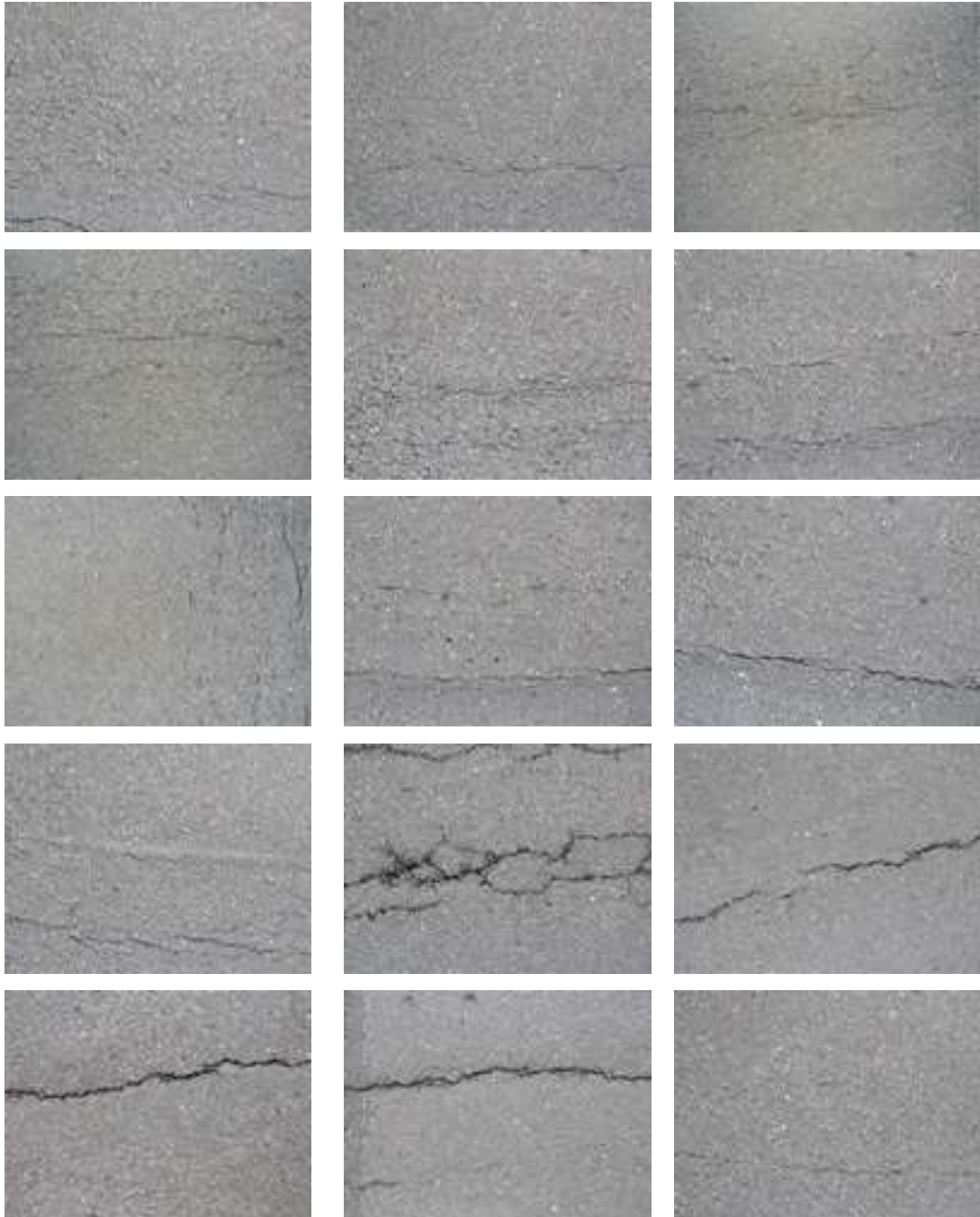
