Additional Content Volume 4: Stepby-Step Texturing of the Alien-Plant

In this step-by-step Tutorial you will learn how to Texture the Alien-Plant Model in **Quixel Mixer**.

In Chapter 5, Texturing your Models inside Quixel Mixer, you've had the opportunity to experiment with Procedural Texturing on the Alien-Plant Model.

Having this freedom to play with the various settings, instead of blindly following instructions to enter arbitrary numbers & using certain Materials, helps you to really understand the Software from a whole different perspective. Self-experimentation is one of the best methods to learning 3D.

But there are those who feel more comfortable following step-by-step instructions, to understand how I got to the final result of my Alien-Plant's Textures. Well...this Tutorial is made for you!

We will be covering the following main topic:

Step-by-Step Texturing of your Alien-Plant Model

At the end of this Online Tutorial, you will understand exactly every step I have used to Texture my Alien-Plant Model, from beginning to end.

Let's first start with the Technical Requirements first.

Technical requirements

The following is the software and hardware you would need to complete this Chapter.

• A computer that can run basic 3D animation software.

You need to have installed Quixel Mixer (free) from: https://quixel.com/mixer

Step-by-Step Texturing of the Alien-Plant in Mixer

In this Section, we will start by downloading the Model and Textures that we will use for this tutorial. Then we will start to Texture the Alien-Plant Model.

Download the Model file: AlienPlant.fbx and the following five Texture files from the Online Repository here:

https://github.com/Henk3D/Online_Repository/tree/main/CHAPTER%2005

- AlienPlant Normals.tga
- AlienPlant AO.tga
- AlienPlant Curvature.tga
- AlienPlant Material ID.png
- AlienPlant Cavity.tga

NOTE:

The Texture: AlienPlant_Cavity.tga is a Cavity Map. Although we didn't use one of these Texture Maps on the Robot Drone, we will use one on the Alien-Plant.

You can use **xNormal** to Bake this Base Texture Map in the same way as you've Baked the other Base Textures in the Section: Baking Base Texture Maps, Chapter 4, UV Maps and Texture Baking.

Here is the setting I have used to bake the Cavity Map, shown in Figure 1

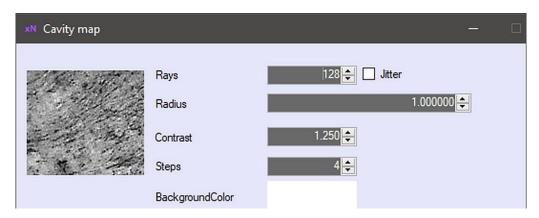


Figure 1: The Cavity Map Settings to use (if you want to Bake your own Cavity Map)

The first thing to do is to **load the Alien-Plant Model into Mixer** in the same way that you've used to load the Robot-Drone. Load the Alien-Plant Model now.

Assign the Alien-Plant's Normal Map, Ambient Occlusion Map, Curvature Map, and Material ID Map. In the same way as you've done for the Robot-Drone. In Figure 2, you can see how to configure your Texture Editor settings.

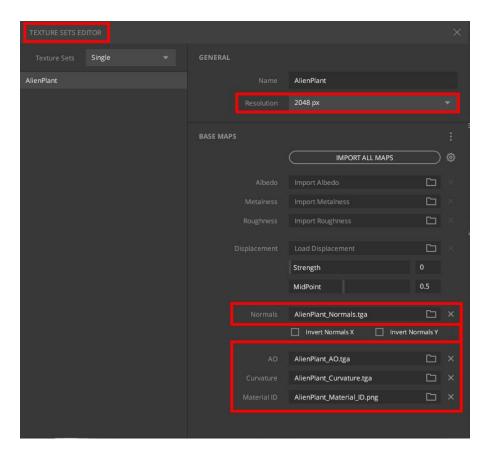


Figure 2: The Texture Editor settings for the Alien-Plant.

