 7.5 Hz), 6.96 s (1H, 4-H), 7.11 d (2H, $H_{arom}$, $^3J$ = 8.8 Hz), 7.25 m (4H, $H_{arom}$, NH), 7.34 d (1H, $H_{arom}$, $^3J$ = 7.4 Hz), 7.62 s (1H, $H_{arom}$). $^{13}$C NMR spectrum, $\delta_C$, ppm: 14.96 ($CH_2$**Me**), 20.84 (Me), 20.96 (Me), 43.75 ($CH_2N$), 63.48 (**C**$H_2$Me), 103.16 ($C^4$), 111.16 ($CH_{arom}$), 113.32 (2C, $CH_{arom}$), 120.38 ($CH_{arom}$), 121.81 (2C, $CH_{arom}$), 128.30 ($CH_{arom}$), 128.78 ($CH_{arom}$), 128.89 ($CH_{arom}$), 131.46 (2C, $CH_{arom}$), 125.78, 127.07, 133.26, 136.00, 141.26, 146.88, 156.39, 156.70, 159.20, 172.08 (C=O). Found, %: C 73.33; H 5.95; N 6.24. $C_{27}H_{26}N_2O_4$. Calculated, %: C 73.28; H 5.92; N 6.33.

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