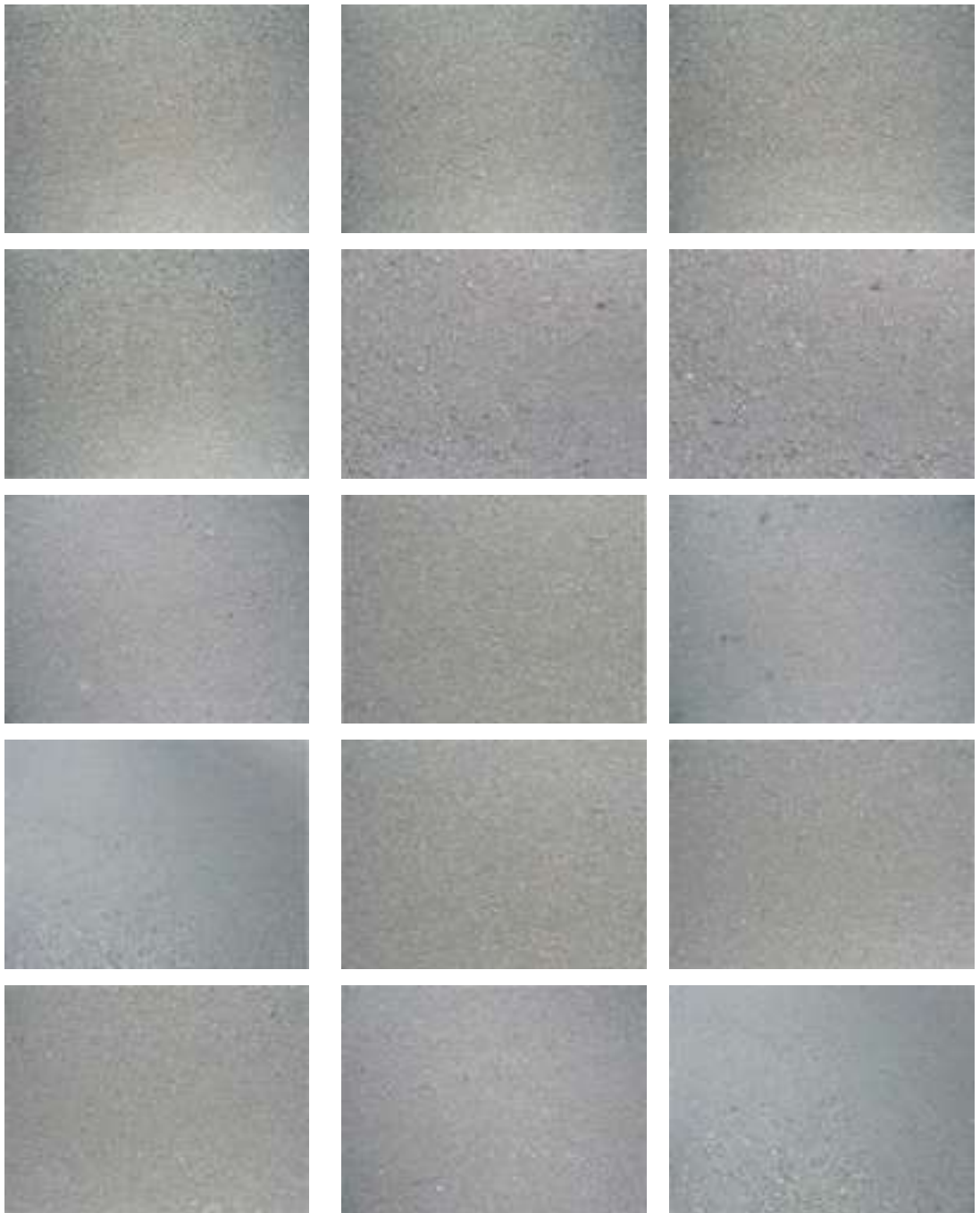