- 2. Go back to the Layer Tab and add a **Solid Layer**.
- 3. Change the **Albedo** of the **Solid** Layer to: **Red**: 10, **Green**: 79, **Blue**: 113. Set **Metalness** to: **Black**. Set **Roughness** to **Red**: 103, **Green**: 103, **Blue**: 103.

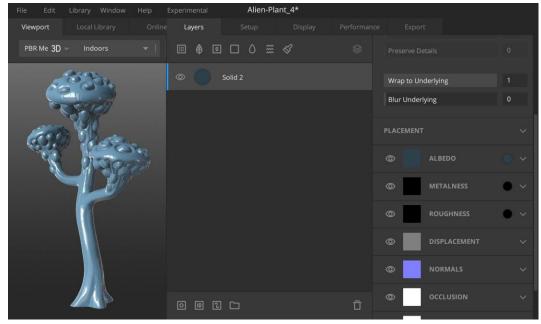


Figure 3: Add a Solid Layer and change it to this turquoise color.

- 4. Add another **Solid Layer**.
- Change this Layer's Opacity to 0.62.
- Change the Albedo of the second Solid Layer to: Red: 79, Green: 66, Blue:
 Set Metalness and Roughness to Pure Black. As seen in Figure 4.

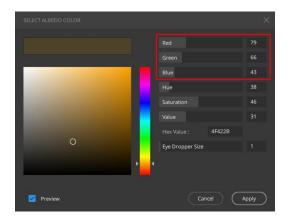


Figure 4: Setting the Albedo Color of the Second Solid Layer.

- 7. Add a **Mask Stack** to this second Layer. Select the **Mask** in the Layer.
- 8. Add a **Simplex Noise Mask** modifier to this Layer. In this **Noise** menu set the following settings: **Seed**: -33, **Amplitude**: 1.6, **Frequency**: 20, **Octaves**: 9, **Lacunarity**: 3.445, **Persistance**: 0.564. As seen in *Figure 5*.

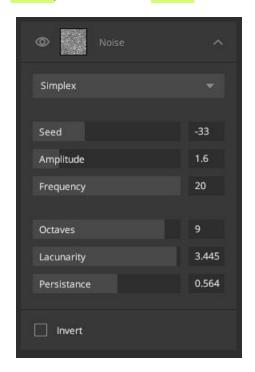


Figure 5: The settings for the Noise Mask.

9. Add a **Brightness / Contrast Mask modifier**. Set **Brightness** to -0.16 and **Contrast** to 3.15. As seen in *Figure* 6.

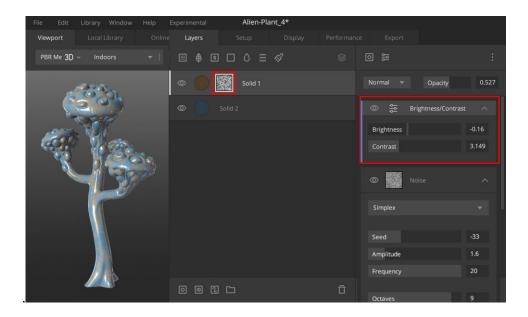


Figure 6: Adjusting the Brightness/Contrast Mask's settings.

- 10. Add a **Smart Material**, in the **Material Browser** with the **Local Library** tab selected, search for, and add **Marbled Bakelite (Blue)**.
- 11. Click on the Marbled Bakelite (Blue) folder's drop-down Icon. Select the Scratches Layer. Press Delete to delete the Scratches Layer. As seen in Figure 7.

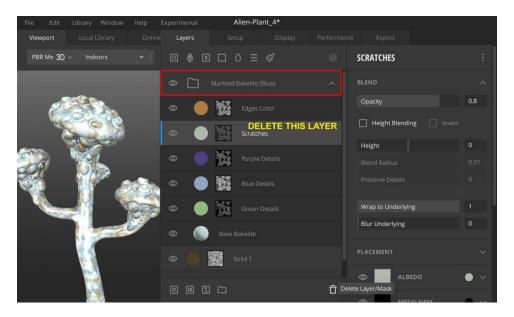


Figure 7: Deleting the Scratches Layer in the Marbled Bakelite (Blue) Material.

