

LAMPIRAN

Ekstraksi

```
if (File == null)
{
    MessageBox.Show("Silahkan pilih Browse terlebih dahulu !!!");
    return;
}

Bitmap org = (Bitmap)pictureBox2.Image.Clone();

Bitmap output1 = new Bitmap(org.Width, org.Height);

StringBuilder builder = new StringBuilder();

for (Byte y = 0; y < output1.Height; y++)
{
    for (Byte x = 0; x < output1.Width; x++)
    {
        Color c = org.GetPixel(x, y);

        double tetha = Math.Cos(0.5 * ((red - green) + (red -
blue)) / Math.Sqrt((red - green) * (red - green) + (red - blue) * (green -
blue))) / (2 * Math.PI);

        double hue = (blue <= green) ? tetha : (1 - tetha);
        double saturation = 1 - 3 * Math.Min(Math.Min(red, green),
blue) / (red + green + blue);
        double intensity = (red + green + blue) / 3;

        hue = Math.Round(hue, 2);
        saturation = Math.Round(saturation, 2);
        intensity = Math.Round(intensity, 2);
        // builder.Append("(");
        builder.Append(hue);
        builder.Append(",");
        builder.Append(saturation);
        builder.Append(",");
        builder.Append(intensity);

        //builder.Append(")");
        builder.Append(" ,");
    }

    builder.AppendLine();
    pictureBox4.Image = output1;
}

String filePath = "E:/writer.csv";
using(StreamWriter outputFile = new StreamWriter(filePath)){
    outputFile.Write(builder);
}
```

Crop image

```

private void pictureBox1_MouseDown(object sender, MouseEventArgs e)
{
    IsMouseDown = true;
    StartLocation = e.Location;
}
private void pictureBox1_MouseMove(object sender, MouseEventArgs e)
{
    if (IsMouseDown == true)
    {
        EndLocation = e.Location;
        pictureBox1.Invalidate();
        Refresh();
    }
}
private void pictureBox1_MouseUp(object sender, MouseEventArgs e)
{
    if (IsMouseDown == true)
    {
        EndLocation = e.Location;
        IsMouseDown = false;

        if (rect != null)
        {
            Bitmap bit = new Bitmap(pictureBox1.Image,
pictureBox1.Width, pictureBox1.Height);
            Bitmap crop = new Bitmap(rect.Width, rect.Height);
            Graphics g = Graphics.FromImage(crop);
            g.DrawImage(bit, 0,0, rect, GraphicsUnit.Pixel);
            pictureBox2.Image = crop;
        }
    }
}
private void pictureBox1_Paint(object sender, PaintEventArgs e)
{
    if (rect!=null)
    {
        e.Graphics.DrawRectangle(Pens.Red, GetRectangle());
    }
}

```



KARTU BIMBINGAN SKRIPSI
S1 – TEKNIK INFORMATIKA
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JUDUL	Deteksi Kualitas Daun Kangkung Berdasarkan Ekstraksi Warna Menggunakan Metode Hue Saturation Intensity



NO	TANGGAL	POKOK BAHASAN	PARAF PEMBIMBING
1.	15/03/2019	BAB I	
2.	03/04/2019	Revisi BAB I	
3.	24/04/2019	BAB II	
4.	13/05/2019	Revisi BAB II	
5.	14/06/2019	BAB III	
6.	28/06/2019	Revisi BAB III	
7.	19/07/2019	BAB IV	
8.	29/07/2019	Revisi BAB IV	
9.	06/08/2019	Revisi BAB IV	

Cat :

1. Minimal bimbingan sebanyak 8x.
2. Kartu ini dikumpulkan sebagai syarat sidang beserta berkas yang lainnya.

PERSETUJUAN SIDANG	
TGL	09/09/2019
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