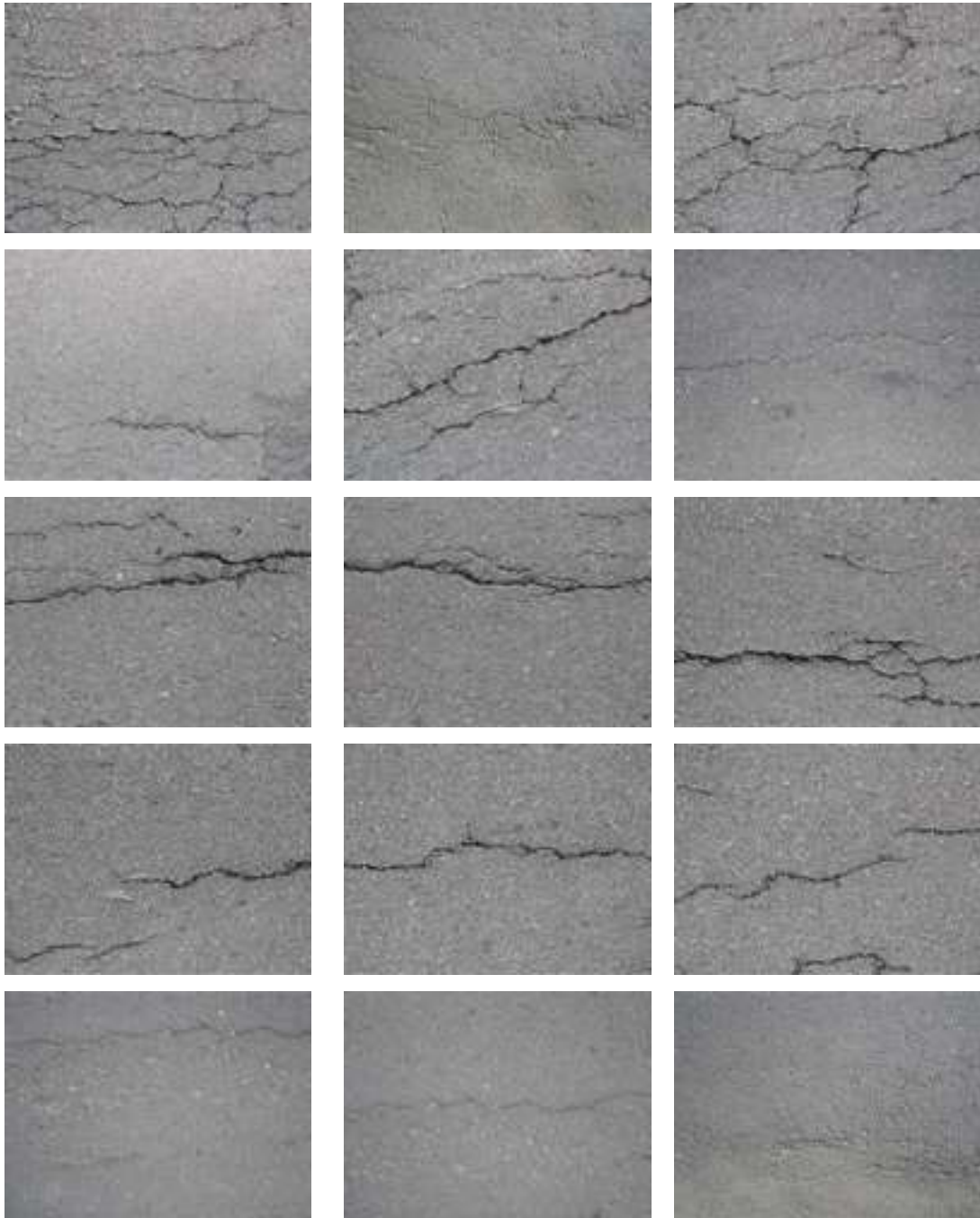