12. Click on the **Base Bakelite Layer** inside the **Marbled Bakelite (Blue)** folder. Change the **Albedo** to: **Red**: 51, **Green**: 94, **Blue**: 97. As seen in Figure 8.

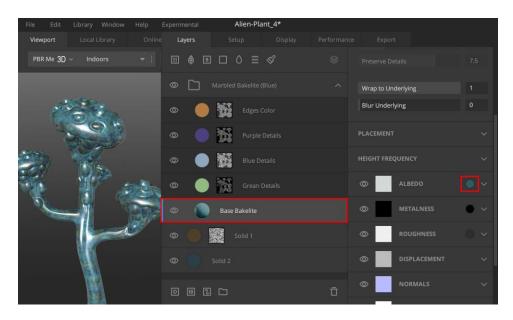


Figure 8: Changing the Albedo color of the Base Bakelite Layer.

- 13. Add a Material ID Mask to Marbled Bakelite (Blue) Layer. Select this Mask.
- 14. Press Q and left click to select the Gray color on the Model's Material ID. As seen in Figure 9. This tells Blender that you want to apply this Material to the Grey areas in the Material ID Map.

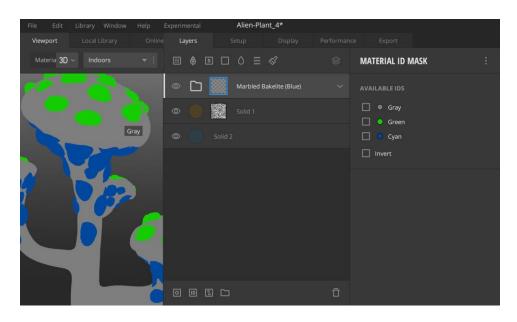


Figure 9: Adding a Material ID Mask to the Marbled Bakelite (Blue) Layer, with the Material ID colors shown on the right side.

Your Model will now look like this one in Figure 10.



Figure 10: The Model at this stage.

- 15. We will now add another Solid Layer. Click on Add Solid Layer. Change the Solid Layer's Albedo to: Red: 20, Green: 17, Blue: 232. This created a blue color Solid Layer.
- 16. Add a **Material ID Mask** to this Layer.
- 17. Press Q and left click to select the **Gray color** on the Model's **Material ID**. (Like you've done in Step 14)
- 18. Add a **Mask Stack** to this second Layer and select the Mask in the Layer.
- 19. Add a **Perlin Noise Mask modifier** to this Layer. In this **Noise** menu set the following settings: **Seed**: 38, **Amplitude**: 30, **Frequency**: 50, **Octaves**: 1, **Lacunarity**: 1.5, **Persistance**: 0.359. As seen in *Figure 11*.

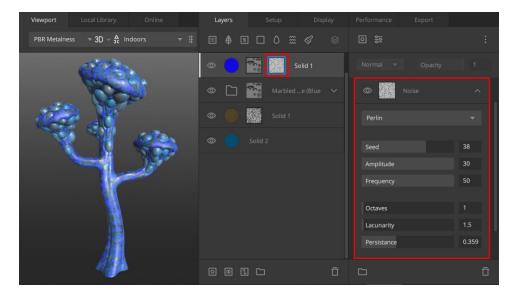


Figure 11: Adding a Noise Mask Modifier to the Mask.

- 20. Next, we want to create a gradient color from top to bottom: Click on Add Mask Component and select Position Gradient.
- 21. In the **Position Gradient menu**, set **Angle**: -27.80, **Range**: 0.39 (first box). As seen in *Figure 12*.