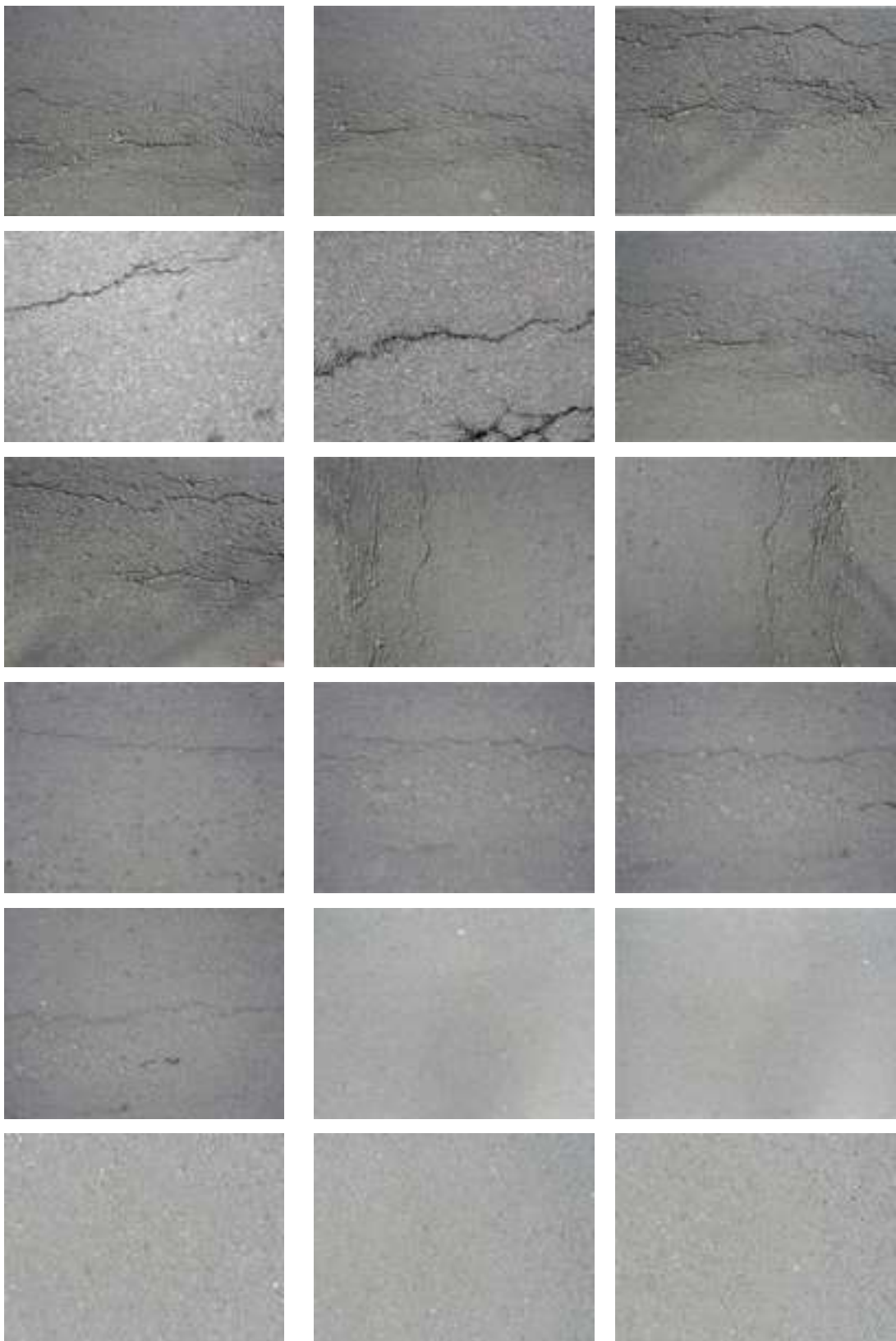
LAMPIRAN 1
CITRA LATIH

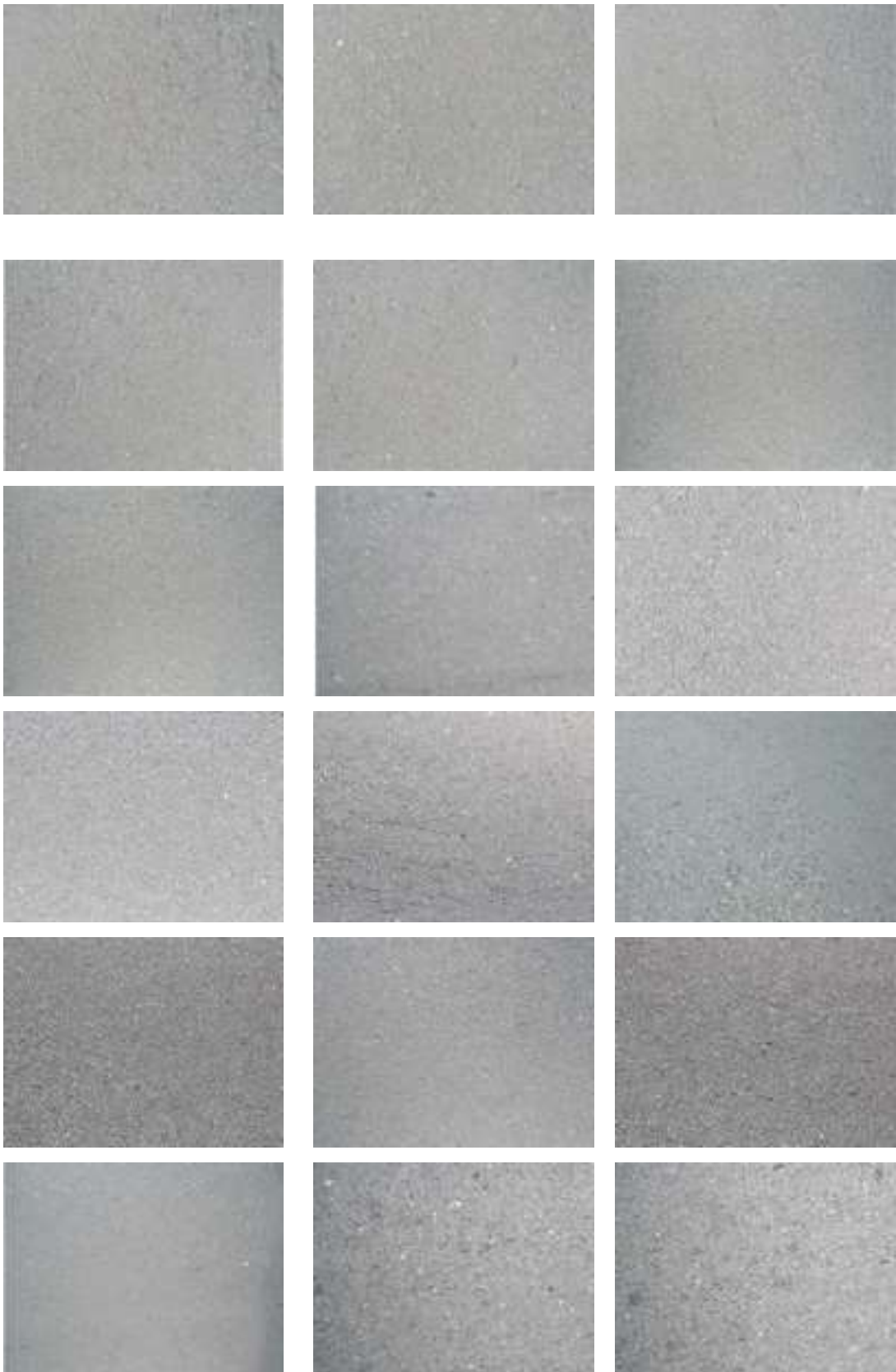




LAMPIRAN 2
CITRA UJI









LAMPIRAN 3

SKRIP PROGRAM

Tahap 1 – Ekstraksi Ciri

```
1.      close all;
2.      clc;
3.      clear all;

4.      path = 'D:\Image Processing\FullImage\Latih'; %'
5.      fileNames = dir(fullfile(path, '*.JPG'));
6.      RGB = cell(length(fileNames),1);
7.      RESIZE = cell(length(fileNames),1);
8.      GRAY = cell(length(fileNames),1);

9.      MEAN_CA = cell(length(fileNames),1);

10.     STD_CA = cell(length(fileNames),1);

11.     CA = cell(length(fileNames),1);
12.     CV = cell(length(fileNames),1);
13.     CH = cell(length(fileNames),1);
14.     CD = cell(length(fileNames),1);

15.     data(1) = 1;
16.     data(2) = 1;
17.     data(3) = 1;
18.     data(4) = 1;
19.     data(5) = 1;
20.     data(6) = 1;
21.     data(7) = 1;
22.     data(8) = 1;
23.     data(9) = 1;
24.     data(10) = 1;
25.     data(11) = 1;
26.     data(12) = 1;
27.     data(13) = 1;
28.     data(14) = 1;
29.     data(15) = 1;
30.     data(16) = 0;
31.     data(17) = 0;
32.     data(18) = 0;
33.     data(19) = 0;
34.     data(20) = 0;
35.     data(21) = 0;
36.     data(22) = 0;
37.     data(23) = 0;
```

```

38.     data(24) = 0;
39.     data(25) = 0;
40.     data(26) = 0;
41.     data(27) = 0;
42.     data(28) = 0;
43.     data(29) = 0;
44.     data(30) = 0;

45.     for k = 1:length(fileName)
46.         filename = fileName(k).name;
47.         RGB{k} = imread(filename);
48.         RESIZE{k} = imresize(RGB{k}, [480 640]);
49.         GRAY{k} = rgb2gray(RESIZE{k});

50.         [CA{k},CV{k},CH{k},CD{k}]= dwt2(GRAY{k},'haar');

51.         MEAN_CA{k} = mean2(CA{k});
52.         STD_CA{k} = std2(CA{k});
53.         end

54.         group = data';

55.         mean = cell2mat(MEAN_CA);
56.         std = cell2mat(STD_CA);

57.         input_train = [group,mean,std];
58.         save input_train.mat input_train;
59.         disp('Step 1 - Feature Extraction: DONE')

```

Tahap 2 – Persamaan LDA

```

1.         load input_train;

2.         group = input_train(:,1);
3.         mean = input_train(:,2);
4.         std = input_train(:,3);

5.         h1 = gscatter(mean,std,group,'rb','xo',[],'off');
6.         grid on
7.         hold on

8.         X = [mean,std];
9.         cls = ClassificationDiscriminant.fit(X,group);
10.        hold on