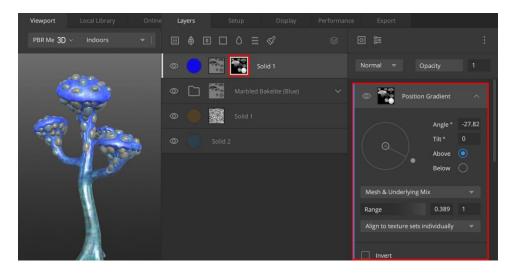


Figure 12: Adding a Position Gradient to the Mask.

- 22. In the **Blend** menu, set the **Opacity** to 0.388.
- 23. Click on Add Solid Layer. Change the Solid Layer's Albedo to: Red: 6, Green: 30, Blue: 137.
- 24. In the **Blend** menu, set this **Solid** Layer's **Opacity** to 0.25. As seen in *Figure* 13.
- 25. Add a **Material ID Mask** to this **Solid** Layer. Press **Q** and select the **Green Material ID color**.

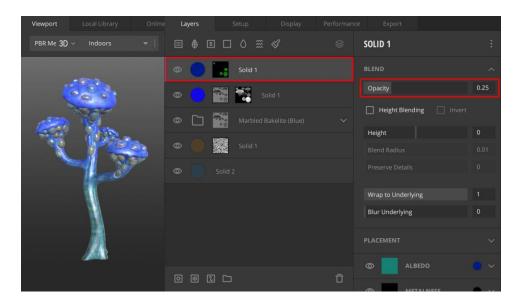


Figure 13: Changing the Opacity and adding a Material ID Mask Stack.

- 26. *Click* **Add Surface Layer**. Set your type to **Surface** and search online for and add: **Passion Fruit Seeds**.
- 27. Change this Layer's **Opacity** to 0.095.
- 28. In **Placement** in the **Property Stack**, set the **Scale** to 5. As highlighted in *Figure 14*.
- 29. Add a Material ID Mask to the Passion Fruit Seeds Layer.
- 30. Press Q and left click to select the Gray color on the Model's Material ID.

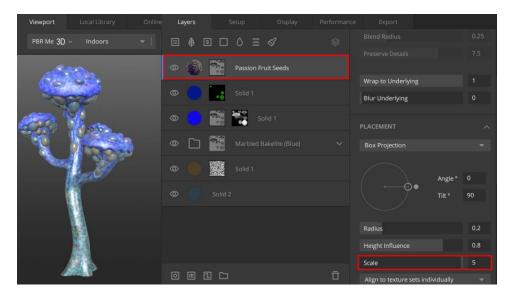


Figure 14: Changing the Scale of the Passion Fruit Seeds Layer.

- 31. Click Add Surface Layer. Set your type to Surface and search online for and add: Alien Seeds.
- 32. Change this Layer's **Opacity** to 0.06.
- 33. Change the Alien Seed Layer's **Albedo** to: **Red**: 95, **Green**: 194, **Blue**: 2.
- 34. Change the Alien Seed Layer's **Roughness** to: **Red**: 107, **Green**: 107, **Blue**: 107.
- 35. In **Placement** in the **Property Stack**, set the **Scale** to 1.5. As shown in *Figure 16*.
- 36. Add a Material ID Mask to the Alien Seeds Layer.
- 37. Press Q and left click to select both the Gray and the Green colors on the Model's Material ID.

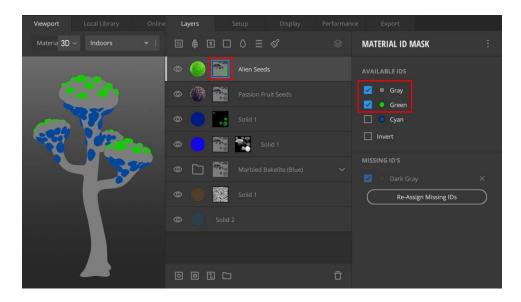


Figure 15: Selecting the Gray and the Green colors from the Material ID Mask.