11.        K = cls.Coeffs(1,2).Const;
12.        L = cls.Coeffs(1,2).Linear;

```



```

13.     f = @(x1,x2)K+L(1)*x1+L(2)*x2;

14.     h2=ezplot(f,[0 650 0 60]);
15.     set(h2,'color','r','LineWidth',2);
16.     axis([0 650 0 60]);

17.     save K.mat K;
18.     save L.mat L;

19.     disp('Step 2 - LDA Function: DONE')

```

Tahap 3 – Pengujian

```

1.     clear all;
2.     clc;
3.     close all;

4.     load K;
5.     load L;

6.     path      = 'D:\Image Processing\FullImage\Uji'; %'
7.     fileNames = dir(fullfile(path, '*.JPG'));
8.     RGB       = cell(length(fileNames),1);
9.     RESIZE    = cell(length(fileNames),1);
10.    GRAY      = cell(length(fileNames),1);

11.    MEAN_CA = cell(length(fileNames),1);

12.    STD_CA  = cell(length(fileNames),1);

13.    CA = cell(length(fileNames),1);
14.    CV = cell(length(fileNames),1);
15.    CH = cell(length(fileNames),1);
16.    CD = cell(length(fileNames),1);

17.    jawab = cell(length(fileNames),1);
18.    Figure = 0;
19.    benar = 0;
20.    y = 0;

21.    data(1) = 1;
22.    data(2) = 1;
23.    data(3) = 1;
24.    data(4) = 1;
25.    data(5) = 1;
26.    data(6) = 1;
27.    data(7) = 1;
28.    data(8) = 1;

```

```
29. data(9) = 1;
30. data(10) = 1;
31. data(11) = 1;
32. data(12) = 1;
33. data(13) = 1;
34. data(14) = 1;
35. data(15) = 1;
36. data(16) = 1;
37. data(17) = 1;
38. data(18) = 1;
39. data(19) = 1;
40. data(20) = 1;
41. data(21) = 1;
42. data(22) = 1;
43. data(23) = 1;
44. data(24) = 1;
45. data(25) = 1;
46. data(26) = 1;
47. data(27) = 1;
48. data(28) = 1;
49. data(29) = 0;
50. data(30) = 0;
51. data(31) = 0;
52. data(32) = 0;
53. data(33) = 0;
54. data(34) = 0;
55. data(35) = 0;
56. data(36) = 0;
57. data(37) = 0;
58. data(38) = 0;
59. data(39) = 0;
60. data(40) = 0;
61. data(41) = 0;
62. data(42) = 0;
63. data(43) = 0;
64. data(44) = 0;
65. data(45) = 0;
66. data(46) = 0;
67. data(47) = 0;
68. data(48) = 0;
69. data(49) = 0;
70. data(50) = 0;
71. data(51) = 0;
72. data(52) = 0;
73. data(53) = 0;
74. data(54) = 0;
75. data(55) = 0;
76. data(56) = 0;
```

```

77.     for k         = 1:length(fileName)
78.         filename   = fileName(k).name;
79.         RGB{k}     = imread(filename);
80.         RESIZE{k}  = imresize(RGB{k}, [480 640]);
81.         GRAY{k}    = rgb2gray(RESIZE{k});

82.         [CA{k},CV{k},CH{k},CD{k}]= dwt2(GRAY{k},'haar');

83.         MEAN_CA{k} = mean2(CA{k});

84.         STD_CA{k}  = std2(CA{k});

85.         x1 = cell2mat(MEAN_CA);
86.         x2 = cell2mat(STD_CA);

87.         y = K+L(1)*x1+L(2)*x2;

88.         Figure = Figure + 1;
89.         if y(k) <= 0
90.             jawab='retak';
91.             hasil(k)=1;
92.         else
93.             jawab='tidak retak';
94.             hasil(k)=0;
95.         end

96.         if data(k)==hasil(k)
97.             benar_salah(k)=1;
98.         else
99.             benar_salah(k)=0;
100.        end

101.        msg = {'Citra   = ', filename; 'Nilai y = ',
               num2str(y(k)); 'Jawaban = ', jawab};
102.        disp(msg)
103.        benar=benar+benar_salah(k);

104.        end

105.        akurasi = benar/Figure*100;
106.        disp('>>DONE...')

107.        hasil = hasil';
108.        data = data';
109.        benar_salah = benar_salah';
110.        result = [x1,x2,y,hasil,data,benar_salah];

```

LAMPIRAN 4

CEK PLAGIARISME

Completed: 100% Checked	91% Unique
INTISARI Jalan sebagai prasarana transportasi darat berpengaruh	- Unique
dibuat dengan bahan material yang mempunyai umur dan ketahanan	- Unique
kerusakan jalan, misalnya faktor bahan material itu sendiri,	- Unique
tersebut tentu akan mengganggu dan membahayakan pengguna	- Unique
tradisional yaitu dengan pengamatan secara manual dengan	- Unique
karena membutuhkan biaya yang lumayan besar, membutuhkan	- Unique
tinggi, faktor subyektifitas dan faktor kelelahan. Banyak	- Unique
retak jalan raya berbasis pengolahan citra. Namun, dari	- Unique
misalnya harga perangkat yang mahal dan susahnya pengoperasian	- Unique
ada, maka penelitian ini bertujuan untuk mengembangkan metode	- Unique
lebih terjangkau dan pengoperasian yang mudah. Metode penelitian	- Unique
Tahap pra pengolahan citra diawali dengan pengaturan ukuran	- Unique
transformasi wavelet diskrit. Tahap selanjutnya adalah pengambilan	- Unique
dengan menghitung nilai rata-rata dan standar deviasi. Tahap	- Unique
pengklasifikasian citra menggunakan Linier Discriminant	- Unique