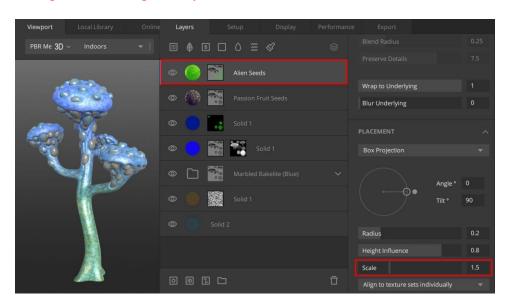


Figure 16: Setting the Scale of the Alien Seeds Layer.

- 38. Add another **Solid Layer**.
- 39. Change this Layer's **Opacity** to 0.1.

- 40. Change the **Albedo** of the **Solid** Layer to: **Red**: 177, **Green**: 99, **Blue**: 9. Set **Metalness** and **Roughness** to **Pure Black**.
- 41. Add a Material ID Mask to this Solid Layer.
- 42. Press Q and *left click* select the **Gray color** on the Model's **Material ID**.
- 43. Add a **Mask Stack** to this second Layer. Select the Mask in the Layer.
- 44. Add a **Worley 3 Noise Mask** modifier to this Layer. In this **Noise** menu set the following settings: **Seed**: 15, **Amplitude**: 50, **Frequency**: 500, **Octaves**: 10, **Lacunarity**: 2.38, **Persistance**: 0.17. As shown in the highlighted area of *Figure 17*.

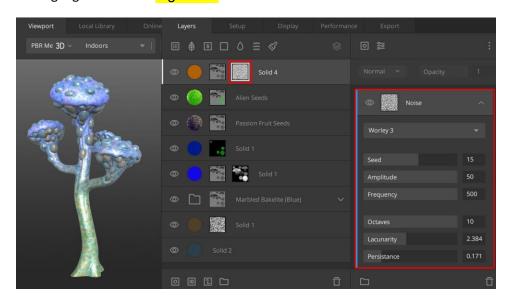


Figure 17: The Worley 3 Noise settings.

Let's now add some darker lines around the edges of the nodules and spore sacks. We will do this by using the Alien-Plant's Cavity Map.

- 45. Add another **Solid Layer**.
- 46. Change this Layer's **Opacity** to 0.84. As seen in *Figure 18*.
- 47. Change the **Albedo** of the **Solid** Layer to: **Red**: 15, **Green**: 6, **Blue**: 1. Set **Roughness** to **Pure White**.

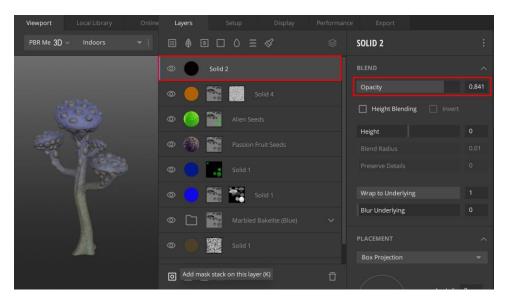


Figure 18: Adding another Solid Layer and changing its Opacity.

- 48. Add a **Mask Stack** to this second Layer. Select the Mask in the Layer.
- 49. *Click* on **Add Mask Component** and select **Texture Map**. As shown in *Figure 19*.

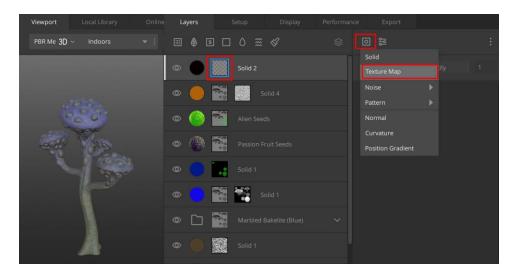


Figure 19: Adding a Mask Component to the Mask and selecting Texture Map as the option.

50. Keep **Custom Map** as the type. (As shown in *Figure 20*) Where it says **Select Image**, *click* on the drop-down Icon to select **Add Image**. (As shown in *Figure 20*)

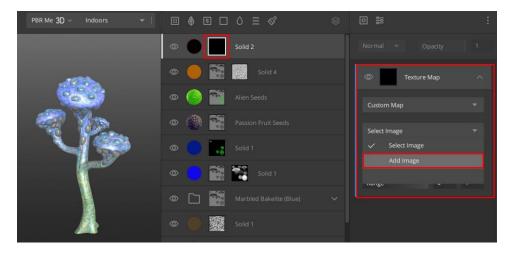


Figure 20: Adding an Image to use as a Mask.

- 51. The **Choose Image mask to Load** window will open up. Select the **Alien-Plant's Cavity Map**: AlienPlant Cavity.tga.
- 52. **Tick** the **Invert** tick-box and set the **Range** to 0.127 in the input box on the right side. (Keep the **Range** as 0 in the input box on the left side). As shown in **Figure 21**.

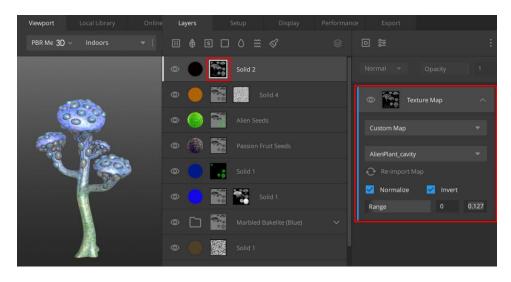


Figure 21: Adjusting the Texture Maps settings.

53. Now for the last step, we want to Blur the dark lines. *Click* on **Add Mask**Modifier and select Blur. Choose the Gaussian Blur type. As shown in Figure 22.

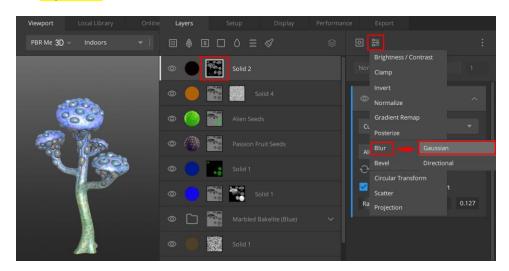


Figure 22: Adding a Blur Mask Modifier to the Mask.

54. Set the **Blur Strength** to 0.023. As shown in *Figure* 23.

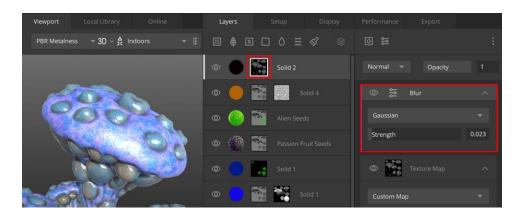


Figure 23: Adjusting the Blur Strength.

Congratulations! Your Alien-Plant's Texturing is now complete! It should now look like the Model shown in *Figure 24*

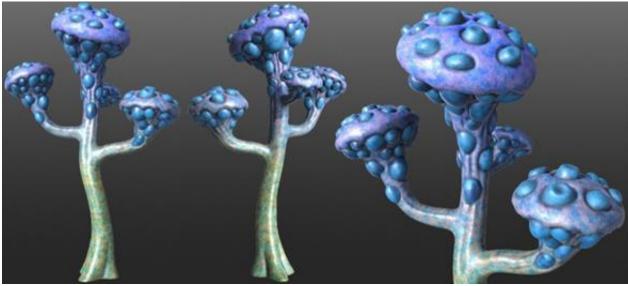


Figure 24: The Completed Alien-Plant Model.

Summary

You have just **learned how to Texture your Alien-Plant Model using the Step-by-Step instructions**. Now your Alien-Plant Model will look the same as